# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2024-2025 Catalog</td>
<td>5</td>
</tr>
<tr>
<td>Academic Plans</td>
<td>6</td>
</tr>
<tr>
<td>Accounting</td>
<td>7</td>
</tr>
<tr>
<td>- Accounting Clerk (CP)(Plan Code: ATBACC45)</td>
<td>7</td>
</tr>
<tr>
<td>- Accounting (AAS)(Plan Code: ATBACAPT)</td>
<td>7</td>
</tr>
<tr>
<td>Addiction Counselor Education</td>
<td>9</td>
</tr>
<tr>
<td>- Addiction Counselor Education (CP)(Plan Code: SAAACC45)</td>
<td>9</td>
</tr>
<tr>
<td>- Addiction Counselor Education (AAS)(Plan Code: SAAACAPT)</td>
<td>10</td>
</tr>
<tr>
<td>- Addiction Counselor Education (AA)(Plan Code: LASACAA)</td>
<td>10</td>
</tr>
<tr>
<td>Applied Management (BAS)</td>
<td>12</td>
</tr>
<tr>
<td>- Applied Management (BAS)(Plan Code: BAMSMBAS)</td>
<td>12</td>
</tr>
<tr>
<td>Art</td>
<td>14</td>
</tr>
<tr>
<td>- Graphic Design (AFA)(Plan Code: LASFGAA)</td>
<td>14</td>
</tr>
<tr>
<td>- Studio Arts (AFA)(Plan Code: LASFSAA)</td>
<td>15</td>
</tr>
<tr>
<td>Associate in Arts (AADTA) and Concentrations</td>
<td>17</td>
</tr>
<tr>
<td>- Associate in Arts (AADTA)(Plan Code: LASDTAA)</td>
<td>18</td>
</tr>
<tr>
<td>- Concentration in Agroecology (AADTA)(Plan Code: LASDTAA, Subplan Code: AGROECOLGY)</td>
<td>19</td>
</tr>
<tr>
<td>- Concentration in Elementary Education (AADTA)(Plan Code: LASDTAA, Subplan Code: ELMNTRYEDU)</td>
<td>19</td>
</tr>
<tr>
<td>- Concentration in Graphic Design (Plan Code: LASDTAA, Subplan Code: GRAPHICDSN)</td>
<td>20</td>
</tr>
<tr>
<td>- Concentration in Power, Privilege, and Inequity (Plan Code: LASDTAA, Subplan Code: PWPRPVINEQ)</td>
<td>21</td>
</tr>
<tr>
<td>- Concentration in Studio Arts (Plan Code: LASDTA, Subplan Code: STUDIOART)</td>
<td>21</td>
</tr>
<tr>
<td>- Concentration in Women's Studies (Plan Code: LASDTAA, Subplan Code: WOMENSTDOY)</td>
<td>22</td>
</tr>
<tr>
<td>- Concentration in World Languages (AADTA)(Plan Code: LASDTAA, Subplan Code: WORLDLNG)</td>
<td>23</td>
</tr>
<tr>
<td>Associate in Science – Track 1 (AST1)</td>
<td>24</td>
</tr>
<tr>
<td>- Associate in Science Transfer - General (AST1)(Plan Code: LRST1AS)</td>
<td>24</td>
</tr>
<tr>
<td>- Concentration in Biological Sciences (AST1)(Plan Code: LRST1AS)</td>
<td>25</td>
</tr>
<tr>
<td>- Concentration in Chemistry (AST1)(Plan code: LRST1AS, Subplan Code: CHEMISTRY)</td>
<td>25</td>
</tr>
<tr>
<td>- Concentration in Environmental Science (AST1)(Plan Code: LRST1AS, Subplan Code: ENVIROSCI)</td>
<td>26</td>
</tr>
<tr>
<td>- Concentration in Geology (AST1)(Plan Code: LRST1AS, Subplan Code: GEOLOGY)</td>
<td>27</td>
</tr>
<tr>
<td>Associate in Science – Track 2 (AST2)</td>
<td>29</td>
</tr>
<tr>
<td>- Associate in Science – General (AST2)(Plan Code: PHST2AS)</td>
<td>29</td>
</tr>
<tr>
<td>- Concentration in Computer Science (AST2)(Plan Code: PHST2AS, Subplan Code: COMPUTRSCI)</td>
<td>31</td>
</tr>
<tr>
<td>- Concentration in Physics (AST2)(Plan Code: PHST2AS, Subplan Code: PHYSICS)</td>
<td>32</td>
</tr>
<tr>
<td>Automotive Technology</td>
<td>34</td>
</tr>
<tr>
<td>- HiTECC Automotive Technology (AAT)(Plan Code: AUMHAAPT)</td>
<td>34</td>
</tr>
<tr>
<td>- T-TEN Automotive Technology (AAT)(Plan Code: AUMTAAPT)</td>
<td>35</td>
</tr>
<tr>
<td>Bioengineering and Chemical Engineering</td>
<td>36</td>
</tr>
<tr>
<td>- Bioengineering and Chemical Engineering (AST2/MRP)(Plan Code: CHEBCAS)</td>
<td>36</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>38</td>
</tr>
<tr>
<td>- Biology DTA/MRP (Plan Code: GEBBIAS)</td>
<td>38</td>
</tr>
<tr>
<td>Business Administration</td>
<td>40</td>
</tr>
<tr>
<td>- Business Administration (AAS)(Plan Code: BAMBUAPT)</td>
<td>40</td>
</tr>
<tr>
<td>- Business Administration (DTA/MRP)(Plan Code: BUCBUUA)</td>
<td>41</td>
</tr>
<tr>
<td>- Small Business Management (CP)(Plan Code: SBMSMC45)</td>
<td>42</td>
</tr>
<tr>
<td>- Supervisory Management (CP) (Plan Code: HRPSMC45)</td>
<td>42</td>
</tr>
<tr>
<td>- Supervisory Management (AAS)(Plan Code: HRPSMAAPT)</td>
<td>43</td>
</tr>
<tr>
<td>Computer Technology</td>
<td>44</td>
</tr>
<tr>
<td>- Information Technology Skills (CP)(Plan Code: MIAISC45)</td>
<td>44</td>
</tr>
<tr>
<td>- Computer Support Specialist (AAT)(Plan Code: MIACTAAPT)</td>
<td>44</td>
</tr>
<tr>
<td>Culinary Arts</td>
<td>46</td>
</tr>
<tr>
<td>- Baking and Pastry Arts Fundamentals (CA)(Plan Code: BPABPC20)</td>
<td>46</td>
</tr>
<tr>
<td>- Professional Baking and Pastry Arts Management (AAT)(Plan Code: BPABPAAPT)</td>
<td>46</td>
</tr>
<tr>
<td>- Cuisine Fundamentals (CA)(Plan Code: CACFC20)</td>
<td>47</td>
</tr>
<tr>
<td>- Cuisine Management (AAT)(Plan Code: CACCMAPT)</td>
<td>48</td>
</tr>
<tr>
<td>Cybersecurity (BAS)</td>
<td>49</td>
</tr>
<tr>
<td>- Cybersecurity (BAS)(Plan Code: CISCYBAS)</td>
<td>49</td>
</tr>
<tr>
<td>Dental Hygiene (BAS)</td>
<td>50</td>
</tr>
<tr>
<td>- Dental Hygiene (BAS)(Plan Code: DEHDHBAS)</td>
<td>50</td>
</tr>
<tr>
<td>Diesel Technology</td>
<td>52</td>
</tr>
<tr>
<td>- Diesel Technician (CP) (Plan Code: DMTDTC90)</td>
<td>52</td>
</tr>
<tr>
<td>- Diesel Technologies (AAS)(Plan Code: DMTDTAAPT)</td>
<td>52</td>
</tr>
<tr>
<td>Digital Media Arts</td>
<td>54</td>
</tr>
<tr>
<td>- Digital Media Arts (AAT)(Plan Code: DMWDMAAPT)</td>
<td>54</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>55</td>
</tr>
<tr>
<td>- State Initial Early Childhood Education Certificate (CC)(Plan Code: ECEEC01)</td>
<td>55</td>
</tr>
<tr>
<td>- State Short Early Childhood Education Certificate of Specialization-General(CC)(Plan Code: ECEGEC20)</td>
<td>55</td>
</tr>
<tr>
<td>Program</td>
<td>Plan Code</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>State Short Early Childhood Education Certificate of Specialization-Infants and Toddlers(CC)</td>
<td>ECEITC20</td>
</tr>
<tr>
<td>State Short Early Childhood Education Certificate of Specialization-School Age Care(CC)</td>
<td>ECESAC20</td>
</tr>
<tr>
<td>State Short Early Childhood Education Certificate of Specialization-Family Child Care(CC)</td>
<td>ECEFC20</td>
</tr>
<tr>
<td>State Short Early Childhood Education Certificate of Specialization-Administration (CC)</td>
<td>ECEADC20</td>
</tr>
<tr>
<td>State Early Childhood Education Certificate (CP)</td>
<td>ECESEC45</td>
</tr>
<tr>
<td>Early Childhood Education (AAS)</td>
<td>ECEECAPT</td>
</tr>
<tr>
<td>Electrical and Computer Engineering</td>
<td></td>
</tr>
<tr>
<td>Electrical and Computer Engineering (AST2/ MRP)</td>
<td>ECECEAS</td>
</tr>
<tr>
<td>Concentration in Electrical Engineering (AST2/MRP)</td>
<td>ECECEAS, Subplan: ELECTENGRL</td>
</tr>
<tr>
<td>Concentration in Computer Engineering (AST2)</td>
<td>ECECEAS, Subplan: COMPTRENGRL</td>
</tr>
<tr>
<td>Emergency Medical Services</td>
<td></td>
</tr>
<tr>
<td>Emergency Medical Technician Accelerated (CC)</td>
<td>EMAETC01</td>
</tr>
<tr>
<td>Health Information Management / Medical Billing and Coding</td>
<td></td>
</tr>
<tr>
<td>Medical Billing/Coding Specialist (CP)</td>
<td>MICMCC45</td>
</tr>
<tr>
<td>Health Information Management (AAT)</td>
<td>MICMCAPT</td>
</tr>
<tr>
<td>Human Services (BAS)</td>
<td></td>
</tr>
<tr>
<td>Human Services (BAS)(Plan Code: HSTHSBAS)</td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td></td>
</tr>
<tr>
<td>Marketing (CP)(Plan Code: SALMAC45)</td>
<td></td>
</tr>
<tr>
<td>Marketing (AAS)(Plan Code: SALMAAP)</td>
<td></td>
</tr>
<tr>
<td>Materials Science</td>
<td></td>
</tr>
<tr>
<td>Materials Science (AST2/MRP)(Plan Code: MEEMSAS)</td>
<td></td>
</tr>
<tr>
<td>Math Education</td>
<td></td>
</tr>
<tr>
<td>Math Education (DTA/MRP) (Plan Code: METMEAS)</td>
<td></td>
</tr>
<tr>
<td>Mechanical, Civil &amp; Aeronautical Engineering</td>
<td></td>
</tr>
<tr>
<td>Mechanical, Civil Aeronautical Engineering (AST2/MRP)(Plan Code: MEEMCAS)</td>
<td>MEEMCAS</td>
</tr>
<tr>
<td>Concentration in Aeronautical Engineering (AST2/ MRP)(Plan Code: MEEMCAS, Subplan: AEROENGRL)</td>
<td>MEEMCAS</td>
</tr>
<tr>
<td>Concentration in Civil Engineering (AST2/MRP)(Plan Code: MEEMCAS, Subplan: CIVILENGR)</td>
<td>MEEMCAS</td>
</tr>
<tr>
<td>Concentration in Mechanical Engineering (AST2/MRP)(Plan Code: MEEMCAS, Subplan: MECHENGRL)</td>
<td>MEEMCAS</td>
</tr>
<tr>
<td>Mechatronics</td>
<td></td>
</tr>
<tr>
<td>Mechatronics Fundamentals (CC)(Plan Code: ETEMFC01)</td>
<td></td>
</tr>
<tr>
<td>Mechanical and Instrumentation Automation (CA)(Plan Code: ETEMAC20)</td>
<td></td>
</tr>
<tr>
<td>Mechanical and Instrumentation Automation (AAT)(Plan Code: ETEMIAPT)</td>
<td></td>
</tr>
<tr>
<td>Medical Assistant</td>
<td></td>
</tr>
<tr>
<td>Medical Assistant (CP)(Plan Code: MLAMAC45)</td>
<td></td>
</tr>
<tr>
<td>Medical Assistant with Phlebotomy or Business Option (AAT)(Plan Code: MLAMSAP)</td>
<td>MLAMSAP</td>
</tr>
<tr>
<td>Music</td>
<td></td>
</tr>
<tr>
<td>Associate in Music DTA/MPR (Plan Code: MUSMUA)</td>
<td></td>
</tr>
<tr>
<td>Network Technology</td>
<td></td>
</tr>
<tr>
<td>Cisco Technician (CA)(Plan Code: TETCTC20)</td>
<td></td>
</tr>
<tr>
<td>Microsoft Technician (CA)(Plan Code: CSTMTC20)</td>
<td></td>
</tr>
<tr>
<td>Network Technologies (AAT)(Plan Code: CSTNAPT)</td>
<td></td>
</tr>
<tr>
<td>Nursing</td>
<td></td>
</tr>
<tr>
<td>Pre-Nursing (DTA/MPR)(Plan Code: RENPNAS)</td>
<td></td>
</tr>
<tr>
<td>Associates in Nursing DTA/MPR (Plan Code: RENDDA)</td>
<td></td>
</tr>
<tr>
<td>Pharmacy Technician</td>
<td></td>
</tr>
<tr>
<td>Pharmacy Technician (CP)(Plan Code: PTAPTC45)</td>
<td></td>
</tr>
<tr>
<td>Pharmacy Technician Leadership (AAT)(Plan Code: PTAPTAAT)</td>
<td></td>
</tr>
<tr>
<td>Phlebotomy</td>
<td></td>
</tr>
<tr>
<td>Phlebotomy (CA)(Plan Code: PHLPHC20)</td>
<td></td>
</tr>
<tr>
<td>Surveying &amp; Geomatics</td>
<td></td>
</tr>
<tr>
<td>Surveying Geomatics Technician - GIS (CP)(Plan Code: SUTSGC45)</td>
<td></td>
</tr>
<tr>
<td>Surveying Geomatics Technician - Boundary (CP)(Plan Code: SUTBOC45)</td>
<td></td>
</tr>
<tr>
<td>Surveying/Geomatics (AAS)(Plan Code: SUTSAG)</td>
<td></td>
</tr>
<tr>
<td>Teacher Education (BAS)</td>
<td></td>
</tr>
<tr>
<td>Teacher Education (BAS)(Plan Code: EETTEBAS)</td>
<td></td>
</tr>
<tr>
<td>Web Development</td>
<td></td>
</tr>
<tr>
<td>Web Development (CP)(Plan Code: WMMWDAC45)</td>
<td></td>
</tr>
<tr>
<td>Web Development (AAT)(Plan Code: WMMWDAAP)</td>
<td></td>
</tr>
<tr>
<td>Welding Technology</td>
<td></td>
</tr>
<tr>
<td>Flux Core Arc Welding (CA)(Plan Code: WETFCC20)</td>
<td></td>
</tr>
<tr>
<td>Gas Metal Arc Welding (CA)(Plan Code: WETGMC20)</td>
<td></td>
</tr>
<tr>
<td>Gas Tungsten Arc Welding (CA)(Plan Code: WETGTC20)</td>
<td></td>
</tr>
<tr>
<td>Shielded Metal Arc Welding (CA)(Plan Code: WETSMD20)</td>
<td></td>
</tr>
<tr>
<td>Welding Technician (CP) (Plan Code: WETWTCA45)</td>
<td></td>
</tr>
<tr>
<td>Welding Technologies (AAT)(Plan Code: WETWCAAP)</td>
<td></td>
</tr>
<tr>
<td>Course Descriptions</td>
<td></td>
</tr>
<tr>
<td>Accounting (ACCT/ACCT8)</td>
<td></td>
</tr>
<tr>
<td>Addiction Counselor Education (ACED)</td>
<td></td>
</tr>
<tr>
<td>Program</td>
<td>Page</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Allied Health (AH)</td>
<td>114</td>
</tr>
<tr>
<td>American Sign Language (ASL/ASL&amp;)</td>
<td>115</td>
</tr>
<tr>
<td>Anthropology (ANTH/ANTH&amp;)</td>
<td>116</td>
</tr>
<tr>
<td>Art (ART/ART&amp;)</td>
<td>117</td>
</tr>
<tr>
<td>Astronomy (ASTR&amp;)</td>
<td>121</td>
</tr>
<tr>
<td>Automotive Technology (AUTO)</td>
<td>122</td>
</tr>
<tr>
<td>BAS Applied Management (BASAM)</td>
<td>126</td>
</tr>
<tr>
<td>BAS Human Services (BASHS)</td>
<td>128</td>
</tr>
<tr>
<td>BAS Teacher Education</td>
<td>129</td>
</tr>
<tr>
<td>Biology (BIOL/BIOL&amp;)</td>
<td>131</td>
</tr>
<tr>
<td>Business Administration (BUS/BUS&amp;)</td>
<td>134</td>
</tr>
<tr>
<td>Chemistry (CHEM/CHEM&amp;)</td>
<td>136</td>
</tr>
<tr>
<td>College and Academic Preparation (CAP/CCAP)</td>
<td>139</td>
</tr>
<tr>
<td>College Preparation (COLL)</td>
<td>144</td>
</tr>
<tr>
<td>Communication Studies (CMST/CMST&amp;))</td>
<td>145</td>
</tr>
<tr>
<td>Computer Science &amp; Engineering (CSE)</td>
<td>146</td>
</tr>
<tr>
<td>Computer Technology (CTEC)</td>
<td>149</td>
</tr>
<tr>
<td>Cuisine (CUIS)</td>
<td>153</td>
</tr>
<tr>
<td>Dental Hygiene (DH)</td>
<td>156</td>
</tr>
<tr>
<td>Diesel Technology (DIES)</td>
<td>160</td>
</tr>
<tr>
<td>Digital Media Arts (DMA)</td>
<td>161</td>
</tr>
<tr>
<td>Drama (DRMA/DRMA&amp;)</td>
<td>162</td>
</tr>
<tr>
<td>Early Childhood Education (ECE)</td>
<td>163</td>
</tr>
<tr>
<td>Early Childhood Education (ECED/ECED&amp;)</td>
<td>165</td>
</tr>
<tr>
<td>Economics (ECON/ECON&amp;)</td>
<td>166</td>
</tr>
<tr>
<td>Education (EDUC/EDUC&amp;)</td>
<td>167</td>
</tr>
<tr>
<td>Emergency Medical Technician (EMT)</td>
<td>168</td>
</tr>
<tr>
<td>Engineering (ENGR/ENGR&amp;))</td>
<td>169</td>
</tr>
<tr>
<td>English (ENGL/ENGL&amp;)</td>
<td>172</td>
</tr>
<tr>
<td>English as a Second Language (ESL)</td>
<td>176</td>
</tr>
<tr>
<td>Environmental Science (ENVS/ENVS&amp;)</td>
<td>178</td>
</tr>
<tr>
<td>Geography (GEOG/GEOG&amp;)</td>
<td>180</td>
</tr>
<tr>
<td>Geology (GEOL/GEOL&amp;)</td>
<td>182</td>
</tr>
<tr>
<td>Health &amp; Physical Education (HPE)</td>
<td>183</td>
</tr>
<tr>
<td>Health (HLTH)</td>
<td>184</td>
</tr>
<tr>
<td>Health Information Management (HIM)</td>
<td>185</td>
</tr>
<tr>
<td>History (HIST/HIST&amp;)</td>
<td>187</td>
</tr>
<tr>
<td>Honors (HONS)</td>
<td>189</td>
</tr>
<tr>
<td>Human Services Substance Abuse (HSSA&amp;)</td>
<td>190</td>
</tr>
<tr>
<td>Intensive English Language Program (IELP)</td>
<td>191</td>
</tr>
<tr>
<td>Japanese (JAPN/JAPN&amp;)</td>
<td>193</td>
</tr>
<tr>
<td>Journalism (JOUR)</td>
<td>194</td>
</tr>
<tr>
<td>Management (MGMT)</td>
<td>196</td>
</tr>
<tr>
<td>Mathematics (MATH/MATH&amp;)</td>
<td>197</td>
</tr>
<tr>
<td>Mechatronics (MTX)</td>
<td>200</td>
</tr>
<tr>
<td>Medical Assisting (MA)</td>
<td>203</td>
</tr>
<tr>
<td>Meteorology (METR)</td>
<td>205</td>
</tr>
<tr>
<td>Music (MUSC/MUSC&amp;/MUSCA)</td>
<td>206</td>
</tr>
<tr>
<td>Network Technology (NTEC)</td>
<td>216</td>
</tr>
<tr>
<td>Nursing (NURS)</td>
<td>219</td>
</tr>
<tr>
<td>Nutrition (NUTR/NUTR&amp;)&amp;</td>
<td>221</td>
</tr>
<tr>
<td>Oceanography (OCEA&amp;)</td>
<td>222</td>
</tr>
<tr>
<td>Pharmacy (PHAR)</td>
<td>223</td>
</tr>
<tr>
<td>Philosophy (PHIL/PHIL&amp;)/</td>
<td>225</td>
</tr>
<tr>
<td>Phlebotomy (PHLE)</td>
<td>226</td>
</tr>
<tr>
<td>Physical Education (PE)</td>
<td>227</td>
</tr>
<tr>
<td>Physical Education Dance (PEDNC)</td>
<td>232</td>
</tr>
<tr>
<td>Physical Education Exercise Science (PEEXS)</td>
<td>234</td>
</tr>
<tr>
<td>Physical Education Martial Arts (PEMAR)</td>
<td>235</td>
</tr>
<tr>
<td>Physical Science (PHSC)</td>
<td>236</td>
</tr>
<tr>
<td>Physics (PHYS/PHYS&amp;)</td>
<td>237</td>
</tr>
<tr>
<td>Political Science (POLS/POLS&amp;</td>
<td>239</td>
</tr>
<tr>
<td>Professional Baking (PBAK)</td>
<td>241</td>
</tr>
<tr>
<td>Professional Technical Computational Skills (PTCS)</td>
<td>243</td>
</tr>
<tr>
<td>Professional Technical Writing (PTWR)</td>
<td>244</td>
</tr>
<tr>
<td>Psychology (PSYC/PSYC&amp;)</td>
<td>245</td>
</tr>
<tr>
<td>Sociology (SOC/SOC&amp;)</td>
<td>246</td>
</tr>
<tr>
<td>Spanish (SPAN/SPAN&amp;)</td>
<td>247</td>
</tr>
<tr>
<td>Surveying &amp; Geomatics (SURV)</td>
<td>248</td>
</tr>
<tr>
<td>Tutoring (TUTR)</td>
<td>250</td>
</tr>
<tr>
<td>Welding (WELD)</td>
<td>251</td>
</tr>
<tr>
<td>Women's Studies (WS)</td>
<td>253</td>
</tr>
<tr>
<td>College Information</td>
<td>254</td>
</tr>
<tr>
<td>History</td>
<td>254</td>
</tr>
<tr>
<td>Accreditation</td>
<td>254</td>
</tr>
<tr>
<td>Clark CARES: Collaborate, Assess, Resource, and Engage Students</td>
<td>255</td>
</tr>
<tr>
<td>College Assessment</td>
<td>255</td>
</tr>
<tr>
<td>Consumer Information</td>
<td>255</td>
</tr>
<tr>
<td>Equity in Athletics</td>
<td>255</td>
</tr>
<tr>
<td>Graduation Rates</td>
<td>255</td>
</tr>
<tr>
<td>Limitation of Liability</td>
<td>256</td>
</tr>
<tr>
<td>Locations and Campuses</td>
<td>256</td>
</tr>
<tr>
<td>Nondiscrimination and Equity</td>
<td>256</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Notification of Students' Rights Under the Family Educational Rights</td>
<td>257</td>
</tr>
<tr>
<td>and Privacy Act</td>
<td></td>
</tr>
<tr>
<td>Student Rights and Responsibilities</td>
<td>257</td>
</tr>
<tr>
<td>Degree &amp; Certificate Requirements</td>
<td>259</td>
</tr>
<tr>
<td>General Information</td>
<td>259</td>
</tr>
<tr>
<td>Bachelor of Applied Sciences</td>
<td>260</td>
</tr>
<tr>
<td>Transfer Degrees Overview</td>
<td>262</td>
</tr>
<tr>
<td>Transfer Degree Distribution List</td>
<td>264</td>
</tr>
<tr>
<td>Career and Technical Overview</td>
<td>268</td>
</tr>
<tr>
<td>Career and Technical Degrees and Certificates Distribution List</td>
<td>269</td>
</tr>
<tr>
<td>Non-Traditional Credit</td>
<td>273</td>
</tr>
<tr>
<td>Credit Hours and Credit Load</td>
<td>273</td>
</tr>
<tr>
<td>Directories and Academic Calendar</td>
<td>275</td>
</tr>
<tr>
<td>Phone Directory</td>
<td>275</td>
</tr>
<tr>
<td>Academic Calendar</td>
<td>275</td>
</tr>
<tr>
<td>Enrollment, Aid and College Life</td>
<td>276</td>
</tr>
<tr>
<td>Academic Retention Concern (ARC)</td>
<td>276</td>
</tr>
<tr>
<td>Academic Standards Policy</td>
<td>276</td>
</tr>
<tr>
<td>Advising</td>
<td>277</td>
</tr>
<tr>
<td>Career Services</td>
<td>277</td>
</tr>
<tr>
<td>College Life</td>
<td>277</td>
</tr>
<tr>
<td>Credential Evaluations</td>
<td>283</td>
</tr>
<tr>
<td>Enrollment Services</td>
<td>286</td>
</tr>
<tr>
<td>eLearning</td>
<td>289</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>290</td>
</tr>
<tr>
<td>Registration</td>
<td>296</td>
</tr>
<tr>
<td>Special Instruction Programs and Locations</td>
<td>300</td>
</tr>
<tr>
<td>Student Orientation</td>
<td>301</td>
</tr>
<tr>
<td>Student Success Programs</td>
<td>301</td>
</tr>
<tr>
<td>Veteran and Military</td>
<td>301</td>
</tr>
<tr>
<td>Faculty and Administration</td>
<td>307</td>
</tr>
<tr>
<td>Board of Trustees</td>
<td>307</td>
</tr>
<tr>
<td>Executive Cabinet</td>
<td>308</td>
</tr>
<tr>
<td>Administration</td>
<td>308</td>
</tr>
<tr>
<td>Faculty</td>
<td>312</td>
</tr>
<tr>
<td>Foundation</td>
<td>319</td>
</tr>
<tr>
<td>Corrections</td>
<td>321</td>
</tr>
<tr>
<td>Catalog Corrections</td>
<td>321</td>
</tr>
<tr>
<td>Course Corrections</td>
<td>321</td>
</tr>
<tr>
<td>Degrees and Certificate Corrections</td>
<td>321</td>
</tr>
<tr>
<td>Catalog Archives</td>
<td>322</td>
</tr>
<tr>
<td>Index</td>
<td>323</td>
</tr>
</tbody>
</table>
**2024-2025 CATALOG**

**Mission**
To cultivate an inclusive, equitable, and vibrant community, Clark College educates, empowers, and elevates individuals to achieve their personal and professional goals.

**Vision**
Rooted in social justice, Clark College is a beacon of hope, opportunities, and transformation providing excellent and equitable education to create economic, cultural, and community growth.

**Values**
- Social Justice
- Partnerships
- Innovation
- Shared Governance
- Continuous Improvement
- Sustainability

**Tenets**

**Equitable Student Experience:** Clark College supports student success and retention through equitable access to quality education; pathways leading to transfer, completion, and living wage careers; and positive contributions to our community.

**Employee Engagement, Empowerment, and Excellence:** Clark College employees are valued, celebrated, and respected and are offered opportunities for equitable professional growth.

**Community Partners Engagement:** Clark College is a leader in inclusive excellence that strengthens the Southwest Washington community through interdependent partnerships, which are integral to our community’s cultural, economic, and educational vitality.

**Institutional Effectiveness and Equity:** Clark College maintains an equitable, high-performing organizational structure and positive college climate.

**Disability Support Services**
Clark College and the Disability Support Services (DSS) staff assist those with disabilities in pursuing their educational goals. The DSS staff is committed to assuring Clark College, its services, programs, and activities are accessible to individuals with disabilities. The institution takes seriously its responsibility to follow both the spirit and letter of all pertinent federal and state mandates.

If you are in need of accommodation due to a disability during any of the entry processes to Clark College or for your classes, contact DSS for assistance. Early contact with DSS personnel is essential.

360-992-2314
360-991-0901 VP
www.clark.edu/DSS (http://www.clark.edu/campus-life/student-support/disability_support/)
ACADEMIC PLANS

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

- Accounting (p. 7)
- Addiction Counselor Education (p. 9)
- Applied Management (BAS) (p. 12)
- Art (p. 14)
- Associate in Arts (AADTA) and Concentrations (p. 17)
- Associate in Science – Track 1 (AST1) (p. 24)
- Associate in Science – Track 2 (AST2) (p. 29)
- Automotive Technology (p. 34)
- Bioengineering and Chemical Engineering (p. 36)
- Biological Sciences (p. 38)
- Business Administration (p. 40)
- Computer Technology (p. 44)
- Culinary Arts (p. 46)
- Cybersecurity (BAS) (p. 49)
- Dental Hygiene (BAS) (p. 50)
- Diesel Technology (p. 52)
- Digital Media Arts (p. 54)
- Early Childhood Education (p. 55)
- Electrical and Computer Engineering (p. 60)
- Emergency Medical Services (p. 64)
- Health Information Management / Medical Billing and Coding (p. 65)
- Human Services (BAS) (p. 67)
- Marketing (p. 68)
- Materials Science (p. 70)
- Math Education (p. 72)
- Mechanical, Civil & Aeronautical Engineering (p. 74)
- Mechatronics (p. 79)
- Medical Assistant (p. 81)
- Music (p. 84)
- Network Technology (p. 86)
- Nursing (p. 88)
- Pharmacy Technician (p. 92)
- Phlebotomy (p. 95)
- Surveying & Geomatics (p. 97)
- Teacher Education (BAS) (p. 100)
- Web Development (p. 102)
- Welding Technology (p. 104)
ACCOUNTING

Accounting is an essential component of every institution and business organization. Basic accounting skills provided by the one-year certificate or the two-year degree will prove to be valuable in managing financial resources, policies and decisions.

- Accounting Clerk (CP)(Plan Code: ATBACC45) (p. 7)
- Accounting (AAS)(Plan Code: ATBACAPT) (p. 7)

**Accounting Clerk (CP)(Plan Code: ATBACC45)**

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication Skills (minimum 3 credits/units required)</td>
<td></td>
</tr>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Computational Skills (minimum 3 credits/units required)</td>
<td></td>
</tr>
<tr>
<td>BUS 102</td>
<td>Business Math Applications</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Human Relations (minimum 3 credits/units required)</td>
<td></td>
</tr>
<tr>
<td>BUS 148</td>
<td>Business Professional Self Development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Business Core Courses</strong></td>
<td></td>
</tr>
<tr>
<td>ACCT 129</td>
<td>Basic Accounting Procedures</td>
<td>5</td>
</tr>
<tr>
<td>BUS 101</td>
<td>Introduction to Business</td>
<td>5</td>
</tr>
<tr>
<td>BUS 150</td>
<td>Computer Business Applications</td>
<td>5</td>
</tr>
<tr>
<td>ECON 101</td>
<td>Introduction to Economics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Major Area Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>ACCT 136</td>
<td>Accounting Applications</td>
<td>3</td>
</tr>
<tr>
<td>BUS 130</td>
<td>Computerized Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 169</td>
<td>Introduction to Excel</td>
<td>3</td>
</tr>
<tr>
<td>COLL 101</td>
<td>College Essentials: Introduction to Clark</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Additional electives from ACCT/ECON/MGMT to meet min. credit requirement</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits/Units**: 45

**Program Outcomes**

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Perform all steps of the accounting cycle, using both general and specialized journals.
- Accurately prepare financial statements for sole proprietorships, partnerships, and corporations.
- Accurately prepare and maintain payroll records required under federal and state laws.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website [https://programmap.clark.edu/academics](https://programmap.clark.edu/academics/)

**Accounting (AAS)(Plan Code: ATBACAPT)**

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication Skills</td>
<td></td>
</tr>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Health &amp; Physical Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Course Options (p. 270)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Humanities</td>
<td></td>
</tr>
<tr>
<td>CMST&amp; 220</td>
<td>Public Speaking</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>or CMST&amp; 230 Small Group Communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural Sciences</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Course Options (p. 272)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Computational Skills</td>
<td></td>
</tr>
<tr>
<td>BUS 102</td>
<td>Business Math Applications</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Human Relations</td>
<td></td>
</tr>
<tr>
<td>BUS 148</td>
<td>Business Professional Self Development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Social Sciences</td>
<td></td>
</tr>
<tr>
<td>ECON 101</td>
<td>Introduction to Economics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Business Core</td>
<td></td>
</tr>
<tr>
<td>ACCT 129</td>
<td>Basic Accounting Procedures</td>
<td>5</td>
</tr>
<tr>
<td>BUS 101</td>
<td>Introduction to Business</td>
<td>5</td>
</tr>
<tr>
<td>BUS 150</td>
<td>Computer Business Applications</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Major Area Requirements</td>
<td></td>
</tr>
<tr>
<td>ACCT 136</td>
<td>Accounting Applications</td>
<td>3</td>
</tr>
<tr>
<td>ACCT&amp; 201</td>
<td>Principles of Accounting I</td>
<td>5</td>
</tr>
<tr>
<td>ACCT&amp; 202</td>
<td>Principles of Accounting II</td>
<td>5</td>
</tr>
<tr>
<td>ACCT&amp; 203</td>
<td>Principles of Accounting III</td>
<td>5</td>
</tr>
<tr>
<td>BUS 130</td>
<td>Computerized Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 169</td>
<td>Introduction to Excel</td>
<td>3</td>
</tr>
<tr>
<td>BUS 170</td>
<td>Excel for Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 199</td>
<td>Cooperative Work Experience</td>
<td>1-5</td>
</tr>
<tr>
<td>BUS&amp; 201</td>
<td>Business Law</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 146</td>
<td>Introduction to Stat</td>
<td>5</td>
</tr>
</tbody>
</table>
COLL 101 College Essentials: Introduction to Clark 2

Additional electives from BUS/ACCT/ECON/MGMT to meet min. credit requirement 3

Total Credits/Units 91

1 A minimum of 5 credit/units of BUS 199 are required for the AAS.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
• Demonstrate progress toward healthier behaviors. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Demonstrate interpersonal/human relations skills. (GE)
• Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
• Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
• Perform all steps of the accounting cycle, using both general and specialized journals.
• Accurately prepare, interpret, and analyze financial statements and data for sole proprietorships, partnerships, and corporations.
• Accurately prepare and maintain payroll records required under federal and state laws.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
ADDICTION COUNSELOR EDUCATION

The Clark College Addiction Counselor Education Department (ACED) program offers an AAS, for students pursuing the Chemical Dependency Professional (CDP) certification, an AA for students wishing to transfer to a state college or university and a Certificate of Proficiency for students who already possess a degree and plan to sit for the CDP state exam. The ACED program is certified by the National Association of Alcohol and Drug Abuse Counselors (NAADAC), as well as the National Addiction Studies Accreditation Commission (NASAC).

Addiction counselors work with families and individuals of all ages who are experiencing problems with addictive behaviors. Counselors may work as members of treatment teams in inpatient or outpatient settings, with schools, or in businesses. They provide group, individual, and couples therapy as well as assessments and interventions. Addiction counselors also work as liaisons for their clients to judicial systems, schools, state services, and communities. Counselors may serve as educators in their communities, acquainting community members with treatment options and prevention strategies for the community. Please contact the Addiction Counselor Education Department (ACED) program advisor for current Washington state certification requirements.

Students must complete all specifically listed courses and Major Area Requirements with a minimum grade of "C" or better in order to successfully complete the program and be awarded the award.

Refer to the Degree & Certificate Requirements Section of the Clark College Catalog to identify the courses needed to satisfy the General Education Requirements.

- Addiction Counselor Education (CP)(Plan Code: SAAACC45) (p. 9)
- Addiction Counselor Education (AAS)(Plan Code: SAAACAPT) (p. 10)
- Addiction Counselor Education (AA)(Plan Code: LASACAA) (p. 10)

Addiction Counselor Education (CP) (Plan Code: SAAACC45)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Education Requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication Skills (minimum 3 credits/units required)</td>
<td></td>
</tr>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Human Relations (minimum 3 credits/units required)</td>
<td></td>
</tr>
<tr>
<td>PSYC&amp; 100</td>
<td>General Psychology</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Computational Skills (minimum 3 credits/units required)</td>
<td></td>
</tr>
<tr>
<td>Course Options (p. 270)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Major Area Requirements</td>
<td></td>
</tr>
<tr>
<td>ACED 101</td>
<td>Survey of Addictionology ¹</td>
<td>3-5</td>
</tr>
<tr>
<td>or HSSA&amp; 101</td>
<td>Introduction to Addictive Drugs</td>
<td></td>
</tr>
</tbody>
</table>

¹ For non-majors also.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Communicate effectively, accurately, and professionally, using verbal, non-verbal, and written language with diverse populations of clients, patients, colleagues, the public, and other healthcare providers.
- Demonstrate professional and ethical behaviors when working with clients, patients, other professionals, and the public.
- Successfully complete Washington State Chemical Dependency Professional exam.
- Understand and participate in addiction placement, continuing care, and discharge of patients and clients with addictions.
- Treat substance abuse clients in multiple settings including individual and group counseling situations.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
Addiction Counselor Education (AAS) (Plan Code: SAAACAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communication Skills</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>English Composition II</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Health &amp; Physical Education</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Course Options (p. 270)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Computational Skills</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 92</td>
<td>Applied Elementary Algebra (or any higher level Math course)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Human Relations</strong></td>
<td></td>
</tr>
<tr>
<td>PSYC&amp; 100</td>
<td>General Psychology</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Humanities</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Course Options (p. 270)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Social Sciences</strong></td>
<td></td>
</tr>
<tr>
<td>PSYC&amp; 200</td>
<td>Lifespan Psychology</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Natural Sciences</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Course Options (p. 272)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Major Area Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>ACED 101</td>
<td>Survey of Addictionology</td>
<td>3-5</td>
</tr>
<tr>
<td>or HSSA&amp; 101</td>
<td>Introduction to Addictive Drugs</td>
<td></td>
</tr>
<tr>
<td>ACED 125</td>
<td>Group Counseling In Addictions</td>
<td>3</td>
</tr>
<tr>
<td>ACED 132</td>
<td>Introduction to Counseling Family Members</td>
<td>3</td>
</tr>
<tr>
<td>ACED 136</td>
<td>Law and Ethics In Addictions Counseling</td>
<td>3</td>
</tr>
<tr>
<td>ACED 137</td>
<td>Addictions and Mental Illness</td>
<td>3</td>
</tr>
<tr>
<td>ACED 138</td>
<td>Prevention and Education In The Community</td>
<td>3</td>
</tr>
<tr>
<td>ACED 160</td>
<td>Pharmacology of Drugs of Abuse</td>
<td>3</td>
</tr>
<tr>
<td>ACED 164</td>
<td>Adolescent Addiction Assessment &amp; Treatment</td>
<td>3</td>
</tr>
<tr>
<td>ACED 170</td>
<td>Air- and Blood-Borne Pathogens</td>
<td>3</td>
</tr>
<tr>
<td>ACED 201</td>
<td>Theories of Counseling</td>
<td>3</td>
</tr>
<tr>
<td>ACED 202</td>
<td>Multi-Cultural Addictions Counseling</td>
<td>3</td>
</tr>
<tr>
<td>ACED 203</td>
<td>Case Management In Addiction Medicine</td>
<td>3</td>
</tr>
<tr>
<td>ACED 204</td>
<td>Introduction to Addiction Counseling Skills</td>
<td>3</td>
</tr>
<tr>
<td>ACED 205</td>
<td>Advanced Techniques for Addiction Counsel</td>
<td>3</td>
</tr>
<tr>
<td>ACED 210</td>
<td>Field Placement I</td>
<td>12</td>
</tr>
<tr>
<td>&amp; ACED 211</td>
<td>and Field Placement II</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>General Electives</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Complete as many courses as necessary to reach 90 credits/units</td>
<td>90</td>
</tr>
</tbody>
</table>

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Understand and participate in addiction placement, continuing care, and discharge of patients and clients with addictions.
- Communicate effectively, accurately, and professionally, using verbal, non-verbal, and written language with diverse populations of clients, patients, colleagues, the public, and other healthcare providers.
- Demonstrate professional and ethical behaviors when working with clients, patients, other professionals, and the public.
- Successfully complete Washington State Chemical Dependency Professional exam.
- Treat substance abuse clients in multiple settings including individual and group counseling situations.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Addiction Counselor Education (AA) (Plan Code: LASACAA)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communication Skills</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>English Composition II</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Oral Communication</strong></td>
<td></td>
</tr>
<tr>
<td>CMST&amp; 210</td>
<td>Interpersonal Communication</td>
<td>5</td>
</tr>
</tbody>
</table>

1 May count for both Human Relations and Social Science distribution.
2 For non-majors also.
<table>
<thead>
<tr>
<th>Course Options (p. 264)</th>
<th>5</th>
</tr>
</thead>
</table>

**Course Options (p. 264)**
- or CMST& 220 Public Speaking
- or CMST& 230 Small Group Communication

**Quantitative Skills**

**Course Options (p. 264)**
- Health & Physical Education

**Course Options (p. 264)**
- Humanities

**Course Options (p. 265)**
- Social Sciences

**Social Sciences**

<table>
<thead>
<tr>
<th>Course Options (p. 266)</th>
<th>10</th>
</tr>
</thead>
</table>

**Course Options (p. 266)**
- Select 10 additional credits/units from two other departments

**Natural Sciences**

**Course Options (p. 267)**

**Major Area Requirements**

<table>
<thead>
<tr>
<th>Course Options (p. 267)</th>
<th>15</th>
</tr>
</thead>
</table>

**Course Options (p. 267)**
- ACED 101 Survey of Addictionology
- or HSSA& 101 Introduction to Addictive Drugs
- ACED 136 Law and Ethics In Addictions Counseling
- ACED 160 Pharmacology of Drugs of Abuse
- ACED 201 Theories of Counseling
- ACED 204 Introduction to Addiction Counseling Skills
- PSYC& 200 Lifespan Psychology

**Additional Specified Electives**

<table>
<thead>
<tr>
<th>Course Options (p. 267)</th>
<th>0-2</th>
</tr>
</thead>
</table>

**Total Credits/Units**

- 90

---

1. Select courses from at least two (2) subject areas for a minimum of fifteen (15) credits/units. You may include no more than 10 credits/units from any one subject area. A maximum of five (5) credits/units of “B” list coursework may be applied. A maximum of five (5) credits/units of 100-level world language can be applied.

2. Must include a lab science.

3. For non-majors also.

---

**Program Outcomes**

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Communicate effectively, accurately, and professionally, using verbal, non-verbal, and written language with diverse populations of clients, patients, colleagues, the public, and other healthcare providers.
- Demonstrate professional and ethical behaviors when working with clients, patients, other professionals, and the public.
- Successfully complete Washington State Chemical Dependency Professional exam.
- Understand and participate in addiction placement, continuing care, and discharge of patients and clients with addictions.
- Treat substance abuse clients in multiple settings including individual and group counseling situations.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
APPLIED MANAGEMENT (BAS)

The Bachelor of Applied Science (BAS) in Applied Management is a two-year, 90-credit/unit program that combines technical and academic courses. This degree is designed for professional and technical education (PTE) students, to qualify them for the program with a junior standing, after completing an associate degree. The BAS in Applied Management program combines 300- and 400-level general education and managerial courses, to prepare technically skilled students to enter their respective career fields with a bachelor’s degree, allowing them to obtain managerial-level positions or to start their own businesses.

Application Process & Preliminary Requirements

Preliminary requirements must be satisfied to qualify to apply prior to program entry. Clark College reserves the right to determine admissions status. Please note: completion of the preliminary requirements does not guarantee entrance into the Bachelor of Applied Science in Applied Management Program.

To meet preliminary program entrance requirements, candidates must:

- Complete an associate (AAS, AAT, AA, AST) degree (90 credits/units or higher) or higher from an accredited institution and/or international equivalent
- Cumulative GPA of 2.0
- Complete the following preliminary courses with a grade of ‘C’ or better:
  1. Communication skills
     a. English Composition (ENGL& 101 or equivalent)
     b. Oral Communications (CMST& 210, CMST& 220, or equivalent)
  2. College-level Math (5 credits/units required)
     - Submit official college transcripts from all previous colleges attended to the Credential Evaluations Office for complete transcript evaluation and continue to send updated transcripts quarterly, as additional courses are completed. If you earned your degree or all your credits/units from Clark College, you do not need to include a transcript.
     - Apply to the program by completing the Clark College application packet for BAS in Applied Management. Submit the packet to the Clark College Enrollment Services in Gaiser Hall before the enrollment deadline, along with the non-refundable program application fee.

Upon completion of the preliminary requirements, all qualified applicants will be notified in writing of final acceptance into the program. The payment of a non-refundable deposit will reserve a position for the program’s next entry date. Students not selected for entry are welcome to reapply for the next cohort start date but are encouraged to seek advising before doing so. Students must formally comply with the published application and admission criteria for that year and cohort.

Selective criteria and current fee amounts are subject to change.

For complete, updated information, please visit the Applied Management (BAS) website (https://www.clark.edu/academics/programs/business-and-entrepreneurship/basam/).

- Applied Management (BAS)(Plan Code: BAMAMBAS) (p. 12)

Applied Management (BAS)(Plan Code: BAMSMBAS)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

All BASAM specifically listed courses must be completed with a grade of “C” or higher.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Education Requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication Skills</td>
<td></td>
</tr>
<tr>
<td>CMST 310</td>
<td>Organizational Communication</td>
<td>5</td>
</tr>
<tr>
<td>Human Relations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC 315</td>
<td>Organizational Behavior</td>
<td>5</td>
</tr>
<tr>
<td>Social Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 405</td>
<td>Managerial and Global Economics</td>
<td>5</td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 420</td>
<td>Ethics In Management</td>
<td>5</td>
</tr>
<tr>
<td>Natural Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVS 430</td>
<td>Sustainability &amp; Environmental Practices</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Major Area Requirements</td>
<td></td>
</tr>
<tr>
<td>BASAM 301</td>
<td>Foundations of Management</td>
<td>5</td>
</tr>
<tr>
<td>BASAM 305</td>
<td>Social Media In Business</td>
<td>5</td>
</tr>
<tr>
<td>BASAM 320</td>
<td>Business Research Applications</td>
<td>5</td>
</tr>
<tr>
<td>BASAM 325</td>
<td>Business Principles</td>
<td>5</td>
</tr>
<tr>
<td>BASAM 330</td>
<td>Accounting Principles for Managers</td>
<td>5</td>
</tr>
<tr>
<td>BASAM 335</td>
<td>Legal Issues In Management</td>
<td>5</td>
</tr>
<tr>
<td>BASAM 340</td>
<td>Marketing for Managers</td>
<td>5</td>
</tr>
<tr>
<td>BASAM 400</td>
<td>Human Resource Management</td>
<td>5</td>
</tr>
<tr>
<td>BASAM 410</td>
<td>Principles of Project Management</td>
<td>5</td>
</tr>
<tr>
<td>BASAM 415</td>
<td>Financial Management</td>
<td>5</td>
</tr>
<tr>
<td>BASAM 425</td>
<td>Operations and Logistics</td>
<td>5</td>
</tr>
<tr>
<td>BASAM 440</td>
<td>Capstone: Strategic Management &amp; Policy</td>
<td>5</td>
</tr>
<tr>
<td>BASAM 450</td>
<td>Applied Management Internship</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Additional Requisite Requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Please note that in addition to the 90 credits/units required in upper division courses a student must complete 90 (ninety) additional credits/units from an associate degree for a total of 180 credits/units.</td>
<td></td>
</tr>
<tr>
<td>Communication Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>Quantitative Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 146</td>
<td>Introduction to Stat (recommended)</td>
<td>5</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any College level Math course (5 credits/units) (p. 266)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Options (p. 266)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMST&amp; 210</td>
<td>Interpersonal Communication</td>
<td>5</td>
</tr>
<tr>
<td>or CMST&amp; 220</td>
<td>Public Speaking</td>
<td></td>
</tr>
</tbody>
</table>
Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Describe the complexities that affect successful trading in domestic and global markets, utilizing information, data, and technologies to support effective decision making.
- Recognize and apply effective communication strategies, appropriate to organizational settings.
- Analyze and apply managerial functions, roles, styles, and effective strategies for stability and change, to be used in various managerial and leadership situations.
- Analyze legal issues for risk management and responsible oversight.
- Interpret financial models for business decision-making to support organizational goals.
- Evaluate and develop organizational structures and operating procedures to foster continuous improvement, innovation, and quality results.
- Balance theoretical and practical strategies and policies for a productive, quality, and motivated workforce, including managing diversity, ethics, and social responsibility.
- Develop and apply a marketing strategy, based on an integrated marketing plan, to produce and distribute products at optimum operational levels.
- Obtain, evaluate, and ethically use information. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Analyze patterns of power, privilege, and inequity in the United States. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Apply communication theory to demonstrate effective oral communication skills. (GE)
The Clark College Art Department offers many classes to help students prepare for advanced studies at a four-year institution, enter an art profession directly, or simply enrich their spirit. Clark’s Art faculty is composed of a complementary blend of highly qualified instructors possessing advanced degrees, as well as recognized working professionals who bring with them a practical knowledge of the art marketplace.

It is imperative that students planning to transfer to a college, university or art school and seek a B.A. (Bachelor of Arts) or B.F.A. (Bachelor of Fine Arts) in a design-related field see an Art Department faculty member as early as possible to plan an individualized program. Call 360-992-2370 or 360-992-2639 for an appointment.

- Graphic Design (AFA)(Plan Code: LASFGAA) (p. 14)
- Studio Arts (AFA)(Plan Code: LASFSAA) (p. 15)

**Graphic Design (AFA)(Plan Code: LASFGAA)**

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Completion of the following recommended courses does not guarantee admission as an art major with junior standing at the transfer institution. A competitive GPA and a quality portfolio are also essential. Due to the AFA degree’s heavy emphasis on art and graphic design foundation courses, upon acceptance, the AFA student should expect to complete further general education courses at the baccalaureate institution in addition to the major area coursework. Students are strongly advised to select and plan courses in collaboration with their Art Department advisor, and to contact the intended transfer institution to determine required coursework as early as possible. Also, please see the Digital Media Arts department’s career and technical AAT degree in Digital Media Arts or Web Development department’s career and technical AAT degree and Certificate of Proficiency in Web Development.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLL 101</td>
<td>College Essentials: Introduction to Clark</td>
<td>2</td>
</tr>
</tbody>
</table>

**Communication Skills**

| ENGL 101 | English Composition I                      | 5             |

**Quantitative Skills**

Select one from the following:

| MATH& 107 | Math In Society (recommended)              |               |

OR

Select five credits/units from any college level Math class (p. 264)

**Health & Physical Education**

Select one from the following:

| HPE 258 | Fitness-Wellness                         |               |
|         | or HPE 266 | Mind Body Health                        |               |

**Humanities**

Select two credits/units of Health and one credit/unit of Physical Education (p. 264)

<table>
<thead>
<tr>
<th>Humanities</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST&amp; 102 Intro to Mass Media</td>
<td>5</td>
</tr>
<tr>
<td>DRMA 154 Introduction to Cinema</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 173 Popular Culture</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 176 Nature and the Humanities</td>
<td>5</td>
</tr>
</tbody>
</table>

**Social Sciences**

| CMST& 230 Small Group Communication | 5             |

**Natural Sciences**

Select five credits/units from a lab science (p. 267)

**Major Area Requirements**

**Fine Arts Foundations**

| ART 101 | 2D Art and Design                        | 5             |
| ART 103 | Drawing I                                | 5             |

**Digital Media Arts**

| DMA 101 | Photoshop Raster Graphics                | 4             |
| DMA 102 | Illustrator Vector Graphics              | 4             |

**Graphic Design**

| ART 172 | Graphic Design Exploration               | 5             |
| ART 173 | Graphic Design Studio I                  | 5             |
| ART 174 | Typography I                             | 5             |
| ART 215 | Portfolio Development                     | 3             |
| ART 170 | Publication Production I                 | 3             |
| ART 271 | Typography II                            | 5             |
| ART 272 | Graphic Design History                   | 5             |
| ART 273 | Graphic Design Studio II                 | 5             |
| ART 274 | Graphic Design Studio III                | 5             |

Choose 2 (two) electives from the list below: 7-10

| ART 104 | Observational Drawing                    |               |
| ART 105 | Drawing for Comics                       |               |
| ART 117 | Three-Dimensional Design                 |               |
| ART 118 | Time-Based Art and Design                |               |
| ART 120 | Printmaking I                            |               |
| ART 121 | Printmaking II                           |               |
| ART 123 | Photography I                            |               |
| ART 124 | Photography II                           |               |
| ART 203 | The Human Figure I                       |               |
| ART 204 | The Human Figure II                      |               |
| ART 208 | Digital Painting & Illustration          |               |
| ART 257 | Painting I                               |               |
| ART 258 | Painting II                              |               |
| ART 260 | Watercolor I                             |               |
| ART 261 | Watercolor II                            |               |
| ART 270 | Publication Production                   |               |
| DMA 104 | Motion Graphics and Animation I          |               |
| DMA 201 | Video and Sound Production I             |               |
| DMA 202 | Video and Sound Production II            |               |
Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Recognize and apply foundational art theory.
- Place design projects and issues in context of society and culture.
- Generate original ideas and utilize processes toward solving visual communication problems.
- Implement tools and technology to realize visual ideas.
- Interact, collaborate and implement projects with peers, clients or others in various work environments.
- Effectively organize and manage graphic design projects.
- Use written, verbal and visual means to effectively present and communicate graphic design projects.
- Demonstrate work and business ethics in graphic design practice.
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Obtain, evaluate, and ethically use information. (GE)
- Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
- Evaluate claims about the natural world using scientific methodology. (GE)
- Analyze patterns of power, privilege, and inequity in the United States. (GE)
- Apply communication theory to demonstrate effective oral communication skills. (GE)

Completion of the following recommended courses does not guarantee admission as an art major with junior standing at the transfer institution. A competitive GPA and a quality portfolio are also essential. Due to the AFA degree’s heavy emphasis on studio art and art foundation courses, upon acceptance, the AFA student should expect to complete further general education courses at the baccalaureate institution in additions to upper-level course work in their major area. Students are strongly advised to select and plan courses in collaboration with their Art Department advisor and to contact the intended transfer institution to determine required coursework as early as possible.

**Studio Arts (AFA)(Plan Code: LASFSAA)**

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

The Art Department offers this specialized degree primarily for students intending to pursue a Bachelor of Fine Arts in Studio Art at a baccalaureate institution with competitive portfolio entry. The program also provides a suggested framework of study for those who, although they may not wish to transfer, still want a well-rounded educational experience in studio art for personal enrichment or to develop their skills as a commercial or fine artist. The degree places emphasis on fine art foundations courses and also requires the student to specialize in a particular studio area (painting, drawing, photography, ceramics, or metals). Students will document a body of artwork in the culminating ART 215 Portfolio class and create related written materials to demonstrate their skills and to carry them to the next step on their pathway within the fine arts.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>Course Options (p. 264)</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Course Options (p. 266)</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Select five credits/units from the AA distribution list of Humanities A-list classes (p. 265)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Course Options (p. 267)</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>COLL 101</td>
<td>College Essentials: Introduction to Clark</td>
<td>2</td>
</tr>
<tr>
<td>ART 101</td>
<td>2D Art and Design</td>
<td>5</td>
</tr>
<tr>
<td>ART 103</td>
<td>Drawing I</td>
<td>5</td>
</tr>
<tr>
<td>ART 117</td>
<td>Three-Dimensional Design</td>
<td>5</td>
</tr>
<tr>
<td>ART 118</td>
<td>Time-Based Art and Design</td>
<td>5</td>
</tr>
<tr>
<td>ART 104</td>
<td>Observational Drawing</td>
<td>5</td>
</tr>
</tbody>
</table>
or ART 203  The Human Figure I
or ART 105  Drawing for Comics
ART 215  Portfolio Development 3
ART Elective - Choose any 5 credit Art Prefix Course 5
Art History - Choose 1 (one) from List A and 1 (one) more from either list A or B: 10
List A:
   ART 220  Art History: Ancient to Late Antique
   ART 221  Art History: Medieval-Renaissance
   ART 222  Art History: Baroque-Modern
   ART 223  Art History: 20th Century
List B:
   ART 225  Art History: Asian Art
   ART 250  Women Artists Through History
   ART 272  Graphic Design History
Studio Concentration
Select a minimum of 15 credits/units from one of the following studio concentration areas: 15
Metal Arts
   ART 189  Metal Arts I
   ART 190  Metal Arts II
   ART 191  Metal Arts III
Photography
   ART 123  Photography I
   ART 124  Photography II
   ART 125  Photography III
Ceramics
   ART 180  Ceramics I
   ART 181  Ceramics II
   ART 182  Ceramics III
Drawing/Painting
   ART 104  Observational Drawing
   ART 105  Drawing for Comics
   ART 120  Printmaking I
   ART 121  Printmaking II
   ART 122  Printmaking III
   ART 203  The Human Figure I
   ART 204  The Human Figure II
   ART 257  Painting I
   ART 258  Painting II
   ART 259  Painting III
   ART 260  Watercolor I
   ART 261  Watercolor II
   ART 262  Watercolor III
Illustration
   ART 104  Observational Drawing
   ART 105  Drawing for Comics
   ART 203  The Human Figure I
   ART 208  Digital Painting & Illustration
   ART 257  Painting I
   ART 260  Watercolor I
   DMA 102  Illustrator Vector Graphics
Electives 2
Select an additional 2 (two) credits/units from the AA distribution list of General Electives
Total Credits/Units 90

1 Cannot be an Art class.
2 Must include a lab course.
3 Must not include those listed in the Foundations requirements.

Program Outcomes
Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Identify and utilize the elements and principles of design in works of art.
- Analyze works and ideas in the visual arts within appropriate historical, cultural, and stylistic contexts.
- Demonstrate technical skill, care in handling of materials, awareness of process, and purposeful execution appropriate to discipline.
- Use discipline appropriate vocabulary.
- Synthesize design skills, contextual awareness, technique and craftsmanship to create innovative, coherent works.
- Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Evaluate claims about the natural world using scientific methodology. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Analyze patterns of power, privilege, and inequity in the United States. (GE)
- Obtain, evaluate, and ethically use information. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Apply communication theory to demonstrate effective oral communication skills. (GE)

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.
To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
ASSOCIATE IN ARTS (AADTA) AND CONCENTRATIONS

(Plancode: LASTDAA)

The Associate in Arts (AA) degree is designed for students planning to transfer to a four-year institution to pursue a bachelor's degree program. The degree, in most cases, meets the first two (2) years of general education requirements with at least 90 quarter or 60 semester credits upon entry, at the senior institution. There are exceptions; please check with the transfer institution for additional information. Most students transferring with the AA degree will be granted junior standing upon entry to the senior institution.

The standard Associate in Arts degree is also known as a Direct Transfer Agreement (DTA) Associate degree. The AA-DTA is a statewide agreement between the Washington State community and technical colleges and Washington State public universities as well as some private colleges and universities. The agreement outlines transferability of coursework and standing; in most cases students who have completed an AA-DTA will also have satisfied general education requirements at the baccalaureate institution and will have junior standing. Students should review their baccalaureate institution to see if they are part of the DTA in Washington State.

AA – DTA Degree Options

Students are advised to carefully examine the differences in the degree requirements where there is more than one choice within a major field and be sure that their transfer intent is in line with the degree chosen.

Transfer of Grades

The grades assigned in transferable courses by the sending institution shall not be altered by the receiving institution. They also are not used in calculating students’ Clark GPA. Courses completed with a grade of ‘D’ or above shall normally be accepted in transfer (except at The Evergreen State College, where a minimum of 2.0 or ‘C’ is required for transfer). Nontraditional grading practices require special handling, depending on the nature and circumstances of the program from which and to which a student is transferring, but receiving institutions shall take steps to assure all students equitable treatment.

General Requirements for All Associate in Arts Degrees

- Complete a minimum of ninety (90) college-level credits/units, with a minimum of sixty (60) quarter hours of general education.
- Maintain a minimum cumulative college-level GPA of 2.00 or higher.
- Thirty (30) credits/units minimum must be completed at Clark College to meet Academic Residency.
- Submit a graduation application by the appropriate deadline.

General Credit/Unit Restrictions

- Credit/Unit by Department: Ten (10) credits/units maximum from any single department can be used to fulfill Humanities, Social Sciences and Natural Sciences distribution requirements.
- World Language: Five (5) credits/units maximum in 100-level world language can be used to fulfill Humanities distribution requirements.

Additional 100-level world language coursework can be used to meet Specified or General Elective requirements.
- Physical Education Activity: Three (3) credits/units maximum in PE activity can apply toward the degree.

Other Applicable Credit/Unit Options

- Advanced Placement (AP) and/or International Baccalaureate (IB): A maximum of forty-five (45) credits/units from AP, IB or a combination of both, can be applied to a degree.
- College Level Examination Program (CLEP): Students may request up to fifteen (15) CLEP credits/units to be applied to a degree. Credits/Units will be used to fulfill general elective requirements only.
- Course Challenge: Students may use credits/units earned from successful course challenges toward 25% of the degree or certificate. Credit/Unit by course challenge will meet academic residency requirements.
- Tech Prep/Direct Credit/Unit: Tech Prep/Direct Credit/Unit courses that are part of a professional program and fall into the restricted area in the DTA degree are limited to 15 credits/units. If Tech Prep/Direct Credit/Unit courses apply to a professional technical degree or certificate, there is no limit to the number of credits/units that can be applied.
- Cooperative Work Experience: No more than fifteen (15) credits/units may be applied to the associate degree.
- Special Projects: No more than fifteen (15) credits/units in Special Projects will be allowed toward the Associate in Arts degree.
- Military Experience: Credits/Units may be earned by previous military experience. Please contact the Veterans Affairs Office at Clark College for further information. Credit/Unit awarded for military experience may be granted for up to 25% of the degree and/or certificate.
- Pass/Fail Grading Option: Forty-Five (45) credits/units maximum in courses with Pass/Fail grading option can apply toward the degree, with the exception of the AA Nursing degree which exceeds this limit because of clinical requirements.

General Restrictions

1. A course can apply toward only one (1) distribution requirement (i.e., Communication Skills, Quantitative Skills/Symbolic Reasoning Skills, Humanities, Social Sciences and Natural Sciences). The exception is for Oral Communications, which is a local degree requirement. When meeting the Oral Communications requirement, the same course can be applied to the degree requirement and to the distribution area.
2. Excess credits/units earned in distribution areas (i.e., Communication Skills, Quantitative Skills/Symbolic Reasoning Skills, Humanities, Social Sciences and Natural Sciences) can be used to fulfill the Elective requirements.
3. Credit/Unit by Challenge coursework will meet academic residency requirements.

- Associate in Arts (AADTA)(Plan Code: LASDTA) (p. 18)
- Concentration in Agroecology (AADTA)(Plan Code: LASDTA, Subplan Code: AGROECOLGY) (p. 19)
- Concentration in Elementary Education (AADTA) (Plan Code: LASDTA, Subplan Code: ELMNTRYEDU) (p. 19)
- Concentration in Graphic Design (Plan Code: LASDTA, Subplan Code: GRAPHICDSN) (p. 20)
• Concentration in Power, Privilege, and Inequity (Plan Code: LASDTAA, Subplan Code: PWRPRVINEQ) (p. 21)
• Concentration in Studio Arts (Plan Code: LASDTAA, Subplan Code: STUDIOART) (p. 21)
• Concentration in Women’s Studies (Plan Code: LASDTAA, Subplan Code: WOMENSSTDY) (p. 22)
• Concentration in World Languages (AADTA)(Plan Code: LASDTAA, Subplan Code: WORLDLANG) (p. 23)

Associate in Arts (AADTA)(Plan Code: LASDTAA)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communication Skills</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Select one of the following Options</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Option 1</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 102</td>
<td>English Composition II</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>or ENGL &amp; 23 Technical Writing</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Option 2</strong></td>
<td></td>
</tr>
<tr>
<td>BUS 211</td>
<td>Business Communications</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and</td>
<td></td>
</tr>
<tr>
<td>CMST&amp; 220</td>
<td>Public Speaking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or CMST &amp; 21 Interpersonal Communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or CMST &amp; 23 Small Group Communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Quantitative Skills/Symbolic Reasoning Skills</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one option: (p. )</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Distribution Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Humanities</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Course Options (p. 265)</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td><strong>Social Sciences</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Course Options (p. 266)</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td><strong>Natural Sciences</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Course Options (p. 267)</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td><strong>Additional Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>College 101</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>COLL 101</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Health and Physical Education</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one option (p. 264)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Oral Communication</strong></td>
<td></td>
</tr>
<tr>
<td>CMST&amp; 210</td>
<td>Interpersonal Communication</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>or CMST &amp; 220 Public Speaking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or CMST &amp; 230 Small Group Communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Power, Privilege, and Inequity</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one option (p. )</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Elective Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Specified Electives</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Course Options (p. 267)</strong></td>
<td>15</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits/Units</strong></td>
<td>90</td>
</tr>
</tbody>
</table>

1 For admission to the institution, the University of Washington requires completion of the course designated Algebra II at either the high school or community college. However, UW recognizes the new QSR as fulfilling the DTA QSR requirement. To qualify for QSR, college level math and logic courses must require intermediate algebra course work (high school or college) with a grade of 2.0 or higher as a prerequisite. The University of Washington accepts Mathematics for Elementary Education for elective credits/units, but not as meeting its QSR requirement, since UW offers no degree pathway for which it is appropriate.

2 Select courses from at least two (2) subject areas for a minimum of fifteen (15) credits/units. You may include no more than 10 credits/units from any one subject area. A maximum of five (5) credits/units of “B” list coursework may be applied. A maximum of five (5) credits/units of 100-level world language can be applied.

3 Select courses from at least three (3) subject areas for a minimum of fifteen (15) credits/units. You may include no more than ten (10) credits/units from any one subject area.

4 Select courses from at least two (2) subject areas for a minimum of fifteen (15) credits/units. You may include no more than ten (10) credits/units from any one subject area. You must include at least one lab science.

5 Oral Communications courses fulfill the Oral Communication requirement within an existing distribution area. Check course description for further distribution information.

6 Power, Privilege and Inequity required course fulfill the PPI requirement within an existing distribution area. Check course description for further distribution information.

7 Complete a total of twenty-seven (27) credits/units from courses numbered 100 and above. No more than 15 credits/units can be taken from the General Elective area. Approved courses that apply: WC, Q, HA, HB, SS, NS, SE, HE, HPE, PE, PPI, OC.

8 A maximum of two (2) credits/units in PE activity can apply toward this area.

9 COLL 101 fulfills 2 (two) credits/units of General Electives.

10 These courses may be vocational in nature from Career and Technical education courses. The transferability of the Career-Technical courses and any CAP, ESL or IELP 100-level courses is determined by the receiving baccalaureate institution.

Note: Coursework in ESL or FLPC cannot apply to the AA degree program.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Obtain, evaluate, and ethically use information. (GE)
• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
• Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Demonstrate progress toward healthier behaviors. (GE)
• Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
• Analyze patterns of power, privilege, and inequity in the United States. (GE)
• Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
• Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
• Apply communication theory to demonstrate effective oral communication skills. (GE)

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Concentration in Agroecology (AADTA)(Plan Code: LASDTAA, Subplan Code: AGROECOLGY)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Must concurrently complete the AADTA.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVS&amp; 101</td>
<td>Introduction to Environmental Science</td>
<td>5</td>
</tr>
<tr>
<td>ENVS 200</td>
<td>Global Climate Change</td>
<td>5</td>
</tr>
<tr>
<td>ENVS 201</td>
<td>Introduction to Soils: A Living System</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 146</td>
<td>Introduction to Stat</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 224</td>
<td>Flowering Plants of The Pacific Northwest</td>
<td>5</td>
</tr>
<tr>
<td>ENVS 202</td>
<td>Native Plant Propagation: Principles &amp; Practice</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 208</td>
<td>Field Studies In Environmental Science (minimum of 3 credits/units required)</td>
<td>1-8</td>
</tr>
<tr>
<td>or BIOL 208</td>
<td>Field Studies In Biology</td>
<td></td>
</tr>
<tr>
<td>or BIOL 139</td>
<td>Introduction to Wildlife</td>
<td></td>
</tr>
<tr>
<td>ENVS 290</td>
<td>Special Projects (minimum 1 credit/unit required)</td>
<td>1-3</td>
</tr>
<tr>
<td>Total Credits/Units Required for Concentration</td>
<td>32-39</td>
<td></td>
</tr>
</tbody>
</table>

Recommended courses to be completed as part of the AADTA degree

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 231</td>
<td>Environmental Politics</td>
<td>5</td>
</tr>
<tr>
<td>GEOG 205</td>
<td>Physical Geography</td>
<td>5</td>
</tr>
<tr>
<td>WS 101</td>
<td>Introduction to Women’s Studies</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 176</td>
<td>Nature and the Humanities</td>
<td>5</td>
</tr>
</tbody>
</table>

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Demonstrate an understanding of the connections between the natural and managed landscape.
• Demonstrate how agriculture, ecology, and equity intersect and interact, and how changes to any one impacts the others, using foundation principles of systems.
• Draft and implement an agroecology system plan and demonstrate an understanding of the outcomes and evaluate to determine future actions (next steps) that need to be taken.
• Communicate effectively, accurately and professionally, using verbal, non-verbal, and written language with diverse populations of potential customers, employees, colleagues, the public, and other organizations and agencies about agroecology concepts, strategies and applications.
• Recognize the diversity of opportunities within agroecology and identify their own niche where their interests and skills converge. (the special project will be used as assessment).

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Concentration in Elementary Education (AADTA) (Plan Code: LASDTAA, Subplan Code: ELMNTRYEDU)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Must concurrently complete the AADTA.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 102</td>
<td>English Composition II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 122</td>
<td>Math for Elementary Teachers</td>
<td>5</td>
</tr>
</tbody>
</table>

Major Area Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 208</td>
<td>Field Studies In Environmental Science (minimum of 3 credits/units required)</td>
<td>1-8</td>
</tr>
<tr>
<td>or BIOL 208</td>
<td>Field Studies In Biology</td>
<td></td>
</tr>
<tr>
<td>or BIOL 139</td>
<td>Introduction to Wildlife</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 231</td>
<td>Environmental Politics</td>
<td>5</td>
</tr>
<tr>
<td>GEOG 205</td>
<td>Physical Geography</td>
<td>5</td>
</tr>
<tr>
<td>WS 101</td>
<td>Introduction to Women’s Studies</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 176</td>
<td>Nature and the Humanities</td>
<td>5</td>
</tr>
</tbody>
</table>
Concentration in Graphic Design (Plan Code: LASDTAA, Subplan Code: GRAPHICDSN)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Must concurrently complete the AADTA.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>2D Art and Design</td>
<td>5</td>
</tr>
<tr>
<td>ART 103</td>
<td>Drawing I</td>
<td>5</td>
</tr>
<tr>
<td>ART 173</td>
<td>Graphic Design Studio I</td>
<td>5</td>
</tr>
<tr>
<td>ART 174</td>
<td>Typography I</td>
<td>5</td>
</tr>
<tr>
<td>ART 272</td>
<td>Graphic Design History</td>
<td>5</td>
</tr>
<tr>
<td>DMA 102</td>
<td>Illustrator Vector Graphics</td>
<td>4</td>
</tr>
<tr>
<td>ART 104</td>
<td>Observational Drawing</td>
<td>5</td>
</tr>
<tr>
<td>ART 105</td>
<td>Drawing for Comics</td>
<td>5</td>
</tr>
<tr>
<td>ART 118</td>
<td>Time-Based Art and Design</td>
<td>5</td>
</tr>
<tr>
<td>ART 120</td>
<td>Printmaking I</td>
<td>5</td>
</tr>
<tr>
<td>ART 121</td>
<td>Printmaking II</td>
<td>5</td>
</tr>
<tr>
<td>ART 123</td>
<td>Photography I</td>
<td>5</td>
</tr>
<tr>
<td>ART 124</td>
<td>Photography II</td>
<td>5</td>
</tr>
<tr>
<td>ART 170</td>
<td>Publication Production I</td>
<td>3</td>
</tr>
<tr>
<td>ART 172</td>
<td>Graphic Design Exploration</td>
<td>5</td>
</tr>
<tr>
<td>ART 203</td>
<td>The Human Figure I</td>
<td>5</td>
</tr>
<tr>
<td>ART 204</td>
<td>The Human Figure II</td>
<td>5</td>
</tr>
<tr>
<td>ART 208</td>
<td>Digital Painting &amp; Illustration</td>
<td>5</td>
</tr>
<tr>
<td>ART 215</td>
<td>Portfolio Development</td>
<td>3</td>
</tr>
<tr>
<td>ART 257</td>
<td>Painting I</td>
<td>5</td>
</tr>
<tr>
<td>ART 258</td>
<td>Painting II</td>
<td>5</td>
</tr>
<tr>
<td>ART 260</td>
<td>Watercolor I</td>
<td>5</td>
</tr>
<tr>
<td>ART 261</td>
<td>Watercolor II</td>
<td>5</td>
</tr>
<tr>
<td>ART 271</td>
<td>Typography II</td>
<td>5</td>
</tr>
<tr>
<td>ART 273</td>
<td>Graphic Design Studio II</td>
<td>5</td>
</tr>
<tr>
<td>ART 274</td>
<td>Graphic Design Studio III</td>
<td>5</td>
</tr>
<tr>
<td>DMA 101</td>
<td>Photoshop Raster Graphics</td>
<td>4</td>
</tr>
<tr>
<td>DMA 104</td>
<td>Motion Graphics and Animation I</td>
<td>4</td>
</tr>
<tr>
<td>DMA 201</td>
<td>Video and Sound Production I</td>
<td>4</td>
</tr>
<tr>
<td>DMA 202</td>
<td>Video and Sound Production II</td>
<td>4</td>
</tr>
<tr>
<td>DMA 204</td>
<td>Motion Graphics and Animation II</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits/Units Required for Concentration: 33-38
Total Credits/Units Required for AADTA: 90
**Program Outcomes**

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Recognize and apply the elements and principles of design in works of visual art and communications.
- Obtain, evaluate, and ethically use information. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Analyze patterns of power, privilege, and inequity in the United States. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Apply communication theory to demonstrate effective oral communication skills. (GE)

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website [https://programmap.clark.edu/academics](https://programmap.clark.edu/academics)

**Concentration in Power, Privilege, and Inequity (Plan Code: LASDTAA, Subplan Code: PWRPRVINEQ)**

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Must concurrently complete the AADTA.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS 220</td>
<td>Race, Class, Gender and Sexuality-Women’s Studies</td>
<td>5</td>
</tr>
<tr>
<td>WS 225</td>
<td>Racism &amp; White Privilege In The U.S.-Women’s Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

**Elective Courses**

Select one from the following: 3-5

- ASL 125 American Deaf Culture
- or ENGL 176 Nature and the Humanities
- or ENGL 243 Queer Literature
- or ENGL 267 American Multiethnic Lit
- or HIST& 219Women In US History
- or HIST& 219Native American History
- or HIST 275 African-American History
- or SOC 230 Domestic Violence

**Total Credits/Units Required for Concentration**: 36-38

**Total Credits/Units Required for AADTA**: 90

**Program Outcomes**

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Identify and deconstruct the individual, institutional, and ideological systems of power, privilege and inequity.
- Critically analyze one’s own multiple identities within the context of power, privilege and inequity.
- Critically examine and describe the social, political and historical construction of identity and difference with regard to sex, gender, race, class, sexuality, age, and ability.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website [https://programmap.clark.edu/academics](https://programmap.clark.edu/academics)

**Concentration in Studio Arts (Plan Code: LASDTAA, Subplan Code: STUDIOART)**

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

This is a suggested program for the first two years of study for those wanting a general AA/DTA degree with an emphasis in Studio Art. Lower division course requirements will vary depending on the transfer institution, but this program is specifically designed to fulfill all lower division requirements for students wishing to obtain a BA with a minor in Fine Arts at Washington State University, Vancouver.
Must concurrently complete the AADTA.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 103</td>
<td>Drawing I</td>
<td>5</td>
</tr>
</tbody>
</table>

Choose one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 104</td>
<td>Observational Drawing</td>
<td>5</td>
</tr>
<tr>
<td>or ART 105</td>
<td>Drawing for Comics</td>
<td></td>
</tr>
<tr>
<td>or ART 203</td>
<td>The Human Figure I</td>
<td></td>
</tr>
</tbody>
</table>

Choose one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 220</td>
<td>Art History: Ancient to Late Antique</td>
<td>5</td>
</tr>
<tr>
<td>or ART 221</td>
<td>Art History: Medieval-Renaissance</td>
<td></td>
</tr>
<tr>
<td>or ART 222</td>
<td>Art History: Baroque-Modern</td>
<td></td>
</tr>
</tbody>
</table>

And choose 2D Focus or 3D Focus from the lists below:

### Core Courses: 2D Focus

Choose at least five credits/units of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>2D Art and Design</td>
<td>5</td>
</tr>
<tr>
<td>ART 257</td>
<td>Painting I</td>
<td></td>
</tr>
<tr>
<td>ART 258</td>
<td>Painting II</td>
<td></td>
</tr>
</tbody>
</table>

### Core Courses: 3D Focus

Choose at least five credits/units of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 117</td>
<td>Three-Dimensional Design</td>
<td>5</td>
</tr>
<tr>
<td>ART 180</td>
<td>Ceramics I</td>
<td></td>
</tr>
<tr>
<td>ART 181</td>
<td>Ceramics II</td>
<td></td>
</tr>
<tr>
<td>ART 189</td>
<td>Metal Arts I</td>
<td></td>
</tr>
</tbody>
</table>

### Art Electives

Choose any two additional ART-prefix courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 250</td>
<td>Women Artists Through History</td>
<td></td>
</tr>
<tr>
<td>ENGL 175</td>
<td>Introduction to LGBTQ Studies</td>
<td></td>
</tr>
<tr>
<td>ENGL 240</td>
<td>Literature By Women</td>
<td></td>
</tr>
<tr>
<td>ENGL 243</td>
<td>Queer Literature</td>
<td></td>
</tr>
<tr>
<td>HIST&amp; 215</td>
<td>Women In US History</td>
<td></td>
</tr>
<tr>
<td>HIST 251</td>
<td>Women In World History I</td>
<td></td>
</tr>
<tr>
<td>HIST 252</td>
<td>Women In World History II</td>
<td></td>
</tr>
<tr>
<td>HIST 252</td>
<td>Women In World History II</td>
<td></td>
</tr>
<tr>
<td>HLTH 207</td>
<td>Women's Health</td>
<td></td>
</tr>
<tr>
<td>SOC 230</td>
<td>Domestic Violence</td>
<td></td>
</tr>
<tr>
<td>WS 210</td>
<td>Women, Arts, and Culture-Women's Studies</td>
<td></td>
</tr>
<tr>
<td>WS 225</td>
<td>Racism &amp; White Privilege In The U.S.-Women's Studies</td>
<td></td>
</tr>
<tr>
<td>WS 280</td>
<td>Selected Topics</td>
<td></td>
</tr>
<tr>
<td>WS 290</td>
<td>Special Projects</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits/Units for Concentration: 30

Total Credits/Units Required for AADTA: 90

### Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Obtain, evaluate, and ethically use information. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Analyze patterns of power, privilege, and inequity in the United States. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Apply communication theory to demonstrate effective oral communication skills. (GE)

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website [https://programmap.clark.edu/academics](https://programmap.clark.edu/academics/)

### Concentration in Women's Studies

(Plan Code: LASDTAA, Subplan Code: WOMENSSTDY)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Must concurrently complete the AADTA.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS 101</td>
<td>Introduction to Women's Studies</td>
<td>5</td>
</tr>
<tr>
<td>WS 201</td>
<td>Women Across Cultures-Women's Studies</td>
<td>5</td>
</tr>
<tr>
<td>WS 220</td>
<td>Race, Class, Gender and Sexuality-Women's Studies</td>
<td>5</td>
</tr>
</tbody>
</table>

Electives: 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 250</td>
<td>Women Artists Through History</td>
<td></td>
</tr>
<tr>
<td>ENGL 175</td>
<td>Introduction to LGBTQ Studies</td>
<td></td>
</tr>
<tr>
<td>ENGL 240</td>
<td>Literature By Women</td>
<td></td>
</tr>
<tr>
<td>ENGL 243</td>
<td>Queer Literature</td>
<td></td>
</tr>
<tr>
<td>HIST&amp; 215</td>
<td>Women In US History</td>
<td></td>
</tr>
<tr>
<td>HIST 251</td>
<td>Women In World History I</td>
<td></td>
</tr>
<tr>
<td>HIST 252</td>
<td>Women In World History II</td>
<td></td>
</tr>
<tr>
<td>HLTH 207</td>
<td>Women's Health</td>
<td></td>
</tr>
<tr>
<td>SOC 230</td>
<td>Domestic Violence</td>
<td></td>
</tr>
<tr>
<td>WS 210</td>
<td>Women, Arts, and Culture-Women's Studies</td>
<td></td>
</tr>
<tr>
<td>WS 225</td>
<td>Racism &amp; White Privilege In The U.S.-Women's Studies</td>
<td></td>
</tr>
<tr>
<td>WS 280</td>
<td>Selected Topics</td>
<td></td>
</tr>
<tr>
<td>WS 290</td>
<td>Special Projects</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits/Units for AADTA: 90

1. Core courses must be completed with a grade of "C" or better.
2. At least three elective credits/units must be WS prefix courses

### Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are
measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Describe foundational concepts in Women's Studies such as: the personal is political; the waves of feminism; the diversity of women's experiences; the difference between sex and gender; the history of feminist activism for social justice; and, women's contributions to culture, politics, history, etc.
- Explain the social construction of identity and difference, analyzing power, privilege and inequality from feminist theoretical perspectives, distinguishing the intersections between gender and other social and cultural identities, such as race, sex, class, ethnicity, national origin, religion, class, ability and sexuality, and locating oneself within the hierarchy of identities.
- Analyze institutional, ideological, and individual components that maintain or challenge systems of oppression in contemporary U.S. society and throughout the world.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics

**Program Outcomes**

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Participate in most formal and informal conversations on general topics in ASL, Spanish or Japanese.
- Demonstrate an appreciation for the linguistic and cultural diversity of ASL, Spanish or Japanese.
- Manage common interactions using enhanced vocabulary and grammar with fellow classmate using ASL, Spanish or Japanese.
- Identify certain rules of behavior, values, beliefs, and etiquette in Deaf, Latino/Hispanic or Japanese culture.
- With the multicultural identity in mind, identify how the heritage language user manages their own multiple identities within the context of power, privilege and inequity.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics

**Concentration in World Languages (AADTA)(Plan Code: LASDTAA, Subplan Code: WORLDLANG)**

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Must concurrently complete the AADTA.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose from one of the following three Pathways</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Sign Language 25</td>
<td>American Sign Language IV 221</td>
<td></td>
</tr>
<tr>
<td>ASL 125</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>ASL 222</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>ASL 233</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>CMST &amp; 220</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Japanese 25</td>
<td>Japanese Culture and Society</td>
<td></td>
</tr>
<tr>
<td>JAPN &amp; 221</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>JAPN 222</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>JAPN 223</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>CMST &amp; 220</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Spanish 25</td>
<td>History of Latin America</td>
<td></td>
</tr>
<tr>
<td>SPAN &amp; 221</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>SPAN 222</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits/Units Required for Concentration 25
Total Credits/Units Required for AADTA 90
ASSOCIATE IN SCIENCE – TRACK 1 (AST1)

Associate in Science – Track 1 is for students intending to transfer into programs in:

AST1 - Concentration Options:

- Biological Sciences
- Chemistry
- Environmental Science
- Geology
- Associate in Science Transfer - General (AST1)(Plan Code: LRST1AS) (p. 24)
- Concentration in Biological Sciences (AST1)(Plan Code: LRST1AS, Subplan Code: BIOSCIENCE) (https://catalog.clark.edu/academic-plans/track-1-ast1/biology/)
- Concentration in Chemistry (AST1)(Plan code: LRST1AS, Subplan Code: CHEMISTRY) (p. 25)
- Concentration in Environmental Science (AST1) (Plan Code: LRST1AS, Subplan Code: ENVIROSCI) (p. 26)
- Concentration in Geology (AST1)(Plan Code: LRST1AS, SubPlan Code: GEOLOGY) (p. 27)

ASSOCIATE IN SCIENCE Transfer - General (AST1)(Plan Code: LRST1AS)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Students must earn a 2.0 cumulative GPA in order to qualify for graduation from Clark College and are encouraged to connect with their potential transfer institution to confirm GPA and course requirements to entry.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>ENVS 218</td>
<td>Introduction to Ecological Restoration</td>
<td></td>
</tr>
<tr>
<td>BIO 167</td>
<td>Human Genetics</td>
<td></td>
</tr>
<tr>
<td>BIO 208</td>
<td>Field Studies In Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 221</td>
<td>Majors Ecology/Evolution</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 222</td>
<td>Majors Cell/Molecular</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 223</td>
<td>Majors Organismal Phys</td>
<td></td>
</tr>
<tr>
<td>BIOL 140</td>
<td>Mammals of The Northwest</td>
<td></td>
</tr>
<tr>
<td>BIOL 141</td>
<td>Birds of The Pacific Northwest</td>
<td></td>
</tr>
<tr>
<td>BIOL 145</td>
<td>Reptiles &amp; Amphibians of The Pacific NW</td>
<td></td>
</tr>
<tr>
<td>BIOL 167</td>
<td>Human Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOL 208</td>
<td>Field Studies In Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 218</td>
<td>Introduction to Physical Geology</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 251</td>
<td>Human A &amp; P I</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 252</td>
<td>Human A &amp; P II</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 253</td>
<td>Human A &amp; P III</td>
<td></td>
</tr>
<tr>
<td>CHEM 141</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 142</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 143</td>
<td>General Chemistry III</td>
<td>6</td>
</tr>
<tr>
<td>CHEM&amp; 151</td>
<td>General Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>CHEM&amp; 152</td>
<td>General Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM&amp; 153</td>
<td>General Chemistry Laboratory III</td>
<td></td>
</tr>
</tbody>
</table>

Additional Sequence

Select one sequence from the following:
- Biology Sequence (BIOL& 221 / BIOL& 222 / BIOL& 223)
- Physics Sequence (100 level)(non-calculus based)
- Physics Sequence (200 level)(calculus based)
- Additional mathematics course(s)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 153</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>or MATH 146</td>
<td>Introduction to Stat</td>
<td></td>
</tr>
</tbody>
</table>

Additional requirements for intended major

Select 2-3 courses from the following list, 10-15 units total are required:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 101</td>
<td>Environ Biol Conf/Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 105</td>
<td>Small World Antibiotics Research 1</td>
<td></td>
</tr>
<tr>
<td>BIOL 139</td>
<td>Introduction to Wildlife</td>
<td></td>
</tr>
<tr>
<td>BIOL 140</td>
<td>Mammals of The Northwest</td>
<td></td>
</tr>
<tr>
<td>BIOL 141</td>
<td>Birds of The Pacific Northwest</td>
<td></td>
</tr>
<tr>
<td>BIOL 142</td>
<td>Freshwater Fishes of The Pacific Northwest</td>
<td></td>
</tr>
<tr>
<td>BIOL 145</td>
<td>Reptiles &amp; Amphibians of The Pacific NW</td>
<td></td>
</tr>
<tr>
<td>BIOL 167</td>
<td>Human Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOL 208</td>
<td>Field Studies In Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 221</td>
<td>Majors Ecology/Evolution</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 222</td>
<td>Majors Cell/Molecular</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 223</td>
<td>Majors Organismal Phys</td>
<td></td>
</tr>
<tr>
<td>BIOL 224</td>
<td>Flowering Plants Of The Pacific Northwest</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 241</td>
<td>Human Anatomy and Physiology I</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 242</td>
<td>Human Anatomy and Physiology II</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 251</td>
<td>Human A &amp; P I</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 252</td>
<td>Human A &amp; P II</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 253</td>
<td>Human A &amp; P III</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 260</td>
<td>Microbiology</td>
<td></td>
</tr>
<tr>
<td>CHEM&amp; 241</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM&amp; 251</td>
<td>and Organic Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>CHEM&amp; 242</td>
<td>Organic Chemistry II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM&amp; 252</td>
<td>and Organic Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM&amp; 243</td>
<td>Organic Chemistry III</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM&amp; 253</td>
<td>and Organic Chemistry Laboratory III</td>
<td></td>
</tr>
<tr>
<td>GEOL 102</td>
<td>Intro to Geology II Lab</td>
<td></td>
</tr>
<tr>
<td>GEOL 218</td>
<td>Field Studies In Geology</td>
<td></td>
</tr>
<tr>
<td>GEOL&amp; 101</td>
<td>Introduction to Physical Geology</td>
<td></td>
</tr>
<tr>
<td>MATH 215</td>
<td>Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 254</td>
<td>Calculus IV</td>
<td></td>
</tr>
<tr>
<td>PHYS&amp; 134</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>&amp; PHYS&amp; 124</td>
<td>and General Physics Lab I</td>
<td></td>
</tr>
<tr>
<td>PHYS&amp; 135</td>
<td>General Physics II</td>
<td></td>
</tr>
<tr>
<td>&amp; PHYS&amp; 125</td>
<td>and General Physics Lab II</td>
<td></td>
</tr>
</tbody>
</table>
PHYS& 136 & PHYS& 126  
General Physics III  
and General Physics Lab III
PHYS& 241 & PHYS& 231  
Engineering Physics I  
and Engineering Phys Lab I
PHYS& 242 & PHYS& 232  
Engineering Physics II  
and Engineering Phys Lab II
PHYS& 243 & PHYS& 233  
Engineering Physics III  
and Engineering Phys Lab III

Remaining Credits/Units:
Sufficient additional college-level credits/units so that the total credits/units earned are at least 90 term credits/units

Total Credits/Units 90

1 Calculus I (MATH& 151) requires the successful completion of both Trigonometry (MATH 103) and College Algebra (MATH 110/MATH 111), or recommending score on an approved placement test prior to registration. These prerequisite courses can be used to fulfill elective requirements within the Associate in Science (AS) degree program.

2 Or select math courses that have MATH& 152 as a prerequisite.

3 Must consult with faculty or advising to pick the correct sequences.

4 Check with chosen 4-year school.

5 Preferably a 3-term sequence; check with chosen 4-year school regarding course selection to better prepare for major. It is recommended that students complete the sequenced science courses before transferring.

6 These remaining credits/units may include prerequisites for major courses, additional major coursework, or specific general education or other university requirements as approved by the advisor. A maximum of five (5) General Elective (GE) credits/units will apply.

Program Outcomes
Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Demonstrate understanding of the derivative as an instantaneous rate of change and the definite integral as a limit of a sum.
- Analyze and solve multi-step problems using techniques through single-variable calculus.
- Acquire scientific information from appropriate sources to analyze issues, claims or situations.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Concentration in Chemistry (AST1)  
(Plan code: LRST1AS, Subplan Code: CHEMISTRY)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 153</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 141</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 142</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 143</td>
<td>General Chemistry III</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 153</td>
<td>General Chemistry Laboratory III</td>
<td>5</td>
</tr>
<tr>
<td>PHYS&amp; 241</td>
<td>Engineering Physics I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS&amp; 242</td>
<td>Engineering Physics II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS&amp; 243</td>
<td>Engineering Physics III</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 241</td>
<td>Organic Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 251</td>
<td>Organic Chemistry Laboratory I</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
</table>

General Education Requirements

Communication Skills

| ENGL& 101  | English Composition I                      | 5             |

Quantitative Skills

| MATH& 151  | Calculus I                                 | 5             |
| MATH& 152  | Calculus II                                | 5             |

Health & Physical Education

| Course Options (p. 264) | 3 |

Humanities (HA)(HB) & Social Sciences (SS) Courses

| Humanities (HA) Courses (p. 265) | 5 |
| Social Sciences (SS) Course (p. 265) | 5 |

Select an additional five credits/units from Humanities (HA) or (HB) or Social Science (SS) course (p. 265)

Pre-Major Program Requirements

| CHEM& 141  | General Chemistry I                        | 5             |
| CHEM& 142  | General Chemistry II                       | 5             |
| CHEM& 143  | General Chemistry III                      | 5             |
| PHYS& 241  | Engineering Physics I                      | 5             |
| PHYS& 242  | Engineering Physics II                     | 5             |
| PHYS& 243  | Engineering Physics III                    | 5             |
| CHEM& 241  | Organic Chemistry I                        | 5             |

Science Electives

| CHEM& 241  | Organic Chemistry I                        | 5             |

Catalog via the Academic Plan links on the right for a desired program or a specific course information.
Successful completion of this program, students will be able to:

1. Analyze and solve multi-step problems using techniques through single-variable calculus.
2. Acquire scientific information from appropriate sources to analyze issues, claims or situations.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Concentration in Environmental Science (AST1) (Plan Code: LRST1AS, Subplan Code: ENVIROSCI)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>English Composition II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 254</td>
<td>Calculus IV</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 151</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 152</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 153</td>
<td>General Chemistry Laboratory I</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 221</td>
<td>Majors Ecology/Evolution</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 222</td>
<td>Majors Cell/Molecular</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 223</td>
<td>Majors Organismal Phys</td>
<td>5</td>
</tr>
<tr>
<td>GEOL 102</td>
<td>Intro to Geology II Lab</td>
<td>5</td>
</tr>
</tbody>
</table>

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Obtain, evaluate, and ethically use information. (GE)
- Analyze patterns of power, privilege, and inequity in the United States. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Apply communication theory to demonstrate effective oral communication skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Apply scientific methodologies to develop and answer questions about the natural world.
- Demonstrate understanding of the derivative as an instantaneous rate of change and the definite integral as a limit of a sum.

1. Calculus I (MATH 151) requires the successful completion of both Trigonometry (MATH 103) and College Algebra (MATH 110/MATH 111), or recommending score on an approved placement test prior to registration.
2. CMST & 230 would count as a social science; otherwise, the third course needs to be a social science.
3. Please check with the transfer institution regarding world language requirements.

General Education Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 231</td>
<td>Environmental Politics</td>
<td>5</td>
</tr>
<tr>
<td>ENVS 232</td>
<td>Environmental Politics</td>
<td>5</td>
</tr>
<tr>
<td>POLS 231</td>
<td>Environmental Politics</td>
<td>5</td>
</tr>
<tr>
<td>Humanities List A (p. 265)</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Humanities or Social Sciences (p. 266)</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>ENVS 101</td>
<td>Introduction to Environmental Science</td>
<td>5</td>
</tr>
<tr>
<td>MATH 146</td>
<td>Introduction to Stat</td>
<td>5</td>
</tr>
</tbody>
</table>

Pre-Major Program Requirements

- Analyze and solve multi-step problems using techniques through single-variable calculus.
- Acquire scientific information from appropriate sources to analyze issues, claims or situations.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Obtain, evaluate, and ethically use information. (GE)
- Analyze patterns of power, privilege, and inequity in the United States. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Apply communication theory to demonstrate effective oral communication skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Apply scientific methodologies to develop and answer questions about the natural world.
- Demonstrate understanding of the derivative as an instantaneous rate of change and the definite integral as a limit of a sum.
- Analyze and solve multi-step problems using techniques through single-variable calculus.
- Acquire scientific information from appropriate sources to analyze issues, claims or situations.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics/.

Concentration in Geology (AST1) (Plan Code: LRST1AS, SubPlan Code: GEOLOGY)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 141</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 142</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 151</td>
<td>General Chemistry Laboratory I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 153</td>
<td>General Chemistry III</td>
<td>6</td>
</tr>
<tr>
<td>CMST&amp; 220</td>
<td>Public Speaking</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 153</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>Pre-Major Program Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL&amp; 101</td>
<td>Introduction to Physical Geology</td>
<td>5</td>
</tr>
<tr>
<td>GEOL 102</td>
<td>Intro to Geology II Lab</td>
<td>5</td>
</tr>
<tr>
<td>GEOL 218</td>
<td>Field Studies In Geology</td>
<td>1-6</td>
</tr>
<tr>
<td>MATH&amp; 153</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 102</td>
<td>English Composition II</td>
<td>5</td>
</tr>
</tbody>
</table>

1 Calculus I (MATH& 151) requires the successful completion of both Trigonometry (MATH 103) and College Algebra (MATH 110/MATH 111), or recommending score on an approved placement test prior to registration.

2 6 (six) credits/units of GEOL 218 required for the degree.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Obtain, evaluate, and ethically use information. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
• Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Demonstrate progress toward healthier behaviors. (GE)
• Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
• Analyze patterns of power, privilege, and inequity in the United States. (GE)
• Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
• Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
• Apply communication theory to demonstrate effective oral communication skills. (GE)

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
ASSOCIATE IN SCIENCE – TRACK 2 (AST2)

Associate in Science – Track 2 is for students intending to transfer into programs in:

AST - Concentration Options:

• Clean/Renewable Energy
• Computer Science
• Engineering
• Physics

• Associate in Science – General (AST2)(Plan Code: PHST2AS) (p. 29)
• Concentration in Computer Science (AST2)(Plan Code: PHST2AS, Subplan Code: COMPUTRSCI) (p. 31)
• Concentration in Physics (AST2)(Plan Code: PHST2AS, Subplan Code: PHYSICS) (p. 32)

Associate in Science – General (AST2)(Plan Code: PHST2AS)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Students must earn a 2.0 cumulative GPA in order to qualify for graduation from Clark College and are encouraged to connect with their potential transfer institution to confirm GPA and course requirements to entry. It is recommended that students complete the sequenced science courses before transferring.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 141</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>&amp; CHEM&amp; 151</td>
<td>and General Chemistry Laboratory I</td>
<td></td>
</tr>
</tbody>
</table>

Choose one of the following Math Options:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH&amp; 153</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>or MATH&amp; 146</td>
<td>Introduction to Stat</td>
<td></td>
</tr>
</tbody>
</table>

Choose one of the following Physics Options:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS&amp; 134</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>&amp; PHYS&amp; 124</td>
<td>and General Physics Lab I</td>
<td></td>
</tr>
<tr>
<td>&amp; PHYS&amp; 135</td>
<td>and General Physics II</td>
<td></td>
</tr>
<tr>
<td>&amp; PHYS&amp; 125</td>
<td>and General Physics Lab II</td>
<td></td>
</tr>
<tr>
<td>&amp; PHYS&amp; 136</td>
<td>and General Physics III</td>
<td></td>
</tr>
<tr>
<td>PHYS&amp; 241</td>
<td>Engineering Physics I</td>
<td></td>
</tr>
<tr>
<td>&amp; PHYS&amp; 231</td>
<td>and Engineering Phys Lab I</td>
<td></td>
</tr>
<tr>
<td>&amp; PHYS&amp; 242</td>
<td>and Engineering Physics II</td>
<td></td>
</tr>
<tr>
<td>&amp; PHYS&amp; 232</td>
<td>and Engineering Phys Lab II</td>
<td></td>
</tr>
<tr>
<td>&amp; PHYS&amp; 243</td>
<td>and Engineering Physics III</td>
<td></td>
</tr>
<tr>
<td>&amp; PHYS&amp; 233</td>
<td>and Engineering Phys Lab III</td>
<td></td>
</tr>
</tbody>
</table>

Remaining Credits/Units 35

The remaining units should be planned with the help of an advisor based on the requirements of the specific discipline at the baccalaureate institution the student selects to attend.

Courses from the following subject area may be used to satisfy this requirement:

- BIOL/BIOL&
- CHEM& (restricted to CHEM& 141 or higher)
- CSE
- ENGL&
- ENGR/ENGR&
- GEOL/GEOL&
- MATH/MATH& (restricted to above MATH& 152)

Total Credits/Units 90

1 Calculus I (MATH& 151) requires the successful completion of both Trigonometry (MATH 103) and College Algebra (MATH 110/MATH 111), or recommending score on an approved placement test prior to registration.

2 Engineering Students must complete CHEM& 141 and CHEM& 151

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Demonstrate progress toward healthier behaviors. (GE)
• Obtain, evaluate, and ethically use information. (GE)
• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
• Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
• Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
• Analyze patterns of power, privilege, and inequity in the United States. (GE)
• Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
• Apply communication theory to demonstrate effective oral communication skills. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Demonstrate understanding of the derivative as an instantaneous rate of change and the definite integral as a limit of a sum.
• Apply fundamental principles and relationships from the Natural Sciences to analyze technological or scientific problems.
• Apply scientific and technological knowledge and methodologies to creatively solve technological or scientific problems.
• Acquire scientific and technological information from appropriate sources to examine issues, claims or situations.
• Analyze and solve multi-step problems using techniques through single-variable calculus.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)


Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Degree requires students to complete minimum of 90 quarter hours of transferable credit/units with a cumulative grade point average of at least 2.00. In order for a student to be junior ready in Renewable/Clean Energy Engineering at specific transfer institutions, there are additional credits/units beyond the AST2 credit/unit requirements for this degree that a student need to consider. Please consult your faculty adviser to learn more and to develop your education plan (www.engrcs.com/schedule). The minimum required credits/units are distributed as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gener Education Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I ¹</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Course Options (p. 265)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Course Options (p. 266)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Major Program (Minimum 25 credits/units)</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>CHEM&amp; 141</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM&amp; 151</td>
<td>and General Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 153</td>
<td>Calculus III</td>
<td></td>
</tr>
<tr>
<td>Remaining Credits (Minimum 35 credits/units)</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>CSE 121</td>
<td>Introduction to C</td>
<td></td>
</tr>
<tr>
<td>ENGR 120</td>
<td>Intro to Electrical/Computer Sci &amp; Engineering</td>
<td></td>
</tr>
<tr>
<td>ENGR 253</td>
<td>Signals and Systems</td>
<td></td>
</tr>
<tr>
<td>ENGR 252</td>
<td>Electrical Circuits and Signals</td>
<td></td>
</tr>
<tr>
<td>ENGR&amp; 204</td>
<td>Electrical Circuits</td>
<td></td>
</tr>
<tr>
<td>MATH 215</td>
<td>Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 221</td>
<td>Differential Equations</td>
<td></td>
</tr>
<tr>
<td>CHEM&amp; 142</td>
<td>General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHEM&amp; 152</td>
<td>General Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CSE 222</td>
<td>Introduction to Data Structures</td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 235</td>
<td>Technical Writing</td>
<td></td>
</tr>
<tr>
<td>ENGR 250</td>
<td>Digital Logic Design</td>
<td></td>
</tr>
<tr>
<td>ENGR 270</td>
<td>Digital Systems and Microprocessors</td>
<td></td>
</tr>
<tr>
<td>ENGR&amp; 214</td>
<td>Statics</td>
<td></td>
</tr>
<tr>
<td>GEOL&amp; 101</td>
<td>Introduction to Physical Geology</td>
<td></td>
</tr>
<tr>
<td>Total Credits/Units</td>
<td>90</td>
<td></td>
</tr>
</tbody>
</table>

¹ Calculus I (MATH& 151) requires the successful completion of both Trigonometry (MATH 103) and College Algebra (MATH 110/MATH 111), or recommending score on an approved placement test prior to registration.
² Any list A Humanities - CMST & CMST & CMST are recommended
³ Any Social Science - ECON & 202 is recommended
⁴ Requires concurrent enrollment in PHYS 94/PHYS 95/PHYS 96

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Demonstrate progress toward healthier behaviors. (GE)
• Obtain, evaluate, and ethically use information. (GE)
• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
• Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
• Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
• Analyze patterns of power, privilege, and inequity in the United States. (GE)
• Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
• Apply communication theory to demonstrate effective oral communication skills. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Demonstrate understanding of the derivative as an instantaneous rate of change and the definite integral as a limit of a sum.
• Apply fundamental principles and relationships from the Natural Sciences to analyze technological or scientific problems.
• Apply scientific and technological knowledge and methodologies to creatively solve technological or scientific problems.
• Acquire scientific and technological information from appropriate sources to examine issues, claims or situations.
• Analyze and solve multi-step problems using techniques through single-variable calculus.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics/ (https://programmap.clark.edu/academics/)

Concentration in Computer Science (AST2)(Plan Code: PHST2AS, Subplan Code: COMPUTRSCI)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Requires students to complete minimum of 90 quarter hours of transferable credit/units with a cumulative grade point average of at least 2.00. In order for a student to be junior ready in Computer Science at specific transfer institutions, there are additional credits/units beyond the AST2 credit/unit requirements for this degree that a student need to consider. Please consult your faculty adviser to learn more and to develop your education plan (www.engrcs.com/schedule). The minimum required credits/units are distributed as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Education Requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communication Skills</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Quantitative Skills</strong></td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Humanities &amp; Social Science</strong></td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Coursework should be planned with the help of an advisor based on the requirements of the specific discipline at the baccalaureate institution the student selects to attend</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Humanities Course Options (p. 265)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Science Course Options (p. 266)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Additional 5 (five) credits/units in either Humanities or Social Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Pre-Major Program Requirements (minimum of 25 credits/units)</strong></td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Any 5 (five) credit/unit Biology (BIOL/BIOL&amp; Class with Lab</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH&amp; 153</td>
<td>Calculus III</td>
<td></td>
</tr>
<tr>
<td>PHYS&amp; 241</td>
<td>Engineering Physics I</td>
<td></td>
</tr>
<tr>
<td>&amp; PHYS&amp; 231</td>
<td>Engineering Phys Lab I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS&amp; 242</td>
<td>Engineering Physics II</td>
<td></td>
</tr>
<tr>
<td>&amp; PHYS&amp; 232</td>
<td>Engineering Phys Lab II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS&amp; 243</td>
<td>Engineering Physics III</td>
<td></td>
</tr>
<tr>
<td>&amp; PHYS&amp; 233</td>
<td>Engineering Phys Lab III</td>
<td>4</td>
</tr>
</tbody>
</table>

Remaining Credits/Units (minimum of 35 credits/units) 35

The remaining credits/units should be planned with the help of an advisor based on the requirements of the specific discipline at the baccalaureate institution the student selects to attend

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE 101</td>
<td>Engineering and Computer Science Orientation</td>
<td></td>
</tr>
<tr>
<td>CSE 120</td>
<td>Introduction to Electrical/Computing</td>
<td></td>
</tr>
<tr>
<td>CSE 121</td>
<td>Introduction to C</td>
<td></td>
</tr>
<tr>
<td>CSE 215</td>
<td>Discrete Structures</td>
<td></td>
</tr>
<tr>
<td>CSE 222</td>
<td>Introduction to Data Structures</td>
<td></td>
</tr>
<tr>
<td>CSE 223</td>
<td>Data Structures &amp; Object-Oriented Programming</td>
<td></td>
</tr>
<tr>
<td>CSE 224</td>
<td>Programming Tools</td>
<td></td>
</tr>
<tr>
<td>ENGR 250</td>
<td>Digital Logic Design</td>
<td></td>
</tr>
<tr>
<td>ENGR 270</td>
<td>Digital Systems and Microprocessors</td>
<td></td>
</tr>
<tr>
<td>MATH 215</td>
<td>Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 254</td>
<td>Calculus IV</td>
<td></td>
</tr>
<tr>
<td>ENGL 235</td>
<td>Technical Writing</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits/Units 90

1 Calculus I (MATH& 151) requires the successful completion of both Trigonometry (MATH 103) and College Algebra (MATH 110/MATH 111) or recommending score on an approved placement test prior to registration.
2 WS 101, ECON& 202 and HIST& 128 are recommended
3 Any 5 Credit/Unit Biology course with Lab - BIOL& 175 and BIOL& 100 are recommended.
4 Requires concurrent enrollment in PHYS 94/PHYS 95/PHYS 96

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Demonstrate understanding of the derivative as an instantaneous rate of change and the definite integral as a limit of a sum.
• Apply fundamental principles and relationships from the Natural Sciences to analyze technological or scientific problems.
• Apply scientific and technological knowledge and methodologies to creatively solve technological or scientific problems.
• Demonstrate progress toward healthier behaviors. (GE)
• Obtain, evaluate, and ethically use information. (GE)
• Acquire scientific and technological information from appropriate sources to examine issues, claims or situations.
• Analyze and solve multi-step problems using techniques through single-variable calculus.
• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
Concentration in Physics (AST2) (Plan Code: PHST2AS, Subplan Code: PHYSICS)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communication Skills</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Quantitative Skills</strong></td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Health &amp; Physical Education</strong></td>
<td></td>
</tr>
<tr>
<td>Health Requirement (p. 264)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Physical Education Activity (p. 264)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Humanities &amp; Social Sciences</strong></td>
<td></td>
</tr>
<tr>
<td>Select one from the following:</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>CMST&amp; 210</td>
<td>Interpersonal Communication</td>
<td></td>
</tr>
<tr>
<td>or CMST&amp; 22</td>
<td>Public Speaking</td>
<td></td>
</tr>
<tr>
<td>or CMST&amp; 23</td>
<td>Small Group Communication</td>
<td></td>
</tr>
<tr>
<td>Select 10 credits/units from the following:</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Humanities Course Options (p. 265)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Science Course Options (p. 266)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Pre-Major Program Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL 102</td>
<td>English Composition II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 111</td>
<td>College Algebra</td>
<td>5</td>
</tr>
<tr>
<td>or MATH 110</td>
<td>College Algebra With Support</td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 153</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 221</td>
<td>Differential Equations</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 254</td>
<td>Calculus IV</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Science Sequence Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>CHEM&amp; 141</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>&amp; CHEM&amp; 151</td>
<td>and General Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>CHEM&amp; 142</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>&amp; CHEM&amp; 152</td>
<td>and General Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM&amp; 143</td>
<td>General Chemistry III</td>
<td>6</td>
</tr>
<tr>
<td>&amp; CHEM&amp; 153</td>
<td>and General Chemistry Laboratory III</td>
<td></td>
</tr>
<tr>
<td>PHYS&amp; 241</td>
<td>Engineering Physics I</td>
<td>5</td>
</tr>
<tr>
<td>&amp; PHYS&amp; 231</td>
<td>and Engineering Phys Lab I</td>
<td></td>
</tr>
<tr>
<td>PHYS&amp; 242</td>
<td>Engineering Physics II</td>
<td>5</td>
</tr>
<tr>
<td>&amp; PHYS&amp; 232</td>
<td>and Engineering Phys Lab II</td>
<td></td>
</tr>
<tr>
<td>PHYS&amp; 243</td>
<td>Engineering Physics III</td>
<td>5</td>
</tr>
<tr>
<td>&amp; PHYS&amp; 233</td>
<td>and Engineering Phys Lab III</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>Total Credits/Units</td>
<td>90</td>
<td></td>
</tr>
</tbody>
</table>

1 Calculus I (MATH& 151) requires the successful completion of both Trigonometry (MATH 103) and College Algebra (MATH 110/MATH 111), or recommending score on an approved placement test prior to registration.

2 Complete minimum number of credits/units necessary to reach 90 credits.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Apply scientific methodologies to develop and answer questions about the natural world.
- Demonstrate understanding of the derivative as an instantaneous rate of change and the definite integral as a limit of a sum.
- Analyze and solve multi-step problems using techniques through single-variable calculus.
- Acquire scientific information from appropriate sources to analyze issues, claims or situations.
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Obtain, evaluate, and ethically use information. (GE)
- Analyze patterns of power, privilege, and inequity in the United States. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Apply communication theory to demonstrate effective oral communication skills. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
AUTOMOTIVE TECHNOLOGY

Clark College has two automotive program offerings:

- Toyota T-TEN
- HiTECC (Dealer Ready)

Toyota T-TEN

Clark College is an award-winning Toyota Technical Education Network (T-TEN) training center. Our T-TEN program requires a Toyota Dealership sponsorship prior to admission. Entry into the program is yearly, beginning summer term; the format is a two-year program of a term of instruction on campus followed by a term of on-the-job learning. This means that for the two years that they are in the program, students alternate one term of full-time classroom and lab practice with one term as a full-time dealership apprentice.

HiTECC (Dealer Ready)

The Hannah initiative for Technician Education with Clark College, or HiTECC automotive program prepares students for maintenance and repair employment opportunities in automotive dealerships nationwide. This program provides a broad overview of technology used in modern vehicles. The program structure is patterned after the successful Toyota program and will require a dealership sponsor prior to entry. Students will participate in a cooperative work experience at a dealership while attending school.

For all programs, students must complete all Major Area Requirements with a minimum grade of "C" or better in order to successfully complete the program and earn the award. As part of the Automotive program, students must successfully complete a minimum of 3 ASE technician certifications to graduate from the program and complete their degree. This is part of our third-party national accreditation standards. These standards were recommended and approved by our Automotive Advisory Committees.

Refer to the Degree & Certificate Requirements Section in the Clark College Catalog to identify the courses needed to satisfy the General Education Requirements.

- HiTECC Automotive Technology (AAT)(Plan Code: AUMHAAPT) (p. 34)
- T-TEN Automotive Technology (AAT)(Plan Code: AUMTAAPT) (p. 35)

HiTECC Automotive Technology (AAT) (Plan Code: AUMHAAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Use a 6-step process to verify customer vehicle concern, determine related symptoms, analyze symptoms, isolate cause of concern, correct the concern, and verify proper vehicle operation.
- Represent sponsoring dealers by being competent, highly trained, and ethical dealership technicians.
- Achieve, maintain, and advance in the ASE technician certification process.
- Work as an effective team member in a dealership environment.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTWR 135</td>
<td>Introduction to Applied Technical Writing</td>
<td>5</td>
</tr>
</tbody>
</table>
T-TEN Automotive Technology (AAT) (Plan Code: AUMTAAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communication Skills</strong></td>
<td></td>
</tr>
<tr>
<td>PTWR 135</td>
<td>Introduction to Applied Technical Writing</td>
<td>5</td>
</tr>
<tr>
<td>or ENGL 101</td>
<td>English Composition I</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Computational Skills</strong></td>
<td></td>
</tr>
<tr>
<td>PTCS 110</td>
<td>Professional Technical Computational Skills</td>
<td>5</td>
</tr>
<tr>
<td>(recommended)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Human Relations</strong></td>
<td></td>
</tr>
<tr>
<td>AUTO 180</td>
<td>Professionalism in Automotive</td>
<td>5</td>
</tr>
<tr>
<td>(recommended)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Major Area Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>AUTO 140</td>
<td>Automotive Bridge Program Readiness</td>
<td>2</td>
</tr>
<tr>
<td>AUTO 150</td>
<td>Introduction to Toyota</td>
<td>7</td>
</tr>
<tr>
<td>AUTO 151</td>
<td>Toyota Electrical I</td>
<td>7</td>
</tr>
<tr>
<td>AUTO 152</td>
<td>Toyota Electrical II</td>
<td>7</td>
</tr>
<tr>
<td>AUTO 153</td>
<td>Toyota Brakes</td>
<td>7</td>
</tr>
<tr>
<td>AUTO 154</td>
<td>Toyota Internship I</td>
<td>8</td>
</tr>
<tr>
<td>AUTO 155</td>
<td>Toyota Steering and Suspension</td>
<td>7</td>
</tr>
<tr>
<td>AUTO 156</td>
<td>Toyota Engine Performance I</td>
<td>7</td>
</tr>
<tr>
<td>AUTO 157</td>
<td>Toyota Engine Performance II</td>
<td>7</td>
</tr>
<tr>
<td>AUTO 250</td>
<td>Toyota Climate Control</td>
<td>7</td>
</tr>
<tr>
<td>AUTO 251</td>
<td>Toyota Internship II</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 252</td>
<td>Toyota Engine Mechanical</td>
<td>7</td>
</tr>
<tr>
<td>AUTO 253</td>
<td>Toyota Manual Transmission</td>
<td>7</td>
</tr>
<tr>
<td>AUTO 254</td>
<td>Toyota Automatic Transmissions</td>
<td>7</td>
</tr>
<tr>
<td>AUTO 266</td>
<td>Advanced Applied Electrical</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total Credits/Units</strong></td>
<td></td>
<td><strong>113</strong></td>
</tr>
</tbody>
</table>

**Program Outcomes**

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Use Toyota's 6-step process to verify customer vehicle concern, determine related symptoms, analyze symptoms, isolate cause of concern, correct the concern, and verify proper vehicle operation.
- Represent Toyota/Lexus and their dealers by being competent, highly trained, and ethical Toyota technicians.
- Achieve, maintain, and advance in the Toyota/Lexus technician certification process.
- Work as an effective team member in a Toyota dealership environment.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/).
BIOENGINEERING AND CHEMICAL ENGINEERING

The following is a degree program designed by a consortium of two-year and four-year colleges in Washington. Students should be aware that baccalaureate institutions may have slightly different requirements for these degrees, and students should consult the transfer institution for exact questions.

Students should complete the entirety of any science sequence at the same school for best transferability. These degrees are not DTA degrees, and there are some general education requirements that students will need to finish upon transfer.

Though this degree does not require such, Clark College students should know that the standard Clark AST degree path has this difference from the Major Related Program (MRP) defined below:

• Clark requires 3 credits/units of Health-Physical Education coursework.

Students must also meet the residency requirements as established by Clark. While Clark College has approved offering the degree, Clark students should keep these requirements in mind should their transfer pathways change.

Students completing this Associate of Science will receive the same priority consideration for admission to the baccalaureate institution as they would for completing the direct transfer associate degree and will be given junior status by the receiving institution.

It is critical that you work with an Engineering faculty advisor to ensure your program will give you the maximum benefit when you transfer.

• Bioengineering and Chemical Engineering (AST2/MRP)(Plan Code: CHEBCAS) (p. 36)

Bioengineering and Chemical Engineering (AST2/MRP)(Plan Code: CHEBCAS)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Students must earn a 2.0 cumulative GPA in order to qualify for graduation from Clark College and are encouraged to connect with their potential transfer institution to confirm GPA and course requirements for acceptance. It is recommended that students complete the sequenced science courses before transferring.

Clark College Equivalents

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Communication Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101 English Composition I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH&amp; 151 Calculus I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Distribution Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coursework should be planned with the help of an advisor based on the specific discipline at the baccalaureate institution the students select to attend.</td>
</tr>
</tbody>
</table>

| Humanities | 5 |
| Social Sciences | 5 |
| Additional 5 (five) credits/units of either Humanities or Social Sciences | 5 |

<table>
<thead>
<tr>
<th>Physics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete the following Physics sequences with the required concurrent enrollment:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sequence One</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS&amp; 241 Engineering Physics I</td>
</tr>
<tr>
<td>PHYS&amp; 231 Engineering Phys Lab I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sequence Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS&amp; 242 Engineering Physics II</td>
</tr>
<tr>
<td>PHYS&amp; 232 Engineering Phys Lab II</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sequence Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS&amp; 243 Engineering Physics III</td>
</tr>
<tr>
<td>PHYS&amp; 233 Engineering Phys Lab III</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemistry with Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 141 General Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM&amp; 151 and General Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM&amp; 142 General Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM&amp; 152 and General Chemistry Laboratory II</td>
</tr>
<tr>
<td>CHEM&amp; 143 General Chemistry III</td>
</tr>
<tr>
<td>&amp; CHEM&amp; 153 and General Chemistry Laboratory III</td>
</tr>
</tbody>
</table>

Select one from the following sequences: 5

<table>
<thead>
<tr>
<th>Sequence One:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 241 Organic Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM&amp; 251 and Organic Chemistry Laboratory I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sequence Two:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM&amp; 242 Organic Chemistry II</td>
</tr>
<tr>
<td>&amp; CHEM&amp; 252 and Organic Chemistry Laboratory II</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sequence Three:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL&amp; 222 Majors Cell/Molecular</td>
</tr>
</tbody>
</table>

Specialization Courses

Select 3 (three) courses (minimum 14-16 units) in consultation with an advisor as appropriate for intended specialization in the major and the intended transfer institution:

| BIOL& 221 Majors Ecology/Evolution |
| BIOL& 223 Majors Organismal Phys |
| CHEM& 243 Organic Chemistry III |
| CHEM& 253 Organic Chemistry Laboratory III |
| CSE 101 Introduction to Computer Science |
| CSE 121 Introduction to C |
| ENGL& 235 Technical Writing |
| ENGR 101 Engineering and Computer Science Orientation |
| ENGR& 104 Introduction to Design |
| ENGR 109 Introduction to Engineering |
| ENGR 120 Intro to Electrical/Computer Sci & Engineering |
ENGR& 204  Electrical Circuits
ENGR& 214  Statics
ENGR 221  Materials Science
ENGR& 224  Thermodynamics
ENGR& 240  Engineering Computations
ENGR 250  Digital Logic Design
MATH 215  Linear Algebra
MATH& 254  Calculus IV

Total Credits/Units  90-92

1 Required at Clark: MATH& 254 (Five credits/units) – Calculus IV. Other electives as advised dependent on transfer institution.
2 MATH 103 and MATH 111 are required prerequisites for MATH& 151 that may be needed if calculus placement is not met via COMPASS.
3 Clark requires concurrent enrollment of completion in MATH& 254 when taking MATH 221.
4 Requires concurrent enrollment in PHYS 94.
5 Requires concurrent enrollment in PHYS 95.
6 Requires concurrent enrollment in PHYS 96.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Obtain, evaluate, and ethically use information. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Apply communication theory to demonstrate effective oral communication skills. (GE)
- Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Analyze patterns of power, privilege, and inequity in the United States. (GE)
- Analyze and solve multi-step problems using techniques through single-variable calculus.
- Apply scientific and technological knowledge and methodologies to creatively solve technological or scientific problems.
- Demonstrate understanding of the derivative as an instantaneous rate of change and the definite integral as a limit of a sum.
- Apply fundamental principles and relationships from the Natural Sciences to analyze technological or scientific problems.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
BIOLOGICAL SCIENCES

Biological sciences are the basic foundation for many professions. Upper-division requirements at the transfer institution will determine the area of specialization. Students should work with a faculty advisor to develop a specific program. The degree requires a 2.0 cumulative college-level GPA.

Professional Opportunities

Following completion of a Bachelor of Arts or Science Degree at a four-year institution of the student’s choice, several avenues of employment or advancement are open. A few of these are:

- Food Processing
- Commercial Fisheries
- Graduate School
- State and Federal Wildlife agencies
- Science teaching at elementary or secondary level
- Environmental Sciences
- Transfer into professional health programs (medical, dental, pharmacy, physical therapy or optometry)
- Veterinary/Animal Science

Clark’s Biological Sciences majors have had excellent success in finding placement in graduate programs, health science programs, and professional areas. Clark College offers the first two years of most Biological Sciences majors: Biology, Botany, Forestry, Genetics, Marine Biology, Microbiology, Wildlife, and Zoology. Special emphasis is placed on small class size, individual instruction, field experiences, and undergraduate research opportunities. There is good exchange between the support areas of Chemistry, Geology, and Physics to aid in developing relevant courses. Application admission deadlines vary among institutions and students must meet the deadline for the institution to which they plan to apply for transfer admission and it is recommended that students meet with advising to assist with ensuring additional institution-specific requirements are met where possible prior to graduation.

- Biology DTA/MRP (Plan Code: GEBBIAS) (p. 38)

Biology DTA/MRP (Plan Code: GEBBIAS)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Basic Requirements

1. May be individualized based on baccalaureate college of choice.
2. Statistics (a course that includes descriptive and inferential statistics) may substitute for Calculus I at some institutions; students are encouraged to check with the transfer institution early in their decision process to confirm requirements.
3. Intermediate Algebra proficiency may be demonstrated by successful completion of a Calculus and/or Statistics course for which Intermediate Algebra is a prerequisite.
4. Completion of a minimum of 60 quarter hours of general education is required.

Distribution Requirements

1. In order to better prepare for successful transfer, students are encouraged to consult with the institution(s) to which they wish to transfer regarding the humanities courses that best support or may be required as prerequisites to their Biology curriculum.
2. In order to better prepare for successful transfer, students are encouraged to consult with the institution(s) to which they wish to transfer regarding the social science courses that best support or may be required as prerequisites to their Biology curriculum.
3. A full year sequence at a single college is the best preparation for the baccalaureate biology degree.

Electives

1. Electives allow students to include additional courses to prepare for the biology major based on college selection. Examples include a full year sequence of organic chemistry for majors; a full year sequence of physics for science majors; or further math at the pre-calculus level or above or statistics.

Students should check with the transfer institution prior to taking any further biology courses beyond the one-year sequence. Some colleges require all continuing biology courses be taken at the 300 level.

Clark College Equivalents

It is recommended that students complete the sequenced science courses before transferring.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>English Composition II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 148</td>
<td>Business Calculus</td>
<td></td>
</tr>
<tr>
<td>MATH 146</td>
<td>Introduction to Stat</td>
<td></td>
</tr>
<tr>
<td>MATH 151</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 140</td>
<td>Calculus for Life Sciences</td>
<td></td>
</tr>
</tbody>
</table>

Distribution Requirements

Humanities

Course Options (p. 265) 15

Social Sciences

Course Options (p. 266) 15

Natural Sciences

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 221</td>
<td>Majors Ecology/Evolution</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 222</td>
<td>Majors Cell/Molecular</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 223</td>
<td>Majors Organismal Phys</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 141</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 142</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 143</td>
<td>General Chemistry III</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 151</td>
<td>General Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 152</td>
<td>General Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 153</td>
<td>General Chemistry Laboratory III</td>
<td>2</td>
</tr>
</tbody>
</table>

Electives
Select 14 additional term credits/units ²

| Total Credits/Units | 90 |

¹ Check with transfer institution to see if MATH 147 will also be necessary.
² Note: Clark’s chemistry sequence has 16 credits/units.

**Program Outcomes**

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Analyze patterns of power, privilege, and inequality. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Obtain, evaluate, and ethically use information. (GE)
- Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Apply communication theory to demonstrate effective oral communication skills. (GE)
- Acquire scientific information from appropriate sources to analyze issues, claims or situations.
- Apply scientific methodologies to develop and answer questions about the natural world.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s)/unit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
BUSINESS ADMINISTRATION

The Business Administration program teaches individuals how to maintain a competitive edge in business today through theory and practical applications. There is special emphasis on utilizing technology to solve problems and improve productivity, teamwork, interpersonal skills, and professional workforce behavior.

Whether owning, operating, and/or managing a small or large business, Clark’s Business Administration and technical education programs allow the student to specialize in a particular area of business. Graduates have found successful positions in accounting, sales and services, merchandising and management.

Students must complete all specifically listed courses in Major Area Requirements with a minimum grade of "C" or better in order to successfully complete the program and earn the award.

Consult with a business academic advisor for recommended course, program planning.

- Business Administration (AAS)(Plan Code: BAMBUAPT) (p. 40)
- Business Administration (DTA/MRP)(Plan Code: BUCBUAA) (p. 41)
- Small Business Management (CP)(Plan Code: SBMSMC45) (p. 42)
- Supervisory Management (CP) (Plan Code: HRPSMC45) (p. 42)
- Supervisory Management (AAS)(Plan Code: HRPSMAPT) (p. 43)

Business Administration (AAS)(Plan Code: BAMBUAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>Course Options (p. 270)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CMST&amp; 220</td>
<td>Public Speaking</td>
<td>5</td>
</tr>
<tr>
<td>or CMST&amp; 230</td>
<td>Small Group Communication</td>
<td></td>
</tr>
<tr>
<td>Course Options (p. 272)</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>BUS 102</td>
<td>Business Math Applications</td>
<td>5</td>
</tr>
<tr>
<td>BUS 148</td>
<td>Business Professional Self Development</td>
<td>3</td>
</tr>
<tr>
<td>ECON 101</td>
<td>Introduction to Economics</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 129</td>
<td>Basic Accounting Procedures</td>
<td>5</td>
</tr>
<tr>
<td>BUS&amp; 101</td>
<td>Introduction to Business</td>
<td>5</td>
</tr>
<tr>
<td>BUS 150</td>
<td>Computer Business Applications</td>
<td>5</td>
</tr>
</tbody>
</table>

Major Area Requirements

ACCT 136 Accounting Applications 3
BUS 110 Customer Service 3
BUS 115 Small Business Management 5
BUS 199 Cooperative Work Experience 1 5
BUS 211 Business Communications 3
BUS 260 Principles of Marketing 5
BUS& 201 Business Law 5
MGMT 103 Applied Management Skills 3
MGMT 126 Introduction to Project Management 4
Electives
COLL 101 College Essentials: Introduction to Clark 2
Additional electives from ACCT/BUS/ECON/ MGMT 5

Total Credits/Units 90

1 A minimum of 5 credit/units of BUS 199 are required for the AAS.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Use effective communication skills and terminology appropriate to a business environment. (Management)
- Apply appropriate interpersonal skills to interact effectively with customers through a variety of methods. (Customer Service)
- Perform all steps of the accounting cycle, using both general and specialized journals. (Accounting)
- Develop product, pricing, promotion, and distribution strategies to meet organizational needs. (Marketing)

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics)
Business Administration (DTA/MRP)
(Plan Code: BUCBUAA)

Basic Requirements

Communication Skills
ENGL& 101 is required at Eastern Washington University.

Distribution Requirements

Humanities
Students intending the international business major should consult their potential transfer institutions regarding the level of world language required for admission to the major. Five credits/units in world languages may apply to the Humanities requirement.

CMST& 220 is specifically required for WSUV business transfer.

Natural Sciences
Students intending the manufacturing management major at WWU should consult WWU regarding the selection of natural science courses required for admission to the major.

Major Requirements

Business Courses
Universities with a lower division Business Law requirement: UW (all campuses), WSU (all campuses), EWU, CWU, WWU, Gonzaga, SMU, SPU, and Whitworth.

The following institutions do not require a lower division Business Law course and agree to accept the course taken as part of this degree as a lower division elective, but generally not as an equivalent to the course required at the upper division: Heritage, PLU, SU, and Walla Walla University.

International students who completed a business law course specific to their home country must take a business law course at a U.S. institution in order to demonstrate proficiency in U.S. business law.

Electives

Elective Courses
Five institutions have requirements for admission to the major that go beyond those specified above. Students can meet these requirements by careful selection of the elective University Course Equivalent to:

- WSU (all campuses): Management Information Systems MIS 250
- Gonzaga: Management Information Systems BMIS 235
- PLU: Computer applications CSCE 120, either an equivalent course or skills test
- SPU: Spreadsheet BUS 1700, either an equivalent course or skills test
- WWW: Introduction to Business Computer Systems MIS 220 (for transfer students entering fall 2014)

Additional Requirements

- To receive this degree, students must have a 2.0 cumulative GPA.

Please note, completion of this degree does not guarantee admission to senior institution.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic Requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communications Skills</td>
<td></td>
</tr>
</tbody>
</table>

| ENGL& 101 | English Composition I  | 5             |
| ENGL& 102 | English Composition II | 5             |
| or ENGL 235 | Technical Writing |               |

Quantitative/Symbolic Reasoning Requirement

Course 1: 5

Select one from the following:

MATH& 148 | Business Calculus | 5
or MATH& 111: Calculus I
or MATH& 111: Calculus II
or MATH& 211: Calculus IV

Course 2: 5

Select one from the following:

MATH 103 | College Trigonometry | 5
or MATH 104: Finite Math with Support
or MATH 105: Finite Mathematics

MATH 110 | College Algebra With Support | 5
or MATH 111: College Algebra

MATH& 153 | Calculus III | 5

MATH 215 | Linear Algebra | 5

MATH 221 | Differential Equations | 5

Distribution Requirements

Humanities

Course Options (p. 265) 15

Social Sciences
ECON& 201 | Micro Economics | 5
ECON& 202 | Macro Economics | 5

Select a Social Science from outside Economics (p. 266) 5

Natural Sciences
MATH& 146 | Introduction to Stat | 5
10 (ten) additional credits of Natural Science (p. 267) 10

Major Requirements

Business Courses (for all schools except UW)
ACCT& 201 | Principles of Accounting I | 5
ACCT& 202 | Principles of Accounting II | 5
ACCT& 203 | Principles of Accounting III | 5
BUS& 201 | Business Law | 5

Electives
Elective courses (p. 267) 5

Total Credits/Units 90

1 CMST& 220 is strongly recommended.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
Small Business Management (CP) (Plan Code: SBMSMC45)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Communication Skills (minimum 3 credits/units required)</em></td>
<td></td>
</tr>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><em>Computational Skills (minimum 3 credits/units required)</em></td>
<td></td>
</tr>
<tr>
<td>BUS 102</td>
<td>Business Math Applications</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><em>Human Relations (minimum 3 credits/units required)</em></td>
<td></td>
</tr>
<tr>
<td>BUS 148</td>
<td>Business Professional Self Development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Business Core Course</strong></td>
<td></td>
</tr>
<tr>
<td>ACCT 129</td>
<td>Basic Accounting Procedures</td>
<td>5</td>
</tr>
<tr>
<td>BUS 150</td>
<td>Computer Business Applications</td>
<td>5</td>
</tr>
<tr>
<td>BUS&amp; 101</td>
<td>Introduction to Business</td>
<td>5</td>
</tr>
<tr>
<td>MGMT 101</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Major Area Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>BUS 115</td>
<td>Small Business Management</td>
<td>5</td>
</tr>
<tr>
<td>BUS 260</td>
<td>Principles of Marketing</td>
<td>5</td>
</tr>
<tr>
<td>COLL 101</td>
<td>College Essentials: Introduction to Clark</td>
<td>2</td>
</tr>
<tr>
<td>ECON 101</td>
<td>Introduction to Economics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits/Units</strong></td>
<td>46</td>
</tr>
</tbody>
</table>

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Prepare a business plan.
- Perform all steps of the accounting cycle, using both general and specialized journals.
- Develop product, pricing, promotion, and distribution strategies to meet organizational needs.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics

Supervisory Management (CP) (Plan Code: HRPSMC45)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Communication (minimum 3 credits/units required)</em></td>
<td></td>
</tr>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><em>Computational Skills (minimum 3 credits/units required)</em></td>
<td></td>
</tr>
<tr>
<td>BUS 102</td>
<td>Business Math Applications</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><em>Human Relations (minimum 3 credits/units required)</em></td>
<td></td>
</tr>
<tr>
<td>BUS 148</td>
<td>Business Professional Self Development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Business Core Courses</strong></td>
<td></td>
</tr>
<tr>
<td>ACCT 129</td>
<td>Basic Accounting Procedures</td>
<td>5</td>
</tr>
<tr>
<td>BUS 150</td>
<td>Computer Business Applications</td>
<td>5</td>
</tr>
<tr>
<td>BUS&amp; 101</td>
<td>Introduction to Business</td>
<td>5</td>
</tr>
<tr>
<td>MGMT 101</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Major Area Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>COLL 101</td>
<td>College Essentials: Introduction to Clark</td>
<td>2</td>
</tr>
<tr>
<td>ECON 101</td>
<td>Introduction to Economics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits/Units</strong></td>
<td>45</td>
</tr>
</tbody>
</table>
Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
• Demonstrate interpersonal/human relations skills. (GE)
• Effectively manage people and resources to meet organizational goals.
• Apply managerial techniques for decision making, problem solving, and facilitating change.
• Identify applicable laws related to human resource issues and functions.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Supervisory Management (AAS)(Plan Code: HRPSMAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communication Skills</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Health and Physical Education</strong></td>
<td></td>
</tr>
<tr>
<td>Course Options (p. 270)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Humanities</strong></td>
<td></td>
</tr>
<tr>
<td>CMST&amp; 220</td>
<td>Public Speaking</td>
<td>5</td>
</tr>
<tr>
<td>or CMST&amp; 230</td>
<td>Small Group Communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Natural Sciences</strong></td>
<td></td>
</tr>
<tr>
<td>Course Options (p. 272)</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Social Science</strong></td>
<td></td>
</tr>
<tr>
<td>ECON 101</td>
<td>Introduction to Economics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Computational Skills</strong></td>
<td></td>
</tr>
<tr>
<td>BUS 102</td>
<td>Business Math Applications</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Human Relations</strong></td>
<td></td>
</tr>
<tr>
<td>BUS 148</td>
<td>Business Professional Self Development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Business Core</strong></td>
<td></td>
</tr>
<tr>
<td>ACCT 129</td>
<td>Basic Accounting Procedures</td>
<td>5</td>
</tr>
<tr>
<td>BUS&amp; 101</td>
<td>Introduction to Business</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Major Area Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>BUS 105</td>
<td>Introduction to International Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 110</td>
<td>Customer Service</td>
<td>3</td>
</tr>
<tr>
<td>BUS 199</td>
<td>Cooperative Work Experience</td>
<td>5</td>
</tr>
<tr>
<td>BUS&amp; 201</td>
<td>Business Law</td>
<td>5</td>
</tr>
<tr>
<td>BUS 211</td>
<td>Business Communications</td>
<td>5</td>
</tr>
<tr>
<td>COLL 101</td>
<td>College Essentials: Introduction to Clark</td>
<td>2</td>
</tr>
<tr>
<td>MGMT 103</td>
<td>Applied Management Skills</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 106</td>
<td>Motivation and Performance</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 110</td>
<td>Creative Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 112</td>
<td>Conflict Management</td>
<td>2</td>
</tr>
<tr>
<td>MGMT 126</td>
<td>Introduction to Project Management</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 128</td>
<td>Human Resources Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Additional electives from ACCT/BUS/ECON/MGMT</strong></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Total Credits/Units</td>
<td>92</td>
</tr>
</tbody>
</table>

1 Six (6) credits/units maximum.
2 A minimum of 5 credit/units of BUS 199 are required for the AAS.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
• Demonstrate progress toward healthier behaviors. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Demonstrate interpersonal/human relations skills. (GE)
• Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
• Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
• Analyze human resource issues, ethical standards, and applicable laws.
• Use effective communication skills and terminology appropriate to a business environment.
• Analyze management problems/opportunities, make decisions, and prepare solutions in increasingly effective ways.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
### COMPUTER TECHNOLOGY

The Computer Technology (CTEC) department at Clark College offers training in a variety of foundational and content-specific topics relating to general computer literacy and fluency, computer operating systems interactions, programming, databases, web technology, and networking. Our course offerings serve a variety of missions: to enhance and expand an individual student's skill set, to serve as a prerequisite or requirement for another area of study, or to be a component course in one of the programs offered by this department.

CTEC currently offers the Computer Support program with degree and certificate options to provide students with skills for employment as computer technicians, help desk workers and other technical support roles. The department also offers an AAT degree in Web Development, which focuses on preparing students for careers that feature web programming skills.

Student considering options in computer-related careers should meet with a program advisor to consider which CTEC courses or programs may benefit them in their training and career exploration. CTEC course offerings can help provide a foundational understanding and set of skills in computer technology that will help them make informed decisions on career choices in other Clark College computer-related programs offered by Networking Technology (NTEC), Digital Media Arts (DMA), and Business Technology as well as on transfer opportunities in Computer Science and Information Technology.

For CTEC degrees and certificates, students must complete all major area requirements with a minimum grade of "C" or better in order to successfully complete the program and earn the award. Students should refer to the Degree & Certificate Requirements Section of the Clark College Catalog to identify the courses needed to satisfy the General Education Requirements for our program offerings.

- Information Technology Skills (CP) (Plan Code: MIAISC45) (p. 44)
- Computer Support Specialist (AAT) (Plan Code: MIACTAPT) (p. 44)

### Information Technology Skills (CP) (Plan Code: MIAISC45)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Students interested in the Computer Support Specialist program should obtain advising before entering the program.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS</td>
<td>Introduction to Managed Information Systems</td>
<td>5</td>
</tr>
<tr>
<td>BUS</td>
<td>Microsoft Networking Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CTEC</td>
<td>Powershell Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CTEC</td>
<td>Internet Research and Living Online</td>
<td>3</td>
</tr>
<tr>
<td>CTEC</td>
<td>Microsoft Windows OS Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CTEC</td>
<td>Microsoft Networking Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CTEC</td>
<td>Introduction to Managed Information Systems</td>
<td>5</td>
</tr>
<tr>
<td>CTEC</td>
<td>CompTIA A+ Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>CTEC</td>
<td>CompTIA A+ Operating Systems &amp; Networking</td>
<td>4</td>
</tr>
<tr>
<td>NTEC</td>
<td>IP Subnetting</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>Credits/Units</td>
<td>49</td>
</tr>
</tbody>
</table>

### Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Analyze the ethical and legal issues surrounding access to and use of technology.
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate foundational understanding of concepts, skills and issues relating to underlying technology and current industry standards involving computer technology
- Install, configure, and maintain hardware and software to bring the system to an appropriate operational level for the end user.
- Diagnose, troubleshoot and repair customer hardware, software, and networking issues.
- Identify, access, and evaluate resources, and respond appropriately and professionally with written and verbal communications to colleagues and customers.
- Maintain a professional and supportive role with colleagues and customers in regard to their computer technology needs.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website [https://programmap.clark.edu/academics](https://programmap.clark.edu/academics).

### Computer Support Specialist (AAT) (Plan Code: MIACTAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.
catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communication Skills</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>or PTWR 135</td>
<td>Introduction to Applied Technical Writing</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Computational Skills</strong></td>
<td></td>
</tr>
<tr>
<td>PTCS 110</td>
<td>Professional Technical Computational Skills</td>
<td>5</td>
</tr>
<tr>
<td>or completed MATH course with 'C' or better where prerequisite requirements are MATH 96 or higher</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Human Relations</strong></td>
<td></td>
</tr>
<tr>
<td>CTEC 104</td>
<td>IT Support</td>
<td>3</td>
</tr>
<tr>
<td>COLL 101</td>
<td>College Essentials: Introduction to Clark</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Major Area Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>BUS 149</td>
<td>Computer Application Essentials</td>
<td>3</td>
</tr>
<tr>
<td>CTEC 106</td>
<td>Information Technology Fundamentals</td>
<td>5</td>
</tr>
<tr>
<td>CTEC 111</td>
<td>Powershell Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CTEC 115</td>
<td>Internet Research and Living Online</td>
<td>3</td>
</tr>
<tr>
<td>CTEC 121</td>
<td>Intro to Programming &amp; Problem Solving</td>
<td>5</td>
</tr>
<tr>
<td>CTEC 130</td>
<td>Microsoft Windows OS Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CTEC 131</td>
<td>Microsoft Networking Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CTEC 132</td>
<td>Microsoft Windows Server Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>CTEC 133</td>
<td>Microsoft Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CTEC 134</td>
<td>Microsoft Database Admin</td>
<td>5</td>
</tr>
<tr>
<td>CTEC 145</td>
<td>Web Server Technology</td>
<td>5</td>
</tr>
<tr>
<td>CTEC 200</td>
<td>Help Desk Technician I</td>
<td>3</td>
</tr>
<tr>
<td>CTEC 201</td>
<td>Help Desk Technician II</td>
<td>3</td>
</tr>
<tr>
<td>or CTEC 199</td>
<td>Cooperative Work Experience</td>
<td></td>
</tr>
<tr>
<td>CTEC 205</td>
<td>Introduction to Managed Information Systems</td>
<td>5</td>
</tr>
<tr>
<td>CTEC 213</td>
<td>CompTIA A+ Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>CTEC 214</td>
<td>CompTIA A+ Operating Systems &amp; Networking</td>
<td>4</td>
</tr>
<tr>
<td>CTEC 233</td>
<td>CompTIA Security+</td>
<td>5</td>
</tr>
<tr>
<td>CTEC 235</td>
<td>CompTIA Cybersecurity</td>
<td>5</td>
</tr>
<tr>
<td>NTEC 103</td>
<td>IP Subnetting</td>
<td>3</td>
</tr>
<tr>
<td>NTEC 142</td>
<td>Cloud Computing Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits/Units</strong></td>
<td>92</td>
</tr>
</tbody>
</table>

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Analyze the ethical and legal issues surrounding access to and use of technology.
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Demonstrate broad based understanding of concepts, skills and issues relating to underlying technology and current industry standards involving computer and information technology.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics
CULINARY ARTS

The culinary and hospitality industries are experiencing tremendous growth. Employers all over the nation are looking for people who have not only technical skills, but also the ability to manage effectively and solve problems creatively.

At the Tod and Maxine McClaskey Culinary Institute at Clark College, we are building on nearly 60 years of excellence in culinary education to offer newly updated programs that prepare you to meet the growing demand for culinary and hospitality professionals. Our programs emphasize mastery of the fundamentals as well as management and critical thinking skills to prepare you for a range of career opportunities.

Our faculty combine their real-world experience with teaching expertise to help you master the technical, organizational, and management skills you need to stand out to potential employers. In addition, your on-campus experience will help develop skills including teamwork, customer service, merchandising, efficiency, equipment and food safety, production scheduling, and more — all key skills to prepare you for a career in the region’s dynamic food and hospitality industry.

Whether you aspire to work in a restaurant, bakery, industrial kitchen, catering service, or your own small business, the McClaskey Culinary Institute will assist in preparing you for a variety of career opportunities.

• Baking and Pastry Arts Fundamentals (CA)(Plan Code: BPABPC20) (p. 46)
• Professional Baking and Pastry Arts Management (AAT)(Plan Code: BPAPBAPT)
• Cuisine Fundamentals (CA)(Plan Code: CACCFC20) (p. 47)
• Cuisine Management (AAT)(Plan Code: CACCMAPT) (p. 48)

Baking and Pastry Arts Fundamentals (CA)(Plan Code: BPABPC20)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

This program is built on a competency model focused on developing the fundamental knowledge, skills and abilities to work in a bakery or pastry shop environment.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBAK 110</td>
<td>Artisan Breads</td>
<td>9</td>
</tr>
<tr>
<td>PBAK 111</td>
<td>Early Morning Product</td>
<td>9</td>
</tr>
<tr>
<td>PBAK 120</td>
<td>Viennoiserie</td>
<td>5</td>
</tr>
<tr>
<td>PBAK 121</td>
<td>Cookies, Brownies, Bars and Quick Breads</td>
<td>5</td>
</tr>
<tr>
<td>PBAK 130</td>
<td>Cakes, Desserts and Tortes</td>
<td>9</td>
</tr>
<tr>
<td>PBAK 131</td>
<td>Retail Operations and Barista</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits/Units</strong></td>
<td><strong>46</strong></td>
</tr>
</tbody>
</table>

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Apply processes of baking, including concepts of ingredient cause and effect, in daily routine
• Accurately follow a formula, with notes, to completion
• Perform accurate mathematical operations appropriate to baking
• Operate commercial baking equipment and tools using standard safety and sanitation procedures
• Demonstrate accurate use of both digital and balance scales
• Demonstrate effective time management

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Professional Baking and Pastry Arts Management (AAT)(Plan Code: BPAPBAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

This program of study will delve deeply into the science of baking and then apply that theoretical knowledge in a hands-on production focused lab environment. During the course of their studies students will learn all aspects of artisan breads, laminated doughs, cakes, tortes, French pastries, and merchandising. While developing these key industry competencies students will simultaneously be developing work place skills such as team work, food costing, customer service, efficiency, speed and accuracy, equipment and food safety, and production scheduling.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communication Skills</strong></td>
<td></td>
</tr>
<tr>
<td>PTWR 135</td>
<td>Introduction to Applied Technical Writing</td>
<td>5</td>
</tr>
<tr>
<td>or ENGL &amp; 101</td>
<td>English Composition I</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Computational Skills</strong></td>
<td></td>
</tr>
<tr>
<td>PTCS 110</td>
<td>Professional Technical Computational Skills</td>
<td>5</td>
</tr>
<tr>
<td>or MATH &amp; 146</td>
<td>Introduction to Stat</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Human Relations</strong></td>
<td></td>
</tr>
<tr>
<td>COLL 101</td>
<td>College Essentials: Introduction to Clark</td>
<td>2</td>
</tr>
<tr>
<td>MGMT 101</td>
<td>Principles of Management</td>
<td></td>
</tr>
<tr>
<td>or BUS 148</td>
<td>Business Professional Self Development</td>
<td>3</td>
</tr>
</tbody>
</table>

Major Area Requirements
This program is designed to provide a solid foundation of necessary skills and practices for entry level employment.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUIS 110</td>
<td>Culinary Fundamentals I</td>
<td></td>
</tr>
<tr>
<td>CUIS 111</td>
<td>Professional Cooking I</td>
<td>8</td>
</tr>
<tr>
<td>CUIS 120</td>
<td>Culinary Fundamentals II</td>
<td>5</td>
</tr>
<tr>
<td>CUIS 121</td>
<td>Professional Cooking II</td>
<td>8</td>
</tr>
<tr>
<td>CUIS 130</td>
<td>Culinary Fundamentals III</td>
<td>5</td>
</tr>
<tr>
<td>CUIS 131</td>
<td>Professional Cooking III</td>
<td>8</td>
</tr>
</tbody>
</table>

**Specialized Short courses**

Select a minimum of four credits/units from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUIS 140</td>
<td>Classic and Modern Soups and Sauces</td>
<td></td>
</tr>
<tr>
<td>CUIS 141</td>
<td>Meat Cutting and Fabrication</td>
<td></td>
</tr>
<tr>
<td>CUIS 142</td>
<td>Wine, Beer, Spirits and Food Pairings</td>
<td></td>
</tr>
<tr>
<td>CUIS 143</td>
<td>Restaurant Baking</td>
<td></td>
</tr>
<tr>
<td>CUIS 144</td>
<td>Catering Operations</td>
<td></td>
</tr>
<tr>
<td>CUIS 145</td>
<td>Wine Appreciation</td>
<td></td>
</tr>
<tr>
<td>CUIS 147</td>
<td>Barbeque Basics</td>
<td></td>
</tr>
<tr>
<td>CUIS 148</td>
<td>Advanced Garde Manger</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits/Units**: 43

---

**Program Outcomes**

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Apply processes of baking, including concepts of ingredient cause and effect, in a daily routine.
- Accurately follow a formula, with notes, to completion.
- Perform accurate mathematical operations appropriate to baking.
- Operate commercial baking equipment and tools using standard safety and sanitation procedures.
- Demonstrate accurate use of both digital and balance scales.
- Demonstrate effective time management.
- Demonstrate effective bakery management skills.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

---

**Cuisine Fundamentals (CA)(Plan Code: CACCFC20)**

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.
Cuisine Management (AAT)(Plan Code: CACCMAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

This program prepares students for a wide variety of employment opportunities in the food service and hospitality industries. Some of these employment venues include restaurants, resorts, assisted living communities and hospital environments. This program is designed to provide a solid foundation of necessary skills and practices for entry level employment. The curriculum is delivered in a competency based format with a focus on skill development, production and customer service. In addition to skill development the curriculum also includes a focus on healthy cooking options, special dietary needs, international cuisine, food cost management, industry trends and sustainable production.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUIS 148</td>
<td>Advanced Garde Manger</td>
<td>105</td>
</tr>
</tbody>
</table>

1 These courses are recommended

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Apply the basics of classical, modern, and healthy cooking techniques.
- Identify and describe a variety of food ingredients and specifications with focus on sustainable, organic, nutritional needs; specialty diets; and aspects of vegetarian and veganism.
- Demonstrate proper kitchen sanitation, safety and professionalism in the workplace.
- Identify and demonstrate proper use of kitchen tools and equipment.
- Demonstrate basic measuring, conversion, food costing and yield management practices.
- Demonstrate cook to order practices with American and International cuisine.
- Apply teamwork, workplace ethics, customer service and communications in the workplace.
- Demonstrate effective management skills.
- Demonstrate professional cooking skills and skills in menu and recipe interpretation and conversion, proper cooking methods, plating and saucing principles to carry out complete dinner and/or banquet service.
- Demonstrate advanced storeroom inventory, management, purchasing and quality control.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
CYBERSECURITY (BAS)

Cybersecurity BAS program entrance consideration is based on the following:

- Completion of the Clark College Application for Admission (if new to Clark College)
- Completion of the Cybersecurity BAS Program Intent Form (a non-refundable program application fee of $50 is required at the time of application submission)
- Official transcripts from all other colleges sent to Clark College Enrollment Services
- Completion of an AA, AAS, AAT, or higher from a regionally accredited institution with a minimum cumulative GPA of 2.00 overall, and 2.50 or above in core program coursework
- Eligibility for the following courses: PHIL& 120 and ENGL& 235
- Completion of 5 math credits/units — any generally transferable math course with Intermediate Algebra as a prerequisite
- Completion of 5 English credits/units — any generally transferable English composition/writing course
- Attend a pre-program advising session with a trained professional or faculty advisor
- Attend a program orientation session

Questions about any step in this process? Contact the Advising Department at 360-992-2345 or cyber@clark.edu.

- Cybersecurity (BAS)(Plan Code: CISCYBAS) (p. 49)

Cybersecurity (BAS)(Plan Code: CISCYBAS)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

A minimum of 35 quarter units or 24 semester units (100-level or above) must be completed prior to program completion and needs to include five units minimum in each of the following categories: communication studies, quantitative skills, humanities, social science, and natural science as defined by Clark College.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/ Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements (60 credits/units required)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communication Skills (10 credits required)</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>CMST 310</td>
<td>Organizational Communication</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Quantitative/Symbolic Reasoning (5 credits required)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Any generally transferrable Symbolic Logic or MATH course with an intermediate algebra prefix.</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Select one option (p. )</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Humanities (10 credits required)</strong></td>
<td></td>
</tr>
<tr>
<td>CMST&amp; 210</td>
<td>Interpersonal Communication</td>
<td>5</td>
</tr>
<tr>
<td>or CMST&amp; 220</td>
<td>Public Speaking</td>
<td></td>
</tr>
<tr>
<td>or CMST&amp; 230</td>
<td>Small Group Communication</td>
<td></td>
</tr>
</tbody>
</table>

A minimum of 35 quarter units or 24 semester units (100-level or above) must be completed prior to program completion and needs to include five units minimum in each of the following categories: communication studies, quantitative skills, humanities, social science, and natural science as defined by Clark College.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/ Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Social Science (10 credits required)</strong></td>
<td></td>
</tr>
<tr>
<td>SOC 315</td>
<td>Organizational Behavior</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Natural Science (10 credits required)</strong></td>
<td></td>
</tr>
<tr>
<td>ENVS 430</td>
<td>Sustainability &amp; Environmental Practices</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Additional General Education Courses (15 credits required)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Courses with the following course attributes/designators can satisfy this requirement - HA, HB, NS, NS-Lab, OC, Q, SS, WC</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits/Units</strong></td>
<td>180</td>
</tr>
</tbody>
</table>

1 Please work with advisor to identify any outstanding needs based on associate degree credits already earned.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Plan, implement, administer, and support enterprise information technologies and systems.
- Analyze the security vulnerabilities of an organization's information technology resources.
- Plan and implement security measures and practices for an organization's information technology resources.
- Evaluate organization needs, and use those to plan the implementation of information technology systems.

- Cybersecurity (BAS)(Plan Code: CISCYBAS) (p. 49)
DENTAL HYGIENE (BAS)

A career as a dental hygienist offers a wide range of opportunities. Services provided by dental hygienists include patient assessment procedures, managing and treating periodontal conditions, providing pain management for patients, placing and finishing dental restorative materials, applying preventive materials to the teeth, teaching patients appropriate oral hygiene to maintain oral health, nutrition counseling, teeth whitening services, performing documentation and office management activities, developing and implementing community oral health programs, and more.

Graduates receive a Bachelor of Applied Science degree. Students who successfully complete the program qualify to take national, regional, and state board examinations for licensure and are prepared to enter clinical practice. The program includes all responsibilities allowed by Washington state law. Clinical experience takes place in the Clark College Firstenburg Dental Hygiene Education and Care Center under the supervision of licensed dentists and dental hygienists.

The Clark College Dental Hygiene program is accredited by the Commission on Dental Accreditation of the American Dental Association, a specialized accrediting body recognized by the Council on Postsecondary Accreditation and the United States Department of Education.

About the Program

For Financial Aid purposes, the Bachelor of Applied Science in Dental Hygiene is open enrollment which enables all students who wish to pursue this degree to complete the “Dental Hygiene Degree Requirements” (courses in the areas of English, Biological Sciences, Psychology, etc.). The “Dental Hygiene Degree Requirements” provide the foundation for the subsequent "Dental Hygiene Core" classes (classes with “DH” prefix). Due to clinical space limitations, although the program of study for the dental hygiene degree is open enrollment, there is a competitive application process for students to be able to begin the “Dental Hygiene Core" classes. The instructions in the Dental Hygiene Program Guide explain the Dental Hygiene Degree requirements and the competitive application process to be able to begin the Dental Hygiene Core classes.


Disability Statement for Health Occupations

In accordance with the Americans with Disabilities Act and the Rehabilitation Act of 1973, accommodations for students with disabilities will be considered at the student's request. The student may need to provide documentation of disability to the Disability Support Services Office to support his/her accommodation requests. Documentation guidelines and procedures can be found at http://www.clark.edu/campus-life/student-support/disability_support/index.php (http://www.clark.edu/campus-life/student-support/disability_support/).

Once the student is qualified by DSS as having a disability, requested accommodations will be considered. Accommodations for the classroom, laboratory, or clinical setting will be evaluated according to reasonableness. Accommodations that compromise patient care, or that fundamentally alter the essential functions of the program or activity, are not considered to be reasonable.

- Dental Hygiene (BAS)(Plan Code: DEHDHBS) (p. 50)

Dental Hygiene (BAS)(Plan Code: DEHDHBS)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Education Requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication Skills</td>
<td></td>
</tr>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>English Composition II</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Humanities</td>
<td></td>
</tr>
<tr>
<td>CMST 210</td>
<td>Interpersonal Communication</td>
<td>5</td>
</tr>
<tr>
<td>or CMST 220</td>
<td>Public Speaking</td>
<td></td>
</tr>
<tr>
<td>or CMST 230</td>
<td>Small Group Communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>In addition to the CMST&amp; course, select 5 credits/units of Humanities (HA/HB) from the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Course Options (p. 265)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Sciences</td>
<td></td>
</tr>
<tr>
<td>PSYC &amp; 100</td>
<td>General Psychology</td>
<td>5</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>College-level Math</td>
<td></td>
</tr>
<tr>
<td>MATH &amp; 146</td>
<td>Introduction to Stat (recommended)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Course Options (p. 264)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural Sciences</td>
<td></td>
</tr>
<tr>
<td>BIOL &amp; 160</td>
<td>General Biology W/Lab</td>
<td>5</td>
</tr>
<tr>
<td>BIOL &amp; 260</td>
<td>Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM &amp; 121</td>
<td>Intro to Chemistry. Pre-Health</td>
<td>5</td>
</tr>
<tr>
<td>CHEM &amp; 131</td>
<td>Intro to Organic/Biochem</td>
<td>5</td>
</tr>
<tr>
<td>NUTR &amp; 101</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following</td>
<td>10-15</td>
</tr>
<tr>
<td>BIOL &amp; 251 &amp; BIOL &amp; 252 &amp; BIOL &amp; 253</td>
<td>Human A &amp; P I and Human A &amp; P II</td>
<td></td>
</tr>
<tr>
<td>or BIOL &amp; 241 &amp; BIOL &amp; 242</td>
<td>Human Anatomy and Physiology I and Human Anatomy and Physiology II</td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one fitness/activity course (p. 264)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Junior Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall Term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH 282</td>
<td>Pharmacology I</td>
<td>1</td>
</tr>
<tr>
<td>DH 283</td>
<td>Clinical Dental Hygiene Techniques I</td>
<td>6</td>
</tr>
<tr>
<td>DH 284</td>
<td>Oral Medicine</td>
<td>2</td>
</tr>
<tr>
<td>DH 285</td>
<td>Periodontics</td>
<td>3</td>
</tr>
<tr>
<td>DH 286</td>
<td>Dental Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>DH 292</td>
<td>Introduction to Digital Management Systems</td>
<td>1</td>
</tr>
<tr>
<td>Term</td>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Winter Term</td>
<td>DH 303</td>
<td>Head and Neck Anatomy</td>
</tr>
<tr>
<td></td>
<td>DH 313 &amp; DH 393</td>
<td>Clinical Dental Hygiene Techniques II</td>
</tr>
<tr>
<td></td>
<td>DH 323</td>
<td>Oral Radiology I</td>
</tr>
<tr>
<td></td>
<td>DH 353</td>
<td>Ethics and The Profession</td>
</tr>
<tr>
<td></td>
<td>DH 373</td>
<td>Cariology</td>
</tr>
<tr>
<td></td>
<td>DH 383</td>
<td>Pharmacology II</td>
</tr>
<tr>
<td>Spring Term</td>
<td>DH 304</td>
<td>Educational Theory and Application</td>
</tr>
<tr>
<td></td>
<td>DH 314 &amp; DH 394</td>
<td>Clinical Dental Hygiene Techniques III</td>
</tr>
<tr>
<td></td>
<td>DH 324</td>
<td>Oral Radiology II</td>
</tr>
<tr>
<td></td>
<td>DH 344</td>
<td>General and Oral Pathology</td>
</tr>
<tr>
<td></td>
<td>DH 364</td>
<td>Local Anesthesia &amp; Pain Control</td>
</tr>
<tr>
<td></td>
<td>DH 384</td>
<td>Pharmacology III</td>
</tr>
<tr>
<td>Senior Year</td>
<td>DH 301</td>
<td>Introduction to Dental Materials/Assisting</td>
</tr>
<tr>
<td></td>
<td>DH 321</td>
<td>Clinical Dental Hygiene Techniques IV</td>
</tr>
<tr>
<td></td>
<td>DH 331</td>
<td>Oral Radiology III</td>
</tr>
<tr>
<td></td>
<td>DH 431</td>
<td>Restorative Dentistry I</td>
</tr>
<tr>
<td></td>
<td>DH 451</td>
<td>Special Needs Populations I</td>
</tr>
<tr>
<td></td>
<td>DH 471</td>
<td>Nitrous Oxide Sedation</td>
</tr>
<tr>
<td>Summer Term</td>
<td>DH 402</td>
<td>Dental Public Health - Research Methods I</td>
</tr>
<tr>
<td></td>
<td>DH 410</td>
<td>Behavior Modification</td>
</tr>
<tr>
<td></td>
<td>DH 412</td>
<td>Clinical Dental Hygiene Techniques V</td>
</tr>
<tr>
<td></td>
<td>DH 422</td>
<td>Clinical Dental Hygiene Techniques V Lab</td>
</tr>
<tr>
<td></td>
<td>DH 432</td>
<td>Restorative Dentistry II</td>
</tr>
<tr>
<td></td>
<td>DH 472</td>
<td>Periodontics II</td>
</tr>
<tr>
<td>Fall Term</td>
<td>DH 403</td>
<td>Dental Public Health - Research Methods II</td>
</tr>
<tr>
<td></td>
<td>DH 413 &amp; DH 423</td>
<td>Clinical Dental Hygiene Techniques VI</td>
</tr>
<tr>
<td></td>
<td>DH 433</td>
<td>Restorative Dentistry III</td>
</tr>
<tr>
<td></td>
<td>DH 443</td>
<td>and Restorative Dentistry III Lab</td>
</tr>
<tr>
<td></td>
<td>DH 463</td>
<td>Dental Hygiene Senior Clinic Seminar</td>
</tr>
<tr>
<td></td>
<td>DH 473</td>
<td>Periodontics III</td>
</tr>
<tr>
<td>Winter Term</td>
<td>DH 404</td>
<td>Dental Public Health - Research Methods III</td>
</tr>
<tr>
<td></td>
<td>DH 414</td>
<td>Clinical Dental Hygiene Techniques VII</td>
</tr>
<tr>
<td></td>
<td>DH 424</td>
<td>Clinical Dental Hygiene Techniques VII Lab</td>
</tr>
<tr>
<td></td>
<td>DH 434 &amp; DH 444</td>
<td>Restorative Dentistry IV</td>
</tr>
<tr>
<td></td>
<td>DH 484</td>
<td>Capstone</td>
</tr>
</tbody>
</table>

Total Credits/Units: 184-189

1 All science courses must be seven (7) years current upon program entry.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Apply the roles of clinician, educator, and researcher to prevent oral diseases and promote health.
- Communicate and collaborate effectively and professionally, using verbal, non-verbal, and written language with diverse populations to include patients, colleagues, the public, and other healthcare providers.
- Analyze professional behaviors and make appropriate decisions guided by ADHA ethical principles and core values.
- Assess, diagnose, plan, implement, and evaluate the provision of optimal, patient-centered dental hygiene care.
- Apply evidence-based decision-making through critical analysis of current research.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/).
**Diesel Technology**

The diesel technician must be able to work on a great variety of equipment and their component parts. These include brake systems, drive trains, electrical and electronic circuits, hydraulic systems, and diesel engines. Diesel power is used in the transportation industry in light, medium, and heavy-duty trucks and in industrial applications such as heavy equipment, agriculture, marine propulsion, power generation, and locomotives.

Because of the widespread use of this type of power, diesel technicians can work in a shop or outdoors as a field service technician. This program is designed to prepare students for entry-level positions into the diesel technician trade. Diesel program instruction includes both classroom theory and extensive hands-on experience in the shop where the student encounters real day-to-day problems.

The diesel evening program includes courses for Caterpillar, Cummins, and Detroit engines; electronic controls; and industrial hydraulics for technicians who wish to further their knowledge and skills. Any course in the program can be made available to area employers and their employees.

Students must complete all Major Area Requirements and specifically listed courses with a minimum grade of "C" or better in order to successfully complete the program and earn the award.

- Diesel Technician (CP) (Plan Code: DMTDTC90) (p. 52)
- Diesel Technologies (AAS)(Plan Code: DMTDTAPT) (p. 52)

**Diesel Technician (CP) (Plan Code: DMTDTC90)**

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Communication Skills (minimum 3 credits/units required)</em></td>
<td></td>
</tr>
<tr>
<td>DIES 111</td>
<td>Diesel Fundamentals</td>
<td>5</td>
</tr>
<tr>
<td>DIES 112</td>
<td>Diesel Procedures</td>
<td>10</td>
</tr>
<tr>
<td>DIES 113</td>
<td>Diesel Engines/Fuel Systems</td>
<td>5</td>
</tr>
<tr>
<td>DIES 114</td>
<td>Diesel Procedures</td>
<td>10</td>
</tr>
<tr>
<td>DIES 115</td>
<td>Drive Trains</td>
<td>5</td>
</tr>
<tr>
<td>DIES 116</td>
<td>Diesel Procedures</td>
<td>10</td>
</tr>
<tr>
<td>DIES 120</td>
<td>Basic Electrical</td>
<td>3</td>
</tr>
<tr>
<td>DIES 121</td>
<td>Electronic Engine Management Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

**Program Outcomes**

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Troubleshoot engines, hydraulic systems, electrical systems, power train systems, brakes, steering, and suspension systems.
- Repair engines, hydraulic systems, electrical systems, power train systems, brakes, steering, and suspension systems.
- Comply with personal and environmental safety practices that relate to the diesel powered industry.
- Evaluate and use technical information from a variety of resources.

**Diesel Technologies (AAS)(Plan Code: DMTDTAPT)**

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Communication Skills</em></td>
<td></td>
</tr>
<tr>
<td>DIES 113</td>
<td>Introduction to Applied Technical Writing</td>
<td>5</td>
</tr>
<tr>
<td>DIES 114</td>
<td>Professional Technical Computational Skills</td>
<td>5</td>
</tr>
<tr>
<td>DIES 120</td>
<td>Small Group Communication</td>
<td>5</td>
</tr>
</tbody>
</table>
or CMST& 210 Interpersonal Communication

**Humanities**

Course Options (p. 270) 3

**Social Sciences**

Course Options (p. 271) 3

**Natural Sciences**

Course Options (p. 272) 3

**Major Area Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIES 111</td>
<td>Diesel Fundamentals</td>
<td>5</td>
</tr>
<tr>
<td>DIES 112</td>
<td>Diesel Procedures</td>
<td>10</td>
</tr>
<tr>
<td>DIES 113</td>
<td>Diesel Engines/Fuel Systems</td>
<td>5</td>
</tr>
<tr>
<td>DIES 114</td>
<td>Diesel Procedures</td>
<td>10</td>
</tr>
<tr>
<td>DIES 115</td>
<td>Drive Trains</td>
<td>5</td>
</tr>
<tr>
<td>DIES 116</td>
<td>Diesel Procedures</td>
<td>10</td>
</tr>
<tr>
<td>DIES 120</td>
<td>Basic Electrical</td>
<td>3</td>
</tr>
<tr>
<td>DIES 121</td>
<td>Electronic Engine Management Systems</td>
<td>3</td>
</tr>
<tr>
<td>DIES 122</td>
<td>Electronic Vehicle Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>DIES 221</td>
<td>Electrical/Electronic Systems</td>
<td>5</td>
</tr>
<tr>
<td>DIES 222</td>
<td>Diesel Procedures</td>
<td>6</td>
</tr>
<tr>
<td>DIES 223</td>
<td>Hydraulic Systems</td>
<td>5</td>
</tr>
<tr>
<td>DIES 224</td>
<td>Diesel Procedures</td>
<td>10</td>
</tr>
<tr>
<td>DIES 225</td>
<td>Brakes, Steering, and Suspension</td>
<td>5</td>
</tr>
<tr>
<td>DIES 226</td>
<td>Diesel Procedures</td>
<td>10</td>
</tr>
</tbody>
</table>

**Total Credits/Units** 122

**Program Outcomes**

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Evaluate and use technical information from a variety of resources.
- Troubleshoot engines, hydraulic systems, electrical systems, power train systems, brakes, steering, and suspension systems.
- Repair engines, hydraulic systems, electrical systems, power train systems, brakes, steering, and suspension systems.
- Comply with personal and environmental safety practices that relate to the diesel powered industry.
DIGITAL MEDIA ARTS

The Digital Media Arts AAT degree prepares students for professional practice in digital art and media design. Students create visual content and communications for delivery to various web, social and digital media platforms. Students will be skilled in designing digital art, motion graphics, basic animation, integrated multimedia, video/sound production, user experience, website and interface design.

Competency is developed through hands-on experience, real client project work, professional skills and building a portfolio of work. Graduates will be prepared to enter the job market as a freelance digital designer, production artist, digital media specialist, web designer, videographer, multimedia/motion designer, marketing assistant, or content/project coordinator.

• Digital Media Arts (AAT)(Plan Code: DMWDMAPT) (p. 54)

Digital Media Arts (AAT)(Plan Code: DMWDMAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

The Digital Media Arts AAT degree prepares students for professional practice in digital art and media design. Students create visual content and communications for delivery to various web, social and digital media platforms.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>College Preparation</strong></td>
<td></td>
</tr>
<tr>
<td>COLL 101</td>
<td>College Essentials: Introduction to Clark</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Communication Skills</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>or PTWR 135</td>
<td>Introduction to Applied Technical Writing</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Computational Skills</strong></td>
<td></td>
</tr>
<tr>
<td>PTCS 110</td>
<td>Professional Technical Computational Skills</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Human Relations</strong></td>
<td></td>
</tr>
<tr>
<td>Select one from the following:</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>CMST 210</td>
<td>Interpersonal Communication</td>
<td></td>
</tr>
<tr>
<td>or CMST &amp; Z: Small Group Communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or BUS 101</td>
<td>Introduction to Business</td>
<td></td>
</tr>
<tr>
<td>or SOC 101</td>
<td>Introduction to Sociology</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Major Area Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Fine Art Foundations</strong></td>
<td></td>
</tr>
<tr>
<td>ART 101</td>
<td>2D Art and Design</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Digital Media Arts</strong></td>
<td></td>
</tr>
<tr>
<td>ART 118</td>
<td>Time-Based Art and Design</td>
<td>5</td>
</tr>
<tr>
<td>ART 208</td>
<td>Digital Painting &amp; Illustration</td>
<td>5</td>
</tr>
<tr>
<td>DMA 101</td>
<td>Photoshop Raster Graphics</td>
<td>4</td>
</tr>
<tr>
<td>DMA 102</td>
<td>Illustrator Vector Graphics</td>
<td>4</td>
</tr>
<tr>
<td>DMA 104</td>
<td>Motion Graphics and Animation</td>
<td>4</td>
</tr>
<tr>
<td>DMA 201</td>
<td>Video and Sound Production</td>
<td>4</td>
</tr>
<tr>
<td>DMA 202</td>
<td>Video and Sound Production II</td>
<td>4</td>
</tr>
<tr>
<td>DMA 204</td>
<td>Motion Graphics and Animation II</td>
<td>4</td>
</tr>
<tr>
<td>CTEC 117</td>
<td>User Experience Design</td>
<td>4</td>
</tr>
<tr>
<td>CTEC 121</td>
<td>Intro to Programming &amp; Problem Solving</td>
<td>5</td>
</tr>
<tr>
<td>CTEC 122</td>
<td>HTML Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>CTEC 160</td>
<td>WordPress I</td>
<td>5</td>
</tr>
<tr>
<td>CTEC 270</td>
<td>Web and Interface Design I</td>
<td>4</td>
</tr>
<tr>
<td>CTEC 271</td>
<td>Web and Interface Design II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Professional Development</strong></td>
<td></td>
</tr>
<tr>
<td>DMA 114</td>
<td>Professional Practices and Portfolio I</td>
<td>4</td>
</tr>
<tr>
<td>DMA 214</td>
<td>Professional Practices and Portfolio II</td>
<td>4</td>
</tr>
<tr>
<td>DMA 215</td>
<td>Professional Studio Experience</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits/Units</strong></td>
<td>94</td>
</tr>
</tbody>
</table>

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
• Demonstrate interpersonal/human relations skills. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Contextual Communication: Strategize and articulate the context, purpose, and meaning of digital media messaging.
• Design Thinking: Engage in design thinking through user-centered, iterative design and evaluation process.
• Media Technology: Integrate media technology through synthesis of content, interaction and functionality.
• Professional Practice: Demonstrate professional practices through industry preparation, performance and portfolio.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
EARLY CHILDHOOD EDUCATION

Work in programs for young children is a challenging, absorbing, and personally rewarding career. In Clark College's Early Childhood Education program, students study child development and program organization, plan learning experiences for young children, and develop guidance skills in working with children.

The Early Childhood Education (ECE) department offers various certificates of achievement. As part of each certificate program, students are required to complete prescribed numbers of hours doing student teaching and/or observation in the Child and Family Studies program under the supervision of selected staff as well as in the community at large.

Programs are revised periodically to reflect changes in the specific career field. The following list of courses is an example of the coursework required for each program. Students planning to complete this program must meet with an advisor prior to registration for a current list of requirements.

Students must complete all Major Area Requirements and specifically listed courses with a minimum grade of "C" or better in order to successfully complete the program and earn the award.

Refer to the Degree & Certificate Requirements Section of the Clark College Catalog to identify the courses needed to satisfy the General Education Requirements.

Students preparing to transfer should make an early decision and contact the four-year school to which they will transfer. The Early Childhood Education Advisors can help in planning a schedule based on the four-year school's requirements.

Students must be able to pass a Criminal History screening to participate with the children in the ECE lab school. Participation in the ECE lab is a requirement for taking classes in ECE program. Students are also required to get a TB test or provide written proof that they have had one within the last year.

- State Initial Early Childhood Education Certificate (CC)(Plan Code: ECEECC01) (p. 55)
- State Short Early Childhood Education Certificate of Specialization-Administration (CC)(Plan Code: ECEADC20) (p. 57)
- State Short Early Childhood Education Certificate of Specialization-Family Child Care(CC)(Plan Code: ECEFCC20) (p. 56)
- State Short Early Childhood Education Certificate of Specialization-General(CC)(Plan Code: ECEGEC20) (p. 55)
- State Short Early Childhood Education Certificate of Specialization-Infants and Toddlers(CC)(Plan Code: ECEITC20) (p. 56)
- State Short Early Childhood Education Certificate of Specialization-School Age Care(CC)(Plan Code: ECESAC20) (p. 56)
- State Early Childhood Education Certificate (CP)(Plan Code: ECESEC45) (p. 57)
- Early Childhood Education (AAS)(Plan Code: ECEECAPT) (p. 58)

State Initial Early Childhood Education Certificate (CC)(Plan Code: ECEECC01)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105</td>
<td>Introduction to Early Childhood Education</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 107</td>
<td>Health/Safety/Nutrition</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 120</td>
<td>Practicum-Nurturing Rel</td>
<td>2</td>
</tr>
</tbody>
</table>

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Promoting Child Development and Learning: Students will apply developmental knowledge to create learning environments and meaningful activities.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

State Short Early Childhood Education Certificate of Specialization-General(CC)(Plan Code: ECEGEC20)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105</td>
<td>Introduction to Early Childhood Education</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 107</td>
<td>Health/Safety/Nutrition</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 120</td>
<td>Practicum-Nurturing Rel</td>
<td>2</td>
</tr>
<tr>
<td>EDUC&amp; 115</td>
<td>Child Development</td>
<td>5</td>
</tr>
</tbody>
</table>
Program Outcomes
Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Promoting Child Development and Learning: Students will apply developmental knowledge to create learning environments and meaningful activities.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

State Short Early Childhood Education Certificate of Specialization-Infants and Toddlers (CC) (Plan Code: ECEITC20)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105</td>
<td>Introduction to Early Childhood Education</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 107</td>
<td>Health/Safety/Nutrition</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 120</td>
<td>Practicum-Nurturing Rel</td>
<td>2</td>
</tr>
<tr>
<td>ECED&amp; 132</td>
<td>Infants/Toddler Care</td>
<td>3</td>
</tr>
<tr>
<td>EDUC&amp; 115</td>
<td>Child Development</td>
<td>5</td>
</tr>
<tr>
<td>EDUC&amp; 136</td>
<td>School Age Care</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits/Units</td>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

Program Outcomes
Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Promoting Child Development and Learning: Students will apply developmental knowledge to create learning environments and meaningful activities.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

State Short Early Childhood Education Certificate of Specialization-School Age Care (CC) (Plan Code: ECESAC20)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105</td>
<td>Introduction to Early Childhood Education</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 107</td>
<td>Health/Safety/Nutrition</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 120</td>
<td>Practicum-Nurturing Rel</td>
<td>2</td>
</tr>
<tr>
<td>EDUC&amp; 115</td>
<td>Child Development</td>
<td>5</td>
</tr>
<tr>
<td>EDUC&amp; 136</td>
<td>School Age Care</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits/Units</td>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

Program Outcomes
Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Promoting Child Development and Learning: Students will apply developmental knowledge to create learning environments and meaningful activities.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

State Short Early Childhood Education Certificate of Specialization-Family Child Care (CC) (Plan Code: ECEFCC20)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.
Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Promoting Child Development and Learning: Students will apply developmental knowledge to create learning environments and meaningful activities.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics

State Short Early Childhood Education Certificate of Specialization-Administration (CC)
(Plan Code: ECEADC20)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Promoting Child Development and Learning: Students will apply developmental knowledge to create learning environments and meaningful activities.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics

State Early Childhood Education Certificate (CP)(Plan Code: ECESEC45)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Promoting Child Development and Learning: Students will apply developmental knowledge to create learning environments and meaningful activities.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics

State Short Early Childhood Education Certificate of Specialization-Administration (CC)
(Plan Code: ECEADC20)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Promoting Child Development and Learning: Students will apply developmental knowledge to create learning environments and meaningful activities.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics

State Early Childhood Education Certificate (CP)(Plan Code: ECESEC45)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.
Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Power, privilege and inequity: Students will analyze and evaluate their awareness of equity pedagogy and create strategies for implementing cultural competence in their work with children and their families.
- Promoting child development and learning: Students will apply developmental knowledge to create learning environments and meaningful activities.
- Teaching and learning: Students will apply developmentally appropriate practices when implementing meaningful curriculum in the classroom.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

To view the current suggested map for your program please visit our website [https://programmap.clark.edu/academics](https://programmap.clark.edu/academics)

### Early Childhood Education (AAS) (Plan Code: ECEECAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 102</td>
<td>Science and Mathematics for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 116</td>
<td>Literature and Storytelling for Children</td>
<td>2</td>
</tr>
<tr>
<td>EDUC&amp; 240</td>
<td>Diversity in Education</td>
<td>5</td>
</tr>
<tr>
<td>ECE 135</td>
<td>Partnerships With Families In Early Care &amp; Educ</td>
<td>3</td>
</tr>
<tr>
<td>ECE 199 &amp; ECE 215</td>
<td>Cooperative Work Experience and Early Childhood Seminar</td>
<td>3-5</td>
</tr>
<tr>
<td>ECE 211 &amp; ECE 212</td>
<td>Learning Experiences for Young Children II and Learning Experiences for Young Children II Lab</td>
<td>5</td>
</tr>
<tr>
<td>ECE 222</td>
<td>Learning Experiences Lab Sec</td>
<td>1</td>
</tr>
<tr>
<td>ECE 213 &amp; ECE 214</td>
<td>Learning Experiences for Young Children III and Learning Experiences for Young Children III Lab</td>
<td>5</td>
</tr>
<tr>
<td>ECE 224</td>
<td>Learning Experience Lab Section</td>
<td>1</td>
</tr>
<tr>
<td>ECED&amp; 105 &amp; ECED&amp; 120</td>
<td>Introduction to Early Childhood Education and Practicum-Nurturing Rel</td>
<td>7</td>
</tr>
<tr>
<td>ECED&amp; 107</td>
<td>Health/Safety/Nutrition</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 160</td>
<td>Curriculum Development</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 170</td>
<td>Learning Environments</td>
<td>3</td>
</tr>
<tr>
<td>ECED&amp; 180</td>
<td>Language and Literacy</td>
<td>3</td>
</tr>
<tr>
<td>ECED&amp; 190</td>
<td>Observation and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>EDUC&amp; 115</td>
<td>Child Development</td>
<td>5</td>
</tr>
<tr>
<td>EDUC&amp; 130</td>
<td>Guiding Behavior</td>
<td>3</td>
</tr>
<tr>
<td>EDUC&amp; 204</td>
<td>Inclusive Education</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 132</td>
<td>Infants/Toddler Care</td>
<td>3</td>
</tr>
<tr>
<td>or EDUC&amp; 136</td>
<td>School Age Care</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits/Units</strong></td>
<td></td>
<td><strong>96-98</strong></td>
</tr>
</tbody>
</table>

The course of study in Early Childhood Education conforms to the following:

- Guidelines for preparation of early childhood professionals; Washington State Skill Standards; and
- Early childhood education professional competencies.

### Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
• Promoting Child Development and Learning: Students will apply developmental knowledge to create learning environments and meaningful activities.

• Building Family and Community Relationships: Students will recognize, support and partner with families and communities in learning environments and with meaningful activities.

• Observing, Documenting and Assessing to Support Young Children and Families: Students will apply the process of observation to diverse, and appropriate assessments of children.

• Teaching and Learning: Students will apply developmentally appropriate practices when implementing meaningful curriculum in the classroom.

• Becoming a Professional: Students will apply professional standards and frameworks in early learning classrooms.

• Power, Privilege and Inequity: Students will analyze and evaluate their awareness of equity pedagogy and create strategies for implementing cultural competence in their work with children and their families.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
ELECTRICAL AND COMPUTER ENGINEERING

Electrical & Computer Engineers design, develop and analyze computer, electrical and electronic systems. These engineers work within multi-disciplinary teams and are employed in all industries. Their projects include power generation and distribution, communications systems, robotics, nano- and micro-electrical machinery, Biosystems, semiconductors, automation and robotics, networking, embedded systems and general computer system.

It is critical that you work with an Engineering faculty advisor to ensure your program will give you the maximum benefit when you transfer.

- Electrical and Computer Engineering (AST2/ MRP)(Plan Code: EECCEAS) (p. 60)
- Concentration in Computer Engineering (AST2)(Plan Code: EECCEAS, Subplan Code: COMPTRENGR) (p. 62)
- Concentration in Electrical Engineering (AST2/MRP)(Plan Code: EECCEAS, Subplan: ELECTENGR) (p. 61)

Electrical and Computer Engineering (AST2/ MRP)(Plan Code: EECCEAS)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Students must earn a 2.0 cumulative GPA in order to qualify for graduation from Clark College and are encouraged to connect with their potential transfer institution to confirm GPA and course requirements for acceptance. It is recommended that students complete the sequenced science courses before transferring.

Electrical Engineering Transfer Degree AST2 requires students to complete minimum of 95 quarter hours of transferable credit with a cumulative grade point average of at least 2.00. In order for a student to be junior ready in Electrical Engineering at specific transfer institutions, there are additional credits/units beyond the AST2 credit/ unit requirements for this degree that a student need to consider. Please consult your faculty adviser to learn more and to develop your education plan (www.engrcs.com/schedule). The minimum required credits/units are distributed as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Basic Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communication Skills</strong> (minimum 5 credits/units)</td>
<td></td>
</tr>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Mathematics</strong> (minimum 25 credits/units)</td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 153</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 215</td>
<td>Linear Algebra</td>
<td>5</td>
</tr>
<tr>
<td>MATH 221</td>
<td>Differential Equations</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Distribution Requirements</strong></td>
<td></td>
</tr>
</tbody>
</table>

Coursework should be planned with the help of an advisor based on the requirements of the specific discipline at the baccalaureate institution the student selects to attend.

<table>
<thead>
<tr>
<th>Humanities</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Options (p. 265)</td>
<td>5</td>
</tr>
<tr>
<td>Social Sciences</td>
<td></td>
</tr>
<tr>
<td>Course Options (p. 266)</td>
<td>3</td>
</tr>
<tr>
<td>Additional Credits/Units in either Humanities or Social Sciences</td>
<td>5</td>
</tr>
<tr>
<td>Physics</td>
<td></td>
</tr>
<tr>
<td>Sequence One</td>
<td></td>
</tr>
<tr>
<td>PHYS&amp; 241 &amp; PHYS&amp; 231</td>
<td>5</td>
</tr>
<tr>
<td>Engineering Physics I</td>
<td></td>
</tr>
<tr>
<td>and Engineering Phys Lab I</td>
<td></td>
</tr>
<tr>
<td>Sequence Two</td>
<td></td>
</tr>
<tr>
<td>PHYS&amp; 242 &amp; PHYS&amp; 232</td>
<td>5</td>
</tr>
<tr>
<td>Engineering Physics II</td>
<td></td>
</tr>
<tr>
<td>and Engineering Phys Lab II</td>
<td></td>
</tr>
<tr>
<td>Sequence Three</td>
<td></td>
</tr>
<tr>
<td>PHYS&amp; 243 &amp; PHYS&amp; 233</td>
<td>5</td>
</tr>
<tr>
<td>Engineering Physics III</td>
<td></td>
</tr>
<tr>
<td>and Engineering Phys Lab III</td>
<td></td>
</tr>
</tbody>
</table>

| Chemistry with Lab       | |
|--------------------------| |
| CHEM& 141 & CHEM& 151    | 5 |
| General Chemistry I      | |
| and General Chemistry Laboratory I | |

| Required Major Courses   | |
|--------------------------| |
| ENGR& 204                | 5 |
| Electrical Circuits      | |
| CSE 121                  | 5 |
| Introduction to C        | |

<table>
<thead>
<tr>
<th>Specialization Courses</th>
<th>20-25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select Minimum of five (5) specialization courses (minimum 20 - 25 credits/units) as appropriate for intended major and intended baccalaureate institution:</td>
<td></td>
</tr>
<tr>
<td>ENGL 235</td>
<td>5</td>
</tr>
<tr>
<td>Technical Writing</td>
<td></td>
</tr>
<tr>
<td>ENGR 101</td>
<td>5</td>
</tr>
<tr>
<td>Engineering and Computer Science Orientation</td>
<td></td>
</tr>
<tr>
<td>ENGR 120</td>
<td>5</td>
</tr>
<tr>
<td>Intro to Electrical/Computer Sci &amp; Engineering</td>
<td></td>
</tr>
<tr>
<td>ENGR 252</td>
<td>5</td>
</tr>
<tr>
<td>Electrical Circuits and Signals</td>
<td></td>
</tr>
<tr>
<td>ENGR 250</td>
<td>5</td>
</tr>
<tr>
<td>Digital Logic Design</td>
<td></td>
</tr>
<tr>
<td>ENGR 253</td>
<td>5</td>
</tr>
<tr>
<td>Signals and Systems</td>
<td></td>
</tr>
<tr>
<td>ENGR 270</td>
<td>5</td>
</tr>
<tr>
<td>Digital Systems and Microprocessors</td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 254</td>
<td>5</td>
</tr>
<tr>
<td>Calculus IV</td>
<td></td>
</tr>
</tbody>
</table>

| Total Credits/Units      | 95-100 |

1 Calculus I (MATH& 151MATH& 151) requires the successful completion of both Trigonometry (MATH 103MATH 103) and College Algebra (MATH 110MATH 110/MATH 111MATH 111), or recommending score on an approved placement test prior to registration.

Two courses at or above introductory calculus level. Third-term calculus or approved statistics course: 5 term credits/units chosen with the help of an Engineering faculty advisor based on the requirements of the specific discipline at the

2 Clark requires concurrent enrollment or completion of MATH& 254MATH& 254 with a grade of "C" or better.

3 Either ECON course recommended

4 Calculus-based or non-calculus based sequence including laboratory. Students should be advised that some baccalaureate programs require physics with calculus.
Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
• Obtain, evaluate, and ethically use information. (GE)
• Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
• Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
• Analyze patterns of power, privilege, and inequity in the United States. (GE)
• Demonstrate progress toward healthier behaviors. (GE)
• Apply communication theory to demonstrate effective oral communication skills. (GE)
• Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
• Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Analyze and solve multi-step problems using techniques through single-variable calculus.
• Demonstrate understanding of the derivative as an instantaneous rate of change and the definite integral as a limit of a sum.
• Acquire scientific and technological information from appropriate sources to examine issues, claims or situations.
• Apply fundamental principles and relationships from the Natural Sciences to analyze technological or scientific problems.
• Apply scientific and technological knowledge and methodologies to creatively solve technological or scientific problems.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics

Concentration in Electrical Engineering (AST2/MRP)(Plan Code: EECCEAS, Subplan: ELECTENGR)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 153</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 215</td>
<td>Linear Algebra</td>
<td>5</td>
</tr>
<tr>
<td>MATH 221</td>
<td>Differential Equations</td>
<td>5</td>
</tr>
</tbody>
</table>

Distribution Requirements

Coursework should be planned with the help of an advisor based on the requirements of the specific discipline at the baccalaureate institution the student selects to attend

<table>
<thead>
<tr>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities (minimum 5 credits/units)</td>
<td>5</td>
</tr>
<tr>
<td>Social Sciences (minimum 5 credits/units)</td>
<td>5</td>
</tr>
<tr>
<td>Additional 5 credits/units in either Humanities or Social Sciences</td>
<td>5</td>
</tr>
</tbody>
</table>

Physics

Complete the following 3-term physics sequence with the required concurrent enrollment

Sequence One:

<table>
<thead>
<tr>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 241 &amp; PHYS 231 Engineering Physics I &amp; Engineering Phys Lab I</td>
<td>5</td>
</tr>
</tbody>
</table>

Sequence Two:

<table>
<thead>
<tr>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 242 &amp; PHYS 232 Engineering Physics II &amp; Engineering Phys Lab II</td>
<td>5</td>
</tr>
</tbody>
</table>

Sequence Three:

<table>
<thead>
<tr>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 243 &amp; PHYS 233 Engineering Physics III &amp; Engineering Phys Lab III</td>
<td>5</td>
</tr>
</tbody>
</table>

Chemistry with Laboratory (minimum 5 credits/units)

<table>
<thead>
<tr>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 141 &amp; CHEM 151 General Chemistry I &amp; General Chemistry Laboratory I</td>
<td>5</td>
</tr>
</tbody>
</table>

Required Major Courses (minimum 10 Credits/Units)

<table>
<thead>
<tr>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 204 Electrical Circuits</td>
<td>5</td>
</tr>
<tr>
<td>CSE 121 Introduction to C</td>
<td>5</td>
</tr>
</tbody>
</table>

Electives

Select 5 (five) specialization courses (minimum of 20-25 credits/units) in consultation with an advisor as appropriate for intended specialization in the major and the intended transfer institution:

<table>
<thead>
<tr>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 235 Technical Writing</td>
<td></td>
</tr>
<tr>
<td>ENGR 101 Engineering and Computer Science Orientation</td>
<td></td>
</tr>
<tr>
<td>ENGR 120 Intro to Electrical/Computer Sci &amp; Engineering</td>
<td></td>
</tr>
<tr>
<td>ENGR 250 Digital Logic Design</td>
<td></td>
</tr>
<tr>
<td>ENGR 252 Electrical Circuits and Signals</td>
<td></td>
</tr>
<tr>
<td>ENGR 253 Signals and Systems</td>
<td></td>
</tr>
<tr>
<td>ENGR 270 Digital Systems and Microprocessors</td>
<td></td>
</tr>
<tr>
<td>MATH 254 Calculus IV</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits/Units 95-100

1 MATH 103 and MATH 111/MATH 110 are required prerequisites for MATH 151 that may be needed if calculus placement is not met.
Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Obtain, evaluate, and ethically use information. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Analyze patterns of power, privilege, and inequity in the United States. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Apply communication theory to demonstrate effective oral communication skills. (GE)
- Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Analyze and solve multi-step problems using techniques through single-variable calculus.
- Demonstrate understanding of the derivative as an instantaneous rate of change and the definite integral as a limit of a sum.
- Acquire scientific and technological information from appropriate sources to examine issues, claims or situations.
- Apply fundamental principles and relationships from the Natural Sciences to analyze technological or scientific problems.
- Apply scientific and technological knowledge and methodologies to creatively solve technological or scientific problems.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics

Concentration in Computer Engineering (AST2)(Plan Code: EECCEAS, Subplan Code: COMPTRENGR)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Computer Engineering Transfer Degree AST2 requires students to complete minimum of 95 quarter hours of transferable credit with a cumulative grade point average of at least 2.00. In order for a student to be junior ready in Computer Engineering at specific transfer institutions, there are additional credits beyond the AST2 credit requirements for this degree that a student need to consider. Please consult your faculty adviser to learn more and to develop your education plan (www.engrcs.com/schedule).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 153</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 221</td>
<td>Differential Equations</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 153</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 221</td>
<td>Differential Equations</td>
<td>5</td>
</tr>
</tbody>
</table>

Complete the following 3-term physics sequence with the required concurrent enrollment:

**Sequence One:**
- PHYS 241 & PHYS 231: Engineering Physics I and Engineering Phys Lab I
  - 5 Credits

**Sequence Two:**
- PHYS 242 & PHYS 232: Engineering Physics II and Engineering Phys Lab II
  - 5 Credits

**Sequence Three:**
- PHYS 243 & PHYS 233: Engineering Physics III and Engineering Phys Lab III
  - 5 Credits

**Chemistry with Lab**
- CHEM 141 & CHEM 151: General Chemistry I and General Chemistry Laboratory I
  - 5 Credits

**Required Major Courses**
- ENGR 204: Electrical Circuits
  - 5 Credits
- CSE 121: Introduction to C
  - 5 Credits

**Specialization Courses**
- Select Minimum of five (5) specialization courses (minimum 20 - 25 units) as appropriate for intended major and intended baccalaureate institution:
  - CSE 222: Introduction to Data Structures
  - CSE 223: Data Structures & Object-Oriented Programming
  - CSE 224: Programming Tools

2 WS 101, ECON 202 and HIST 128 are recommended
3 Requires concurrent enrollment in PHYS 94/PHYS 95/PHYS 96
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 235</td>
<td>Technical Writing</td>
</tr>
<tr>
<td>ENGR 101</td>
<td>Engineering and Computer Science Orientation</td>
</tr>
<tr>
<td>ENGR 120</td>
<td>Intro to Electrical/Computer Sci &amp; Engineering</td>
</tr>
<tr>
<td>ENGR 252</td>
<td>Electrical Circuits and Signals</td>
</tr>
<tr>
<td>ENGR 250</td>
<td>Digital Logic Design</td>
</tr>
<tr>
<td>ENGR 253</td>
<td>Signals and Systems</td>
</tr>
<tr>
<td>ENGR 270</td>
<td>Digital Systems and Microprocessors</td>
</tr>
<tr>
<td>MATH 215</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>MATH&amp; 254</td>
<td>Calculus IV</td>
</tr>
</tbody>
</table>

Total Credits/Units 90-95

1. MATH 103 and MATH 111/MATH 110 are required prerequisites for MATH& 151 that may be needed if calculus placement is not met.
2. WS 101, ECON& 202 and HIST& 128 are recommended.
3. Requires concurrent enrollment in PHYS 94/PHYS 95/PHYS 96.

**Program Outcomes**

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Demonstrate progress toward healthier behaviors. (GE)
- Obtain, evaluate, and ethically use information. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Analyze patterns of power, privilege, and inequity in the United States. (GE)
- Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate understanding of the derivative as an instantaneous rate of change and the definite integral as a limit of a sum.
- Apply fundamental principles and relationships from the Natural Sciences to analyze technological or scientific problems.
- Apply scientific and technological knowledge and methodologies to creatively solve technological or scientific problems.
- Acquire scientific and technological information from appropriate sources to examine issues, claims or situations.
- Analyze and solve multi-step problems using techniques through single-variable calculus.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
EMERGENCY MEDICAL SERVICES

Emergency Medical Technician

EMTs work in the pre-hospital setting alongside Paramedics, Firefighters, and police. They must have a good driving record and pass a background check to volunteer or be employed as an EMT. Emergency Medical Technicians learn to manage, assess, and treat ill or injured patients both on scene and en-route to a medical facility. Clark College’s Emergency Medical Technician course is for students that would like to pursue a career in the medical field with a focus on pre-hospital emergency care.

To request information, please contact:
Welcome Center
start@clark.edu
360-992-2078

Clark County Fire District 5
CCFD5.org
11606 NE 66th Street, Suite 103
Vancouver, WA 98662
(564) 397-2100

More about the course

The EMT course is a 12-credit/unit course taught in different modules that include lecture, laboratory, and field experience on an ambulance and fire engine.

Classes take place on Monday and Wednesday evenings throughout the academic year. This course is not available during summer quarter/term.

Preliminary Requirements:

We encourage students interested in the EMT course to review the minimum requirements listed below. The following requirements must be met and submitted to Clark County Fire District 5 one week prior to the first night of class. Please see CCFD5’s website (https://ccfd5.org/courses/emt-training/emt-online/) for exact deadline and further instructions.

- Adult 17 years or older for eligibility to register for this course. Must be at least 18 before you can apply for a WA state EMT licensure. High school diploma or GED required to be licensed in the state of WA, however not required to be eligible to test for the NREMT.
- Copy of a medical level CPR card such as: American Heart Association BLS (card can be earned by taking HLTH 124 offered each term at Clark College). Emergency Care and Safety Institute for Healthcare Providers, Red Cross BLS for Healthcare Providers, or a CPR course for Professional Rescuers
- Copy of driver’s license or passport.
- Hepatitis B Immunization record (3-series) or waiver
- MMR Immunization (twice in a lifetime or within the last 10 years) or waiver
- Negative TB skin test or chest X-ray (valid within a year)
- Washington State criminal background check (valid within six months before course start date). See Washington State Patrol website for directions on how to complete a background check: www.wsp.wa.gov

Course instruction takes place at Clark County Fire District 5. For more information please visit: Clark County Fire District 5.
Clark County Fire District 5
11606 NE 66th Street, Suite 103
Vancouver, WA 98662
Phone: (564) 397-2100

- Emergency Medical Technician Accelerated (CC)(Plan Code: EMAETC01) (p. 64)

Emergency Medical Technician Accelerated (CC)(Plan Code: EMAETC01)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMT 103</td>
<td>Emergency Medical Technician (Accelerated)</td>
<td>12</td>
</tr>
</tbody>
</table>

Total Credits/Units 12

Affiliation

Students who are not affiliated with an appropriate agency have 18 months after completing the program to gain affiliation and take the Washington state exam. All Emergency Medical Technician-Basics wishing to work in Washington must obtain state certification.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Administer first aid treatment or life support care to sick or injured persons in prehospital settings.
- Perform emergency assessment and treatment procedures, observing, recording, and reporting to the receiving facility, the patient’s condition or injury.
- Communicate effectively and professionally, using verbal, non-verbal, and written language with patients, colleagues, the public, diverse populations, and other healthcare providers.
- Model professional behaviors and make appropriate decisions guided by ethical principles and core values.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
HEALTH INFORMATION MANAGEMENT / MEDICAL BILLING AND CODING

The Medical Billing/Coding Specialist Certificate of Proficiency leads to a Health Information Management AAT degree and prepares individuals for employment in the areas of medical insurance, physician's office coding, inpatient hospital coding, health care claims processing, and home-remote coding. This program also serves the needs of healthcare personnel interested in upgrading their professional skills.

Training in medical billing includes CMS-1500 and UB04 claim forms as well as the processing of insurance claims and basic health information procedures. Coding training includes CPT, HCPCS, ICD, PCS, MS-DRGs as well as the legislative changes in healthcare insurance.

The Health Information Management Associate in Applied Technology Program trains individuals on topics in health data content, structure and standards, information protection, access, disclosure, archives, privacy, security, health information technologies, revenue management, medical coding, compliance, and leadership. Health Information Management professionals may practice in different health care settings such as health information systems, health finance and billing services, and health information standards and policy development.

With highly marketable skills that will continue to be in demand, graduates are prepared to enter the workforce. This is a selective admissions program; a separate application is required.

Eligibility

To successfully pass one of the following examinations you will need to review each individual association's eligibility requirements.

National Certification:

• Certified Provider Certification (CPC) through the American Academy of Professional Coders (AAPC) (https://www.aapc.com/certification/cpc/)
• Certified Coding Associate (CCA) through the American Health Information Management Association (AHIMA) (https://www.ahima.org/certification-careers/certifications/)
• Certified Coding Specialist (CCS) through the American Health Information Management Association (AHIMA) (https://www.ahima.org/certification-careers/certifications/ccs/)

Applications are accepted at any time however this is a limited entry program.

• Medical Billing/Coding Specialist (CP)(Plan Code: MICMCC45) (p. 65)
• Health Information Management (AAT)(Plan Code: MICMCA4) (p. 66)

Medical Billing/Coding Specialist (CP)(Plan Code: MICMCC45)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>AHM 104</td>
<td>Health Care Delivery &amp; Career Exploration</td>
<td>3</td>
</tr>
<tr>
<td>AHM 110</td>
<td>Medical Terminology I</td>
<td>3</td>
</tr>
<tr>
<td>AHM 111</td>
<td>Medical Terminology II</td>
<td>3</td>
</tr>
<tr>
<td>HIM 112</td>
<td>Introduction to Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>HIM 114</td>
<td>Medical Office Administrative Procedures</td>
<td>4</td>
</tr>
<tr>
<td>HIM 131</td>
<td>Revenue Cycle Management</td>
<td>4</td>
</tr>
<tr>
<td>HIM 130</td>
<td>Medical Coding I</td>
<td>4</td>
</tr>
<tr>
<td>HIM 232</td>
<td>Medical Coding II</td>
<td>5</td>
</tr>
<tr>
<td>HIM 233</td>
<td>Medical Coding III &amp; Coding Exam Prep</td>
<td>5</td>
</tr>
<tr>
<td>HIM 101</td>
<td>Legal &amp; Ethical Aspects of Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>AHM 100</td>
<td>Basic Concepts of Anatomy and Physiology I</td>
<td>3</td>
</tr>
<tr>
<td>AHM 101</td>
<td>Basic Concepts of Anatomy and Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 124</td>
<td>Healthcare Provider CPR and First Aid</td>
<td>1</td>
</tr>
</tbody>
</table>

| Total Credits/Units | 59 |

1 Only 1 (one) credit/unit required

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
• Demonstrate interpersonal/human relations skills. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Demonstrate use of medical office software to complete medical office tasks (billing and coding).
• Apply policies and principles of medical reimbursement.
• Accurately code using ICD-9 and CPT coding principles.
• Demonstrate the ability to work as a team member to accomplish a task. (affective)
• Communicate effectively with peers, patients, and health care professionals through written and oral communications. (affective and psychomotor)
• Accurately process medical billing claims

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Health Information Management (AAT)(Plan Code: MICMCAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 146</td>
<td>Introduction to Stat</td>
<td>5</td>
</tr>
<tr>
<td>or PTCS 110</td>
<td>Professional Technical Computational Skills</td>
<td></td>
</tr>
<tr>
<td>or BUS 102</td>
<td>Business Math Applications</td>
<td></td>
</tr>
<tr>
<td>CMST&amp; 210</td>
<td>Interpersonal Communication</td>
<td>5</td>
</tr>
<tr>
<td>or CMST&amp; 230</td>
<td>Small Group Communication</td>
<td></td>
</tr>
<tr>
<td>AH 100</td>
<td>Basic Concepts of Anatomy and Physiology I</td>
<td>3</td>
</tr>
<tr>
<td>AH 101</td>
<td>Basic Concepts of Anatomy and Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>AH 110</td>
<td>Medical Terminology I</td>
<td>3</td>
</tr>
<tr>
<td>AH 111</td>
<td>Medical Terminology II</td>
<td>3</td>
</tr>
<tr>
<td>AH 104</td>
<td>Health Care Delivery &amp; Career Exploration</td>
<td>3</td>
</tr>
<tr>
<td>AH 261</td>
<td>Statistics for Health Care Professionals</td>
<td>3</td>
</tr>
<tr>
<td>BUS 104</td>
<td>Keyboarding &amp; Word Processing</td>
<td>1-3</td>
</tr>
<tr>
<td>BUS 149</td>
<td>Computer Application Essentials</td>
<td>3</td>
</tr>
<tr>
<td>BUS 169</td>
<td>Introduction to Excel</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 124</td>
<td>Healthcare Provider CPR and First Aid</td>
<td>1</td>
</tr>
<tr>
<td>HIM 101</td>
<td>Legal &amp; Ethical Aspects of Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HIM 112</td>
<td>Introduction to Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>HIM 113</td>
<td>Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>HIM 114</td>
<td>Medical Office Administrative Procedures</td>
<td>4</td>
</tr>
<tr>
<td>HIM 130</td>
<td>Medical Coding I</td>
<td>4</td>
</tr>
<tr>
<td>HIM 131</td>
<td>Revenue Cycle Management</td>
<td>4</td>
</tr>
<tr>
<td>HIM 201</td>
<td>Health Information Governance</td>
<td>5</td>
</tr>
<tr>
<td>HIM 202</td>
<td>Health Care Quality</td>
<td>3</td>
</tr>
<tr>
<td>HIM 211</td>
<td>Health Informatics, Analytics, and Data Use</td>
<td>5</td>
</tr>
<tr>
<td>HIM 215</td>
<td>Health Organization, Management &amp; Leadership</td>
<td>3</td>
</tr>
<tr>
<td>HIM 226</td>
<td>Professional Practice Experience</td>
<td>3</td>
</tr>
<tr>
<td>HIM 232</td>
<td>Medical Coding II</td>
<td>5</td>
</tr>
<tr>
<td>HIM 233</td>
<td>Medical Coding III &amp; Coding Exam Prep</td>
<td>5</td>
</tr>
<tr>
<td>HIM 280</td>
<td>Selected Topics</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits/Units</strong></td>
<td><strong>92</strong></td>
<td></td>
</tr>
</tbody>
</table>

Only 1 (one) credit required for degree

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Demonstrate interpersonal/human relations skills. (GE)
• Demonstrate use of medical office software to complete medical office tasks (billing and coding).
• Apply policies and principles of medical reimbursement.
• Accurately code using ICD-9/10 and CPT coding principles.
• Demonstrate the ability to work as a team member to accomplish a task.
• Communicate effectively with peers, patients, and health care professionals through written and oral communications.
• Accurately process medical billing claims.
• Solve quantitative problems and interpret the solutions.
• Communicate with various audiences using a variety of methods.
• Demonstrate interpersonal/human relations skills.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
HUMAN SERVICES (BAS)

Clark College is proposing a Bachelors of Applied Sciences degree in Human Services to serve the needs of the community and Clark College students by keeping current with emerging trends in Human Services. This BASHS degree will operate with a generalist and holistic approach. Students will be immersed in vital knowledge and skills needed to serve within an increasingly integrated system of care. These skills and knowledge will include course work and practical experience in:

- Mental Health
- Addiction Studies
- Human Services Values and Ethics
- Trauma Informed Care
- Social Justice
- Multidisciplinary Teams
- Human Development
- Crisis and Acute Care Intervention Strategies
- Prevention Strategies

All prospective students who meet the minimum requirements, and would like to apply for admission to the Bachelor's in Applied Science in Human Services (BASHS) program, must have the following prior to admission:

- An associate degree or higher, or within 15 credits of graduating with an associate degree, from a regionally accredited institution.
- Cumulative 2.5 GPA in degree program coursework.
- Completed Baccalaureate of Applied Science in Human Services
- Statement of Intent submitted in-person, by mail, or email to the Enrollment Services Office

Address:
Clark College
Enrollment Services Office, GHL 128
1933 Fort Vancouver Way
Vancouver, WA 98663-3598
Telephone: 360-992-2107
Email: admissions@clark.edu

- Human Services (BAS)(Plan Code: HSTHSBAS) (p. 67)

Human Services (BAS)(Plan Code: HSTHSBAS)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communication Skills</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 102</td>
<td>English Composition II</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Quantitative Skills</strong></td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 146</td>
<td>Introduction to Stat</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Humanities</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Social Sciences</strong></td>
<td></td>
</tr>
<tr>
<td>PSYC&amp; 100</td>
<td>General Psychology</td>
<td>5</td>
</tr>
<tr>
<td>PSYC&amp; 200</td>
<td>Lifespan Psychology</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Natural Sciences</strong></td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 175</td>
<td>Human Biology w/ Lab</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Course Options (p. 265)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Additional General Education Courses</strong></td>
<td></td>
</tr>
<tr>
<td>SOC 230</td>
<td>Domestic Violence (recommended)</td>
<td>5</td>
</tr>
<tr>
<td>ANTH&amp; 206</td>
<td>Introduction to Cultural Anthropology (recommended)</td>
<td>5</td>
</tr>
<tr>
<td>SOC&amp; 101</td>
<td>Introduction to Sociology (recommended)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>ACED courses and/or General Education Courses</strong></td>
<td>42</td>
</tr>
<tr>
<td></td>
<td><strong>Major Area Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>BASHS 301</td>
<td>Introduction to Human Services</td>
<td>5</td>
</tr>
<tr>
<td>BASHS 302</td>
<td>Systems and Social Justice</td>
<td>5</td>
</tr>
<tr>
<td>BASHS 303</td>
<td>Ethics In Human Services</td>
<td>5</td>
</tr>
<tr>
<td>BASHS 304</td>
<td>Practical Family Therapy</td>
<td>5</td>
</tr>
<tr>
<td>BASHS 305</td>
<td>Advanced Co-Occuring Disorders Treatment</td>
<td>5</td>
</tr>
<tr>
<td>BASHS 306</td>
<td>Trauma, Grief &amp; Loss</td>
<td>5</td>
</tr>
<tr>
<td>BASHS 401</td>
<td>Multicultural Counseling In HS</td>
<td>5</td>
</tr>
<tr>
<td>BASHS 402</td>
<td>Human Services Intervention</td>
<td>5</td>
</tr>
<tr>
<td>BASHS 403</td>
<td>Research &amp; Evaluation Methodologies In HS</td>
<td>5</td>
</tr>
<tr>
<td>BASHS 404</td>
<td>Advanced Case Management In HS</td>
<td>5</td>
</tr>
<tr>
<td>BASHS 410</td>
<td>Human Services Field Placement I</td>
<td>5</td>
</tr>
<tr>
<td>BASHS 411</td>
<td>Human Services Field Placement II</td>
<td>5</td>
</tr>
<tr>
<td>ACED 101</td>
<td>Survey of Addictionology</td>
<td>3</td>
</tr>
<tr>
<td>ACED 125</td>
<td>Group Counseling In Addictions</td>
<td>3</td>
</tr>
<tr>
<td>ACED 136</td>
<td>Law and Ethics In Addictions Counseling</td>
<td>3</td>
</tr>
<tr>
<td>ACED 160</td>
<td>Pharmacology of Drugs of Abuse</td>
<td>3</td>
</tr>
<tr>
<td>ACED 201</td>
<td>Theories of Counseling</td>
<td>3</td>
</tr>
<tr>
<td>ACED 204</td>
<td>Introduction to Addiction Counseling Skills</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits/Units from Associate's Degree</strong></td>
<td>90</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits/Units for Degree</strong></td>
<td>180</td>
</tr>
</tbody>
</table>

1 Please work with advisor to identify any outstanding needs based on associate degree credits already earned.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
MARKETING

The certificates and degree in this area are designed to provide students with the basic skills necessary to work for a variety of organizations that focus on the distribution of customer goods and services. Graduates of these specialized certificates have found the acquired skills very valuable in all types of business and non-profit organizations, domestic as well as international.

Students must complete all specifically listed courses in Major Area Requirements with a minimum grade of "C" or better in order to successfully complete the program and earn the award.

Consult with a business academic advisor for recommended course, program listing.

- Marketing (CP)(Plan Code: SALMAC45) (p. 68)
- Marketing (AAS)(Plan Code: SALMAAPT) (p. 68)

Marketing (CP)(Plan Code: SALMAC45)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>BUS 102</td>
<td>Business Math Applications</td>
<td>5</td>
</tr>
<tr>
<td>BUS 148</td>
<td>Business Professional Self Development</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 129</td>
<td>Basic Accounting Procedures</td>
<td>5</td>
</tr>
<tr>
<td>BUS &amp;101</td>
<td>Introduction to Business</td>
<td>5</td>
</tr>
<tr>
<td>BUS 150</td>
<td>Computer Business Applications</td>
<td>5</td>
</tr>
<tr>
<td>MGMT 101</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits/Units 46

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Create an effective business advertisement to meet the needs of target market(s).
- Apply selling techniques managing a buyer-seller relationship, including service follow-up.
- Demonstrate digital imaging skills through photo sourcing, image manipulation, compositing, and output using software techniques and technical equipment.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Marketing (AAS)(Plan Code: SALMAAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>BUS 102</td>
<td>Business Math Applications</td>
<td>5</td>
</tr>
<tr>
<td>BUS 148</td>
<td>Business Professional Self Development</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 129</td>
<td>Basic Accounting Procedures</td>
<td>5</td>
</tr>
<tr>
<td>BUS &amp;101</td>
<td>Introduction to Business</td>
<td>5</td>
</tr>
<tr>
<td>BUS 150</td>
<td>Computer Business Applications</td>
<td>5</td>
</tr>
<tr>
<td>MGMT 101</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Introduction to International Business</td>
<td>3</td>
</tr>
</tbody>
</table>

Business Core

- ACCT 129 Basic Accounting Procedures 5
- BUS 102 Business Math Applications 5
- BUS 148 Business Professional Self Development 3
- MGMT 101 Principles of Management 3

Major Area Requirements

- BUS 105 Introduction to International Business 3
Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
• Demonstrate progress toward healthier behaviors. (GE)
• Demonstrate interpersonal/human relations skills. (GE)
• Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
• Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
• Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Develop product, pricing, promotion, and distribution strategies to meet organizational needs.
• Create an effective business advertisement to meet the needs of target market(s).
• Demonstrate digital imaging skills through photo sourcing, image manipulation, compositing, and output using software techniques and technical equipment.
• Apply digital and social media concepts and tools to make marketing decisions.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
MATERIALS SCIENCE

Understand and apply science and engineering principles to different materials.

- Materials Science (AST2/MRP)(Plan Code: MEEMSAS) (p. 70)

Materials Science (AST2/MRP)(Plan Code: MEEMSAS)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Education Requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communication Skills</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Mathematics</strong></td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 153</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 215</td>
<td>Linear Algebra</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Distribution Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coursework should be planned with the Help of an advisor based on the requirements of the specific discipline at the baccalaureate institution the student selects to attend</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Humanities</strong></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Course Options (p. 265)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Social Sciences</strong></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Course Options (p. 266)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Additional 5 credits in either Humanities or Social Sciences</strong></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Physics</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Complete the following 3-term physics sequence with the required concurrent enrollment 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sequence One:</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS&amp; 241</td>
<td>Engineering Physics I</td>
<td>5</td>
</tr>
<tr>
<td>&amp; PHYS&amp; 231</td>
<td>and Engineering Phys Lab I</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sequence Two:</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS&amp; 242</td>
<td>Engineering Physics II</td>
<td>5</td>
</tr>
<tr>
<td>&amp; PHYS&amp; 232</td>
<td>and Engineering Phys Lab II</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sequence Three:</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS&amp; 243</td>
<td>Engineering Physics III</td>
<td>5</td>
</tr>
<tr>
<td>&amp; PHYS&amp; 233</td>
<td>and Engineering Phys Lab III</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Chemistry with Laboratory</strong></td>
<td></td>
</tr>
<tr>
<td>CHEM&amp; 141</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>&amp; CHEM&amp; 151</td>
<td>and General Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Additional Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>ENGR&amp; 214</td>
<td>Statics</td>
<td>5</td>
</tr>
<tr>
<td>ENGR&amp; 225</td>
<td>Mechanics of Materials</td>
<td>5</td>
</tr>
<tr>
<td>ENGR 221</td>
<td>Materials Science</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Electives</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select 5 (five) specialization courses (minimum of 20-25 credits/units) 20-25 consultation with an advisor as appropriate for intended specialization in the major and the intended transfer institution:</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 221</td>
<td>Majors Ecology/Evolution</td>
<td></td>
</tr>
<tr>
<td>CSE 101</td>
<td>Engineering and Computer Science Orientation</td>
<td></td>
</tr>
<tr>
<td>CSE 121</td>
<td>Introduction to C</td>
<td></td>
</tr>
<tr>
<td>CHEM&amp; 142</td>
<td>General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM&amp; 152</td>
<td>and General Chemistry Laboratory II</td>
<td></td>
</tr>
<tr>
<td>CHEM&amp; 143</td>
<td>General Chemistry III</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM&amp; 153</td>
<td>and General Chemistry Laboratory III</td>
<td></td>
</tr>
<tr>
<td>CHEM&amp; 241</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM&amp; 251</td>
<td>Organic Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 235</td>
<td>Technical Writing</td>
<td></td>
</tr>
<tr>
<td>ENGR 101</td>
<td>Engineering and Computer Science Orientation</td>
<td></td>
</tr>
<tr>
<td>ENGR&amp; 104</td>
<td>Introduction to Design</td>
<td></td>
</tr>
<tr>
<td>ENGR 105</td>
<td>Wheeler Innovation Lab Qualifications</td>
<td></td>
</tr>
<tr>
<td>ENGR 109</td>
<td>Introduction to Engineering</td>
<td></td>
</tr>
<tr>
<td>ENGR 113</td>
<td>Engineering Sketching and Visualization</td>
<td></td>
</tr>
<tr>
<td>ENGR 140</td>
<td>Basic Autocad</td>
<td></td>
</tr>
<tr>
<td>ENGR 150</td>
<td>Basic Solidworks</td>
<td></td>
</tr>
<tr>
<td>ENGR&amp; 204</td>
<td>Electrical Circuits</td>
<td></td>
</tr>
<tr>
<td>ENGR 221</td>
<td>Materials Science</td>
<td></td>
</tr>
<tr>
<td>ENGR&amp; 224</td>
<td>Thermodynamics</td>
<td></td>
</tr>
<tr>
<td>ENGR&amp; 240</td>
<td>Engineering Computations</td>
<td></td>
</tr>
<tr>
<td>MATH 221</td>
<td>Differential Equations 4</td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 254</td>
<td>Calculus IV</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits/Units 95-100

1 MATH 103 and MATH 111/MATH 110 are required prerequisites for MATH& 151 that may be needed if calculus placement is not met.
2 ECON& 201 or ECON& 202 is recommended, but not required.
3 Requires concurrent enrollment in PHYS 94/PHYS 95/PHYS 96
4 Clark requires concurrent enrollment or completion of MATH& 254 with a grade of "C" or higher.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Demonstrate progress toward healthier behaviors. (GE)
- Obtain, evaluate, and ethically use information. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Analyze patterns of power, privilege, and inequity in the United States. (GE)
• Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
• Apply communication theory to demonstrate effective oral communication skills. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Demonstrate understanding of the derivative as an instantaneous rate of change and the definite integral as a limit of a sum.
• Apply fundamental principles and relationships from the Natural Sciences to analyze technological or scientific problems.
• Apply scientific and technological knowledge and methodologies to creatively solve technological or scientific problems.
• Acquire scientific and technological information from appropriate sources to examine issues, claims or situations.
• Analyze and solve multi-step problems using techniques through single-variable calculus

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
**Math Education (DTA/MRP) (Plan Code: METMEAS)**

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

This pathway is applicable to students preparing to enter a secondary (that is, high school) mathematics teaching degree or certification program at universities in Washington. Students need to make early contact with their potential transfer institutions regarding the specific course choices in each area of the agreement where options are listed. Students also need to check with their potential transfer institutions regarding the requirement for overall minimum GPA, a higher GPA in a selected subset of courses, or a specific minimum grade in one or more courses such as math or English.

Though this degree does not require such, Clark College students should know that the standard Clark AA degree path has these differences from the MRP defined below:

1. Clark requires 3 credits of Health-Physical Education coursework, and
2. As of Fall 2011, Clark requires a course in Oral Communication, and
3. Clark’s Social Science distribution requirement stipulates that students take courses from at least three different departments.

Students must also meet the residency requirements as established by Clark. While Clark College has approved offering the degree below, Clark students should keep these requirements in mind should their transfer pathways change.

Students are responsible for researching and preparing for specific major requirements of baccalaureate institutions as early as possible prior to transferring.

Please visit the Major Related Programs section of this catalog for more specific information.

### Clark College Equivalents

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Basic Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communication Skills</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 102</td>
<td>English Composition II</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Quantitative/Symbolic Reasoning Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Distribution Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Humanities</strong></td>
<td></td>
</tr>
<tr>
<td>CMST&amp; 220</td>
<td>Public Speaking</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Course Options (p. 265)</strong></td>
<td>10</td>
</tr>
<tr>
<td></td>
<td><strong>Social Sciences</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Course Options (p. 266)</strong></td>
<td>10</td>
</tr>
<tr>
<td></td>
<td><strong>Natural Sciences</strong></td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Course Options (p. 267)</strong></td>
<td>10</td>
</tr>
<tr>
<td></td>
<td><strong>Major Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Math Courses</strong></td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 153</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 215</td>
<td>Linear Algebra</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 254</td>
<td>Calculus IV</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Electives</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Course Options (p. 267)</strong></td>
<td>15</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits/Units</strong></td>
<td>90</td>
</tr>
</tbody>
</table>

---

1. MATH 103 and MATH 111/MATH 110 are required prerequisites for MATH& 151 that may be needed if calculus placement is not met.
2. Fulfills oral communication requirement
3. Natural science course work, including one lab, as defined by Clark College
4. As defined under MRP Requirements/ C. Major Requirements /3. Elective Courses

### Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:
• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
• Obtain, evaluate, and ethically use information. (GE)
• Analyze patterns of power, privilege, and inequity in the United States. (GE)
• Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
• Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
• Evaluate claims about the natural world using scientific methodology. (GE)
• Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
• Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Apply communication theory to demonstrate effective oral communication skills. (GE)

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
MECHANICAL, CIVIL & AERONAUTICAL ENGINEERING

Engineering is a profession where you are challenged to develop creative solutions to problems related to every aspect of life, through the application of mathematical and scientific principles, experience, creativity, and common sense.

Mechanical engineering is a diverse discipline which can include robotics, consumer electronics, automotive, appliances, energy-sustainable and clean fuels, aerospace, medical innovations, amusement park rides, toys, and nanotechnology.

Civil engineers work in many areas essential to modern life such as construction, architecture, environmental engineering, power generation, public works and highway departments, or the federal government. Civil engineers are at the forefront of efforts to design inexpensive yet effective ways to ensure that people living in these regions have access to potable water.

Aeronautical engineering expertise is innovative in space exploration but also pioneering in other industries such as automobile manufacturing. Aerospace engineers are experts in aerodynamics, so some of them put their skills to use in making race cars go faster or golf balls fly further.

It is critical that you work with an Engineering faculty advisor to ensure your program will give you the maximum benefit when you transfer.

- Mechanical, Civil Aeronautical Engineering (AST2/MRP)(Plan Code: MEEMCAS) (p. 74)
- Concentration in Aeronautical Engineering (AST2/MRP)(Plan Code: MEEMCAS, Subplan: AEROENGR) (p. 75)
- Concentration in Civil Engineering (AST2/MRP)(Plan Code: MEEMCAS, Subplan: CIVILENGR) (p. 76)
- Concentration in Mechanical Engineering (AST2/MRP)(Plan Code: MEEMCAS, Subplan: MECHENGR) (p. 77)

Mechanical, Civil Aeronautical Engineering (AST2/MRP)(Plan Code: MEEMCAS)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Students must earn a 2.0 cumulative GPA in order to qualify for graduation from Clark College and are encouraged to connect with their potential transfer institution to confirm GPA and course requirements for acceptance. It is recommended that students complete the sequenced science courses before transferring.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 153</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 215</td>
<td>Linear Algebra</td>
<td>5</td>
</tr>
<tr>
<td>MATH 221</td>
<td>Differential Equations</td>
<td>5</td>
</tr>
</tbody>
</table>

Distribution Requirements

Coursework should be planned with the help of an advisor based on the requirements of specific discipline at the baccalaureate institution the student selects to attend.

<table>
<thead>
<tr>
<th>Humanities</th>
<th>Social Sciences</th>
<th>Additional 5 (five) credits/units in either Humanities or Social Sciences</th>
<th>Physics</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

Complete the following 3-term physics sequence with the required concurrent enrollment

**Sequence One:**
- PHYS & 241 Engineering Physics I
- PHYS & 231 and Engineering Phys Lab I

**Sequence Two:**
- PHYS & 242 Engineering Physics II
- PHYS & 232 and Engineering Phys Lab II

**Sequence Three:**
- PHYS & 243 Engineering Physics III
- PHYS & 233 and Engineering Phys Lab III

Chemistry with Laboratory

- CHEM & 141 General Chemistry I
- CHEM & 151 and General Chemistry Laboratory I
- CHEM & 142 General Chemistry II
- CHEM & 152 and General Chemistry Laboratory II

Additional Requirements

- ENGR & 214 Statics
- ENGR & 215 Dynamics
- ENGR & 225 Mechanics of Materials

Specialization Courses 15-20

Select 4 (four) specialization courses (minimum 15-20 credits/units) in consultation with an advisor as appropriate for intended specialization in the major and the intended transfer institution:

- BIOL & 100 Survey of Biology
- BIOL & 222 Majors Cell/Molecular
- BIOL & 260 Microbiology
- CHEM & 143 General Chemistry III
- CHEM & 153 and General Chemistry Laboratory III
- CSE 121 Introduction to C
- ENGL & 235 Technical Writing
- ENGR 101 Engineering and Computer Science Orientation
- ENGR & 104 Introduction to Design
- ENGR 105 Wheeler Innovation Lab Qualifications
- ENGR 109 Introduction to Engineering
- ENGR 113 Engineering Sketching and Visualization
- ENGR 121 Field Survey I
- ENGR 140 Basic Autocad
- ENGR 150 Basic Solidworks
- ENGR & 204 Electrical Circuits
- ENGR 221 Materials Science
**Program map**

To view the current suggested map for your program please visit our website [https://programmap.clark.edu/academics](https://programmap.clark.edu/academics). Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

### Concentration in Aeronautical Engineering (AST2/ MRP)(Plan Code: MEEMCAS, Subplan: AEROENGR)

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

To view the current suggested map for your program please visit our website [https://programmap.clark.edu/academics](https://programmap.clark.edu/academics/)

---

**Program Outcomes**

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Demonstrate progress toward healthier behaviors. (GE)
- Obtain, evaluate, and ethically use information. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Analyze patterns of power, privilege, and inequity in the United States. (GE)
- Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
- Apply communication theory to demonstrate effective oral communication skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Acquire scientific and technological information from appropriate sources to examine issues, claims or situations.
- Analyze and solve multi-step problems using techniques through single-variable calculus.
- Demonstrate understanding of the derivative as an instantaneous rate of change and the definite integral as a limit of a sum.
- Apply fundamental principles and relationships from the Natural Sciences to analyze technological or scientific problems.
- Apply scientific and technological knowledge and methodologies to creatively solve technological or scientific problems.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

---

1. MATH 103 and MATH 111/MATH 110 are required prerequisites for MATH & 151 that may be needed if calculus placement is not met.
2. Clark requires concurrent enrollment or completion of MATH & 254 with a grade of “C” or higher.
3. ECON & 201 or ECON & 202 is recommended, but not required.
4. Requires concurrent enrollment in PHYS 94/PHYS 95/PHYS 96.
ENGR 140  Basic Autocad
ENGR 150  Basic Solidworks
ENGR 204  Electrical Circuits
ENGR 221  Materials Science
ENGR 224  Thermodynamics
ENGR 240  Engineering Computations
MATH & 254  Calculus IV

Total Credits/Units  100-105

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Obtain, evaluate, and ethically use information. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Analyze patterns of power, privilege, and inequity in the United States. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Apply communication theory to demonstrate effective oral communication skills. (GE)
- Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Analyze and solve multi-step problems using techniques through single-variable calculus.
- Demonstrate understanding of the derivative as an instantaneous rate of change and the definite integral as a limit of a sum.
- Acquire scientific and technological information from appropriate sources to examine issues, claims or situations.
- Apply fundamental principles and relationships from the Natural Sciences to analyze technological or scientific problems.
- Apply scientific and technological knowledge and methodologies to creatively solve technological or scientific problems.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics

Concentration in Civil Engineering (AST2/MPR)(Plan Code: MEEMCAS, Subplan: CIVILENGR)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>MATH &amp; 151</td>
<td>Calculus I 1</td>
<td>5</td>
</tr>
<tr>
<td>MATH &amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH &amp; 153</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 215</td>
<td>Linear Algebra</td>
<td>5</td>
</tr>
<tr>
<td>MATH 221</td>
<td>Differential Equations 2</td>
<td>5</td>
</tr>
<tr>
<td>PHYS &amp; 241</td>
<td>Engineering Physics I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS &amp; 231</td>
<td>Engineering Phys Lab I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS &amp; 242</td>
<td>Engineering Physics II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS &amp; 232</td>
<td>Engineering Phys Lab II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS &amp; 243</td>
<td>Engineering Physics III</td>
<td>5</td>
</tr>
<tr>
<td>PHYS &amp; 233</td>
<td>Engineering Phys Lab III</td>
<td>5</td>
</tr>
<tr>
<td>CHEM &amp; 141</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM &amp; 151</td>
<td>General Chemistry Laboratory I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM &amp; 142</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM &amp; 152</td>
<td>General Chemistry Laboratory II</td>
<td>5</td>
</tr>
<tr>
<td>ENGR &amp; 214</td>
<td>Statics</td>
<td>5</td>
</tr>
<tr>
<td>ENGR &amp; 215</td>
<td>Dynamics</td>
<td>5</td>
</tr>
<tr>
<td>ENGR &amp; 225</td>
<td>Mechanics of Materials</td>
<td>5</td>
</tr>
</tbody>
</table>

Math/Engineering Electives

1. MATH 103 and MATH 111/MATH 110 are required prerequisites for MATH & 151 that may be needed if calculus placement is not met.  
2. Clark requires concurrent enrollment or completion of MATH & 254 with a grade of "C" or higher.  
3. ECON & 201 or ECON & 202 is recommended, but not required.  
4. Requires concurrent enrollment in PHYS 94/PHYS 95/PHYS 96
Select a minimum of 4 specialization courses in consultation with an Engineering Advisor as appropriate for intended transfer institution

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 100</td>
<td>Survey of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 222</td>
<td>Majors Cell/Molecular</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 260</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 235</td>
<td>Technical Writing</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 105</td>
<td>Wheeler Innovation Lab Qualifications</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 109</td>
<td>Introduction to Engineering</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 113</td>
<td>Engineering Sketching and Visualization</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 121</td>
<td>Field Survey I</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 140</td>
<td>Basic Autocad</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 150</td>
<td>Basic Solidworks</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 221</td>
<td>Materials Science</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 224</td>
<td>Thermodynamics</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 240</td>
<td>Engineering Computations</td>
<td>4</td>
</tr>
<tr>
<td>MATH 254</td>
<td>Calculus IV</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits/Units: 100-106

1. MATH 103 and MATH 111/MATH 110 are required prerequisites for MATH 151 that may be needed if calculus placement is not met.
2. Clark requires concurrent enrollment or completion of MATH 254 with a grade of "C" or higher.
3. ECON 201 or ECON 202 is recommended, but not required.
4. Requires concurrent enrollment in PHYS 94/PHYS 95/PHYS 96

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Obtain, evaluate, and ethically use information. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Analyze patterns of power, privilege, and inequity in the United States. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Apply communication theory to demonstrate effective oral communication skills. (GE)
- Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Analyze and solve multi-step problems using techniques through single-variable calculus.
- Demonstrate understanding of the derivative as an instantaneous rate of change and the definite integral as a limit of a sum.
- Acquire scientific and technological information from appropriate sources to examine issues, claims or situations.
- Apply fundamental principles and relationships from the Natural Sciences to analyze technological or scientific problems.
- Apply scientific and technological knowledge and methodologies to creatively solve technological or scientific problems.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Concentration in Mechanical Engineering (AST2/MRP)(Plan Code: MEEMCAS, Subplan: MECHENGR)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
</table>
| Basic Requirements
| Communication Skills
| ENGL 101 | English Composition I                     | 5             |
| Mathematics
| MATH 151 | Calculus I                                | 5             |
| MATH 152 | Calculus II                               | 5             |
| MATH 153 | Calculus III                              | 5             |
| MATH 215 | Linear Algebra                            | 5             |
| MATH 221 | Differential Equations                    | 5             |
| Distribution Requirements
| Humanities |                                    | 5             |
| Course Options (p. 265) |                                      | 5             |
| Social Sciences |                                 | 5             |
| Course Options (p. 266) |                                      | 5             |
| Additional Credits/Units in either Humanities or Social Sciences | 5 |
| Physics 4 |                                      | 5             |

Sequence One:
Concentration in Mechanical Engineering (AST2/MRP)(Plan Code: MEEMCAS, Subplan: MECHENGR)

Sequence One:

PHYS& 241 and PHYS& 231
Engineering Physics I and Engineering Phys Lab I

Sequence Two:

PHYS& 242 and PHYS& 232
Engineering Physics II and Engineering Phys Lab II

Sequence Three:

PHYS& 243 and PHYS& 233
Engineering Physics III and Engineering Phys Lab III

Chemistry with Lab

CHEM& 141 and CHEM& 151
General Chemistry I and General Chemistry Laboratory I

CHEM& 142 and CHEM& 152
General Chemistry II and General Chemistry Laboratory II

Additional Requirements

ENGR& 214
Statics

ENGR& 215
Dynamics

ENGR& 225
Mechanics of Materials

Math/Engineering Electives 15-20

Select a minimum of 4 specialization courses in consultation with an Engineering Advisor as appropriate for intended transfer institution

ENGL& 235
Technical Writing

ENGR 105 Wheeler Innovation Lab Qualifications

ENGR 109 Introduction to Engineering

ENGR 113 Engineering Sketching and Visualization

ENGR 150 Basic Solidworks

ENGR 221 Materials Science

ENGR& 224 Thermodynamics

ENGR& 240 Engineering Computations

MATH& 254 Calculus IV

Total Credits/Units 100-105

1 MATH 103 and MATH 111/MATH 110 are required prerequisites for MATH& 151 that may be needed if calculus placement is not met.

2 Clark requires concurrent enrollment or completion of MATH& 254 with a grade of "C" or higher.

3 ECON& 201 or ECON& 202 is recommended, but not required.

4 Requires concurrent enrollment in PHYS 94/PHYS 95/PHYS 96

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Obtain, evaluate, and ethically use information. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Analyze patterns of power, privilege, and inequity in the United States. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Apply communication theory to demonstrate effective oral communication skills. (GE)
- Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Analyze and solve multi-step problems using techniques through single-variable calculus.
- Demonstrate understanding of the derivative as an instantaneous rate of change and the definite integral as a limit of a sum.
- Acquire scientific and technological information from appropriate sources to examine issues, claims or situations.
- Apply fundamental principles and relationships from the Natural Sciences to analyze technological or scientific problems.
- Apply scientific and technological knowledge and methodologies to creatively solve technological or scientific problems.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
MECHATRONICS

Mechatronics Technology is a growing career field that deals with the integration of mechanical and electronic components managed by control systems. Mechatronics technicians troubleshoot, maintain and repair mechanical equipment controlled by electrical, electronic and computer systems. These types of systems are increasingly used in a wide variety of manufacturing and industrial settings. Clark College’s Mechatronics Technology (MTX) classes emphasize current concepts and technology by providing practical, hands-on experiences with the latest, industry standard equipment. In addition to the technical knowledge needed to maintain and repair equipment, the certificate and degree programs will help prepare students to think critically, function as a successful team member and communicate clearly to internal and external customers.

The multiple certificate and degree options available within this program allow students the option to stop-out and enter the workforce, and re-enter the program as needed, or complete their program of study without stopping.

- Mechatronics Fundamentals (CC)(Plan Code: ETEMFC01) (p. 79)
- Mechanical and Instrumentation Automation (CA)(Plan Code: ETEMAC20) (p. 79)
- Mechanical and Instrumentation Automation (AAT)(Plan Code: ETEMIAPT) (p. 80)

Mechatronics Fundamentals (CC) (Plan Code: ETEMFC01)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Area Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTX 100</td>
<td>Industrial Safety</td>
<td>1</td>
</tr>
<tr>
<td>MTX 101</td>
<td>DC Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>MTX 102</td>
<td>AC Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>MTX 103</td>
<td>Basic Measurement Tools</td>
<td>2</td>
</tr>
<tr>
<td>MTX 106</td>
<td>Fluid Power Systems</td>
<td>4</td>
</tr>
<tr>
<td>MTX 110</td>
<td>Electric Motor Control 1</td>
<td>4</td>
</tr>
<tr>
<td>MTX 121</td>
<td>Semiconductors I</td>
<td>3</td>
</tr>
<tr>
<td>MTX 130</td>
<td>Programmable Logic Controllers 1</td>
<td>4</td>
</tr>
<tr>
<td>MTX 140</td>
<td>Robotic Systems</td>
<td>4</td>
</tr>
<tr>
<td>MTX 145</td>
<td>Electrical Power &amp; Distribution Systems</td>
<td>4</td>
</tr>
<tr>
<td>MTX 175</td>
<td>Mechatronics Systems Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>MTX 180</td>
<td>Mechanical Systems</td>
<td>5</td>
</tr>
</tbody>
</table>

Total Credits/Units 18

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Troubleshoot DC and AC circuits for malfunctions.
- Design fluid power systems and identify common components.

- Correctly connect, operate and troubleshoot an AC motor control circuit.
- Demonstrate proper tool identification and usage techniques.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.
Mechanical and Instrumentation Automation (AAT)(Plan Code: ETEMIAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Education Requirements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Communication Skills</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTWR 135</td>
<td>Introduction to Applied Technical Writing</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>(recommended)</td>
<td></td>
</tr>
<tr>
<td><strong>Computational Skills</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTCS 110</td>
<td>Professional Technical Computational Skills</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>(recommended)</td>
<td></td>
</tr>
<tr>
<td><strong>Human Relations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COLL 101</td>
<td>College Essentials: Introduction to Clark</td>
<td>2</td>
</tr>
<tr>
<td>BUS 148</td>
<td>Business Professional Self Development</td>
<td>3</td>
</tr>
<tr>
<td>or MGMT 101</td>
<td>Principles of Management</td>
<td></td>
</tr>
<tr>
<td><strong>Major Area Requirements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTX 100</td>
<td>Industrial Safety</td>
<td>1</td>
</tr>
<tr>
<td>MTX 101</td>
<td>DC Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>MTX 102</td>
<td>AC Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>MTX 103</td>
<td>Basic Measurement Tools</td>
<td>2</td>
</tr>
<tr>
<td>MTX 106</td>
<td>Fluid Power Systems</td>
<td>4</td>
</tr>
<tr>
<td>MTX 110</td>
<td>Electric Motor Control 1</td>
<td>4</td>
</tr>
<tr>
<td>MTX 121</td>
<td>Semiconductors I</td>
<td>3</td>
</tr>
<tr>
<td>MTX 130</td>
<td>Programmable Logic Controllers 1</td>
<td>4</td>
</tr>
<tr>
<td>MTX 132</td>
<td>Siemens PLC Lvl I</td>
<td>4</td>
</tr>
<tr>
<td>MTX 140</td>
<td>Robotic Systems</td>
<td>4</td>
</tr>
<tr>
<td>MTX 145</td>
<td>Electrical Power &amp; Distribution Systems</td>
<td>4</td>
</tr>
<tr>
<td>MTX 175</td>
<td>Mechatronics Systems Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>MTX 180</td>
<td>Mechanical Systems</td>
<td>5</td>
</tr>
<tr>
<td>MTX 216</td>
<td>Mechatronics 2</td>
<td>5</td>
</tr>
<tr>
<td>MTX 221</td>
<td>Semiconductors 2</td>
<td>3</td>
</tr>
<tr>
<td>MTX 224</td>
<td>Motor Drive Systems</td>
<td>5</td>
</tr>
<tr>
<td>MTX 230</td>
<td>Laser Alignment</td>
<td>2</td>
</tr>
<tr>
<td>MTX 232</td>
<td>Digital Electronics Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>MTX 240</td>
<td>Process Control Systems</td>
<td>6</td>
</tr>
<tr>
<td>MTX 250</td>
<td>Advanced Programmable Logic Controllers</td>
<td>4</td>
</tr>
<tr>
<td>MTX 275</td>
<td>Advanced Fluid Power Systems</td>
<td>5</td>
</tr>
<tr>
<td>MTX 292</td>
<td>Manufacturing System Principles</td>
<td>4</td>
</tr>
<tr>
<td>MTX 296</td>
<td>Capstone/Final Project</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits/Units</strong></td>
<td>101</td>
<td></td>
</tr>
</tbody>
</table>
**MEDICAL ASSISTANT**

Medical Assistants maintain the daily workflow of a medical office. Work activities vary depending on the medical setting but often include customer service, administrative and clinical tasks. Medical assistants work directly with physicians and patients to ensure a productive experience in a variety of healthcare environments. The Medical Assistant program prepares students for both front-office clerical and back-office clinical medical assisting responsibilities by providing cognitive (knowledge), psychomotor (skills), and affective (behavior) learning competencies. The Clark College Medical Assistant Certificate of Proficiency is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), on recommendation of the Medical Assisting Education Review Board (MAERB). Graduates of the Clark College Medical Assisting program are eligible to sit for the American Association of Medical Assistants (AAMA)’s Certified Medical Assistant (CMA) examination, a national certification for Medical Assistants. To gain employment as a Certified Medical Assistant, the student must graduate from the program and pass the CMA examination.

**Medical Assistant (CP)(Plan Code: MLAMAC45)**

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication Skills (minimum 3 credits/units required)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTWR 135</td>
<td>Introduction to Applied Technical Writing or ENGL 101 English Composition I</td>
<td></td>
</tr>
<tr>
<td><strong>Computational Skills (minimum 3 credits/units required)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA 103</td>
<td>Math for Medical Assistants</td>
<td>3</td>
</tr>
<tr>
<td><strong>Human Relations (minimum 3 credits/units required)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA 104</td>
<td>Medical Office Administrative Procedures</td>
<td>6</td>
</tr>
<tr>
<td><strong>Major Area Requirements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AH 104</td>
<td>Health Care Delivery &amp; Career Exploration</td>
<td>3</td>
</tr>
<tr>
<td>AH 100</td>
<td>Basic Concepts of Anatomy and Physiology 1</td>
<td>3</td>
</tr>
<tr>
<td>AH 110</td>
<td>Medical Terminology I</td>
<td>3</td>
</tr>
<tr>
<td>AH 101</td>
<td>Basic Concepts of Anatomy and Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>AH 111</td>
<td>Medical Terminology II</td>
<td>3</td>
</tr>
<tr>
<td>MA 123</td>
<td>Legal Aspects of The Medical Office</td>
<td>3</td>
</tr>
<tr>
<td>MA 120</td>
<td>Bloodborne Pathogens in Healthcare Settings</td>
<td>1</td>
</tr>
<tr>
<td>MA 114</td>
<td>Medical Reimbursement</td>
<td>4</td>
</tr>
<tr>
<td>MA 124</td>
<td>Therapeutic Comm Skills for Health Prof</td>
<td>2</td>
</tr>
<tr>
<td>HLTH 124</td>
<td>Healthcare Provider CPR and First Aid</td>
<td>1</td>
</tr>
<tr>
<td>MA 201</td>
<td>Introduction to Pathophysiology</td>
<td>5</td>
</tr>
<tr>
<td>MA 202</td>
<td>MA Assistant Examination Review</td>
<td>2</td>
</tr>
<tr>
<td>MA 211</td>
<td>Medical Office Clinical Procedures</td>
<td>6</td>
</tr>
<tr>
<td>MA 212</td>
<td>Pharmacology for Medical Assistants</td>
<td>3</td>
</tr>
<tr>
<td>MA 221</td>
<td>Medical Office Laboratory Procedures</td>
<td>6</td>
</tr>
<tr>
<td>MA 222</td>
<td>Medical Assistant Practicum</td>
<td>6</td>
</tr>
<tr>
<td>MA 232</td>
<td>Medical Assistant Seminar</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits/Units</strong></td>
<td></td>
<td>69</td>
</tr>
</tbody>
</table>

1 AH 100, AH 101, AH 110, AH 111, MA 103, AND MA 123 must be seven (7) years current upon program entry.

**Program Outcomes**

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate use of medical office administrative and clinical software to complete medical office tasks (scheduling, patient
Medical Assistant with Phlebotomy or Business Option (AAT)(Plan Code: MLAMSAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

The Allied Health and the Medical Assisting courses are held at the CCW Campus. The CCW campus is located on WSU Vancouver campus, click here for map and directions.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

1. Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
2. Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
3. Demonstrate interpersonal/human relations skills. (GE)
4. Demonstrate use of medical office administrative and clinical software to complete medical office tasks (scheduling, patient information management, billing and office finances). (affective, cognitive and psychomotor)
5. Apply policies and principles of office management (patient reception, scheduling, billing and office finances). (affective, cognitive and psychomotor)
6. Apply policies and procedures for office management. (cognitive)
7. Demonstrate the ability to work as a team member to accomplish a task. (affective)
8. Accurately and effectively demonstrate clinical skills required of the medical assistant. (affective, cognitive and psychomotor)
9. Successfully complete all criteria necessary for taking the CMA Exam. (cognitive and psychomotor)
• Communicate effectively with peers, patients, and health care professionals through written and oral communications. (affective and psychomotor).

• Accurately and effectively demonstrate clinical skills required of the medical assistant. (affective, cognitive and psychomotor)

• Successfully complete all criteria necessary for taking the CMA Exam. (cognitive and psychomotor)

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
MUSIC

The Music program at Clark offers students an abundance of experiences in music theory, instrumental and vocal performance training, music appreciation and music history. Courses are designed to prepare the music major for advanced studies for transfer to a four-year bachelor’s music degree while also providing an enriching experience to the non-major music with the skills and background to fully enjoy music as a cultural pursuit. Students are encouraged to contact potential transfer institutions and advising as early as possible for guidance on specific course selections.

• Associate in Music DTA/MRP (Plan Code: MUSMUAA) (p. 84)

Associate in Music DTA/MRP (Plan Code: MUSMUAA)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC&amp; 143</td>
<td>Music Theory III</td>
<td>5</td>
</tr>
<tr>
<td>MUSC 101</td>
<td>Beginning Piano Class</td>
<td>2</td>
</tr>
<tr>
<td>MUSC&amp; 231</td>
<td>Music Theory IV</td>
<td>3</td>
</tr>
<tr>
<td>MUSC&amp; 232</td>
<td>Music Theory V</td>
<td>3</td>
</tr>
<tr>
<td>MUSC&amp; 233</td>
<td>Music Theory VI</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 201</td>
<td>Intermediate Piano Class</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Applied Instrument, Piano, or Voice</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Major Performing Ensemble – Orchestra, Concert Band, Concert Choir, Treble Choir, Chorale, or Jazz Band</td>
<td>12</td>
</tr>
</tbody>
</table>

Total Credits/Units 102

1. No more than 10 credits/units allowed from any one discipline.
2. No more than 10 credits/units allowed from any one discipline. At least 10 credits/units in Physical, Biological and/or Earth Sciences. Shall include at least one laboratory course.
3. In-house diagnostic testing and/or auditions might affect the credits/units accepted in theory and ear training. Students are advised to check with the receiving institution.
4. In-house auditions might affect the credits/units accepted in this area. Students are advised to check with the receiving institution.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Apply communication theory to demonstrate effective oral communication skills. (GE)
• Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
• Analyze patterns of power, privilege, and inequity in the United States. (GE)
• Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Demonstrate progress toward healthier behaviors. (GE)
• Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
• Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
• Obtain, evaluate, and ethically use information. (GE)
• Meet audition standards for any necessary proficiency exams in music theory for transfer to a four-year school of music.
• Perform a standard body of literature at a proficiency level relevant to pursuit of a BA or BM degree in music.
• Demonstrate musicality through participation in recorded performances.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry
method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
NETWORK TECHNOLOGY

Designed to meet the ever-changing needs of the IT (Information Technology) field, Clark’s Network Technology programs include extensive hands-on, real-world scenario-based learning in planning, designing, implementing, maintaining, and troubleshooting small-to-large scale computer networks.

The Network Technology department provides in-demand training for careers as a Network Administrator, Network Engineer, and Network Support Specialist in all aspects of modern computer networks, including traditional data, video conference, Voice over Internet Protocol (VoIP) telephone, wireless networks, and network security.

We are a Cisco Network Academy authorized by Cisco Systems, a leader in the networking industry. The Network Technology department offers training towards obtaining several well-recognized industry certifications, including:

- Cisco CCNA
- Cisco CCNA Security
- Cisco CCNA Voice
- CompTIA A+ PC Technician
- CompTIA Network+
- CompTIA Server+
- Microsoft MCITP Server Administrator on Windows Server 2008
- Microsoft MCTS Windows Server 2008 Network Infrastructure
- Microsoft MCTS Windows Server 2008 Active Directory

Our various Network Technology programs are designed with entry points both for the student just starting a new career, as well as for the computer networking or telecommunications professional seeking to improve and update their skills and achieve industry certifications. Classes are offered at convenient times for working people: days, nights, weekends.

We invite you to visit our website for more information, contact us with your questions, and schedule a tour of our classroom and leading-edge lab facility.

Email: dnet@clark.edu

Program Preparation

Math and English proficiency tests are required of all students before entry into the applied science degree program.

Students must complete all Major Area Requirements with a minimum grade of "C" or better in order to successfully complete the program and earn the award.

Refer to the Degree & Certificate Requirements Section of the Clark College Catalog to identify the courses needed to satisfy the General Education Requirements.

- Cisco Technician (CA)(Plan Code: TETCTC20) (p. 86)
- Microsoft Technician (CA)(Plan Code: CSTMTC20) (p. 86)
- Network Technologies (AAT)(Plan Code: CSTNTAPT) (p. 87)

Cisco Technician (CA)(Plan Code: TETCTC20)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTEC 103</td>
<td>IP Subnetting</td>
<td>3</td>
</tr>
<tr>
<td>NTEC 125</td>
<td>Introduction to Cybersecurity</td>
<td>3</td>
</tr>
<tr>
<td>NTEC 142</td>
<td>Cloud Computing Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>NTEC 151</td>
<td>Linux Essentials</td>
<td>3</td>
</tr>
<tr>
<td>NTEC 161</td>
<td>Network Scripting Fundamentals</td>
<td>5</td>
</tr>
<tr>
<td>NTEC 220</td>
<td>Deploying Linux Server Services</td>
<td>5</td>
</tr>
<tr>
<td>NTEC 221</td>
<td>Introduction to Networks</td>
<td>5</td>
</tr>
<tr>
<td>NTEC 222</td>
<td>Switching, Routing, and Wireless Essentials</td>
<td>5</td>
</tr>
<tr>
<td>NTEC 223</td>
<td>Enterprise Networking, Security, and Automation</td>
<td>5</td>
</tr>
</tbody>
</table>

Total Credits/Units 37

Note: Students will be required to have access to the Internet to complete their coursework.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Design converged networks to meet specific business needs.
- Implement converged networks to meet specific business needs.
- Maintain converged networks to meet specific business needs.
- Resolve common issues with converged networks.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Microsoft Technician (CA)(Plan Code: CSTMTC20)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTEC 103</td>
<td>IP Subnetting</td>
<td>3</td>
</tr>
</tbody>
</table>

Major Area Requirements
Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Design Microsoft networks and domain structures to meet specific business needs.
- Implement Microsoft networks and domain structures to meet specific business needs.
- Maintain Microsoft networks and domain structures to meet specific business needs.
- Resolve common issues with Microsoft networks and domain structures.
- Implement converged networks to meet specific business needs.
- Design converged networks to meet specific business needs.

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Design Windows and Linux networks to meet specific business needs.
- Implement Windows and Linux networks to meet specific business needs.
- Design converged networks to meet specific business needs.
- Implement converged networks to meet specific business needs.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Network Technologies (AAT)(Plan Code: CSTNTAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTEC 125</td>
<td>Introduction to Cybersecurity</td>
<td>3</td>
</tr>
<tr>
<td>NTEC 142</td>
<td>Cloud Computing Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>NTEC 151</td>
<td>Linux Essentials</td>
<td>3</td>
</tr>
<tr>
<td>NTEC 161</td>
<td>Network Scripting Fundamentals</td>
<td>5</td>
</tr>
<tr>
<td>NTEC 221</td>
<td>Introduction to Networks</td>
<td>5</td>
</tr>
<tr>
<td>NTEC 234</td>
<td>Administering Windows Server Hybrid Core</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Infrastructure</td>
<td></td>
</tr>
<tr>
<td>NTEC 235</td>
<td>Windows Server Hybrid Advanced Services</td>
<td>5</td>
</tr>
<tr>
<td>NTEC 236</td>
<td>Cybersecurity Defense Operations</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Total Credits/Units</td>
<td>37</td>
</tr>
</tbody>
</table>

Total Credits/Units 37

Course Options (p. 270) 3

Major Area Requirements

- NTEC 103 IP Subnetting 3
- NTEC 125 Introduction to Cybersecurity 3
- NTEC 142 Cloud Computing Fundamentals 3
- NTEC 151 Linux Essentials 3
- NTEC 161 Network Scripting Fundamentals 5
- NTEC 220 Deploying Linux Server Services 5
- NTEC 221 Introduction to Networks 5
- NTEC 222 Switching, Routing, and Wireless Essentials 5
- NTEC 223 Enterprise Networking, Security, and Automation 5
- NTEC 225 Network Security 5
- NTEC 234 Administering Windows Server Hybrid Core Infrastructure 5
- NTEC 235 Windows Server Hybrid Advanced Services 5
- NTEC 236 Cybersecurity Defense Operations 5
- NTEC 242 Datacenter Virtualization Technology 5
- NTEC 252 Linux Administration 1 5
- NTEC 253 Linux Administration 2 5
- NTEC 297 Capstone Experience: Network Technologies 3

Total Credits/Units 90

1 PTWR 135 does not meet 100 level incoming/transfer credit requirements for a Bachelor Degree program.
2 PTCS 110 does not meet 100 level incoming/transferring credit requirements for a Bachelor Degree program.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Design Windows and Linux networks to meet specific business needs.
- Implement Windows and Linux networks to meet specific business needs.
- Design converged networks to meet specific business needs.
- Implement converged networks to meet specific business needs.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
NURSING

The registered nurse is a licensed health care professional able to work in hospitals, clinics, acute care, physicians’ offices, emergency centers, long-term care facilities, and home health care agencies. Registered nurses work with patients from birth through old age in a variety of health care settings, including medical/surgical, obstetrics, mental health, long-term care, and in the community. They design care plans, perform patient assessments, administer medications, give injections, serve as advocates for patients, and refer patients to the proper resources. Critical-thinking and decision-making ability, as well as a life-long commitment to learning, are important assets in this demanding but rewarding profession.

Students must earn a 2.0 cumulative GPA in order to qualify for graduation from Clark College and are encouraged to connect with their potential transfer institution to confirm GPA and course requirements to entry.

Graduates of the Associate Degree Nursing program receive an Associate in Arts Nursing DTA/ MRP degree, and are qualified to take the National Council Examination for licensure as a Registered Nurse.

The Associate Degree Nursing Program at Clark College at the Washington State University campus located in Vancouver, Washington is accredited by:

ACEN
Accreditation Commission for Education In Nursing
3390 Peachtree Road NE, Suite 1400
Atlanta, Georgia 30326
www.acenursing.org (http://www.acenursing.org)

The most recent accreditation decision made by the ACEN Board of Commissioners for the Clark College Associate Degree Nursing Program is Continuing Accreditation.

About the Program

For Financial Aid purposes, the Associate Degree in Nursing DTA/MRP is open enrollment which enables all students who wish to pursue this degree to complete the “Nursing Degree Requirements” (courses in the areas of English, Biological Sciences, Psychology, etc.). The “Nursing Degree Requirements” provide the foundation for the subsequent "Nursing Core” classes (classes with "NURS” prefix). Due to clinical space limitations, although the program of study for the nursing transfer degree is open enrollment, there is a competitive application process for students to be able to begin the “Nursing Core” classes. The instructions in the Nursing Program Guide explain the nursing transfer degree requirements and the competitive application process to be able to begin the Nursing Core classes.

The Nursing Program Guide is posted on the Nursing website at www.clark.edu/clarknursing (http://www.clark.edu/clarknursing/).

Disability Statement for Health Occupations

Students with disabilities are qualified to participate in clinically based healthcare professions with the use of approved reasonable accommodations (as defined by Section 504 of the Rehabilitation Act and the Americans with Disabilities Act). To be qualified for nursing programs at Clark College those individuals must be able to meet the essential abilities with or without reasonable accommodation. Accommodations for the classroom, laboratory, or clinical setting will be evaluated on a case-by-case basis for individual student disability needs and according to the reasonableness of the essential functions and learning of the program. Accommodations that compromise patient care, or that fundamentally alter the essential functions of the program or activity, are not considered to be reasonable. For further information regarding reasonable accommodation for students with disabilities, please contact the Disability Support Services Office (https://www.clark.edu/campus-life/student-support/disability_support/) at 360-992-2314 or via email at dss@clark.edu

• Associates in Nursing DTA/MRP (Plan Code: RENDTAA) (p. 90)
• Pre-Nursing (DTA/MRP)(Plan Code: RENPNAS) (p. 88)

Pre-Nursing (DTA/MRP)(Plan Code: RENPNAS)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

This pathway is applicable to students planning to prepare for upper-division Bachelor of Science, Nursing (entry-to-practice/basic BSN pathway) by completing a broad selection of academic courses. Many students transfer to the BSN program after completing the Associate Degree Nursing (ADN) program (RN-to-BSN pathway); however, this agreement is not applicable to and does not alter those ADN-to-BSN articulation agreements.

This pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, address the issue of significantly inadequate capacity (faculty, clinical opportunities, etc.) at the BSN level relative to workforce needs or current student interest. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive, with many qualified applicants finding themselves on waiting lists for admission.

This document represents an agreement between the following baccalaureate institutions offering an entry-to-practice/basic BSN program and the community and technical colleges system. Baccalaureate institutions party to this agreement include: University of Washington, Seattle; Washington State University; Northwest University; Seattle University; Seattle Pacific University; Pacific Lutheran University; St. Martin’s University; and Walla Walla University. The Washington State University Intercollegiate College of Nursing (WSU-ICN) is a consortium whose members include Eastern Washington University, Gonzaga, and Whitworth. Associate degree transfers to WSU-ICN are admitted through WSU, but not through the other consortium institutions. EWU participated in the development of this agreement.

Though this degree does not require such (for example, this degree does not require HPE), Clark College students should know that the standard Clark AA degree path has these differences from the MRP defined below:

1. Clark requires 3 credits of Health-Physical Education coursework, and
2. Clark’s Social Science distribution requirement stipulates that students take courses from at least three different departments.

Students must also meet the residency requirements as established by Clark. This degree requires 2.0 cumulative GPA, and students are encouraged to reach out to advising and transfer institution(s) to ensure
that they also meet the expected GPA and course requirements to apply for the program. While Clark College has approved offering the degree below, Clark students should keep these requirements in mind should their transfer pathways change.

Students are responsible for researching and preparing for specific major requirements of baccalaureate institutions as early as possible prior to transferring.

Clark College Equivalents

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic Requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication Skills</td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 102</td>
<td>English Composition II</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Quantitative/Symbolic Reasoning Requirement</td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 146</td>
<td>Introduction to Stat</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Distribution Requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Humanities</td>
<td></td>
</tr>
<tr>
<td>CMST&amp; 220</td>
<td>Public Speaking</td>
<td>5</td>
</tr>
<tr>
<td>or CMST&amp; 240</td>
<td>Intercultural Communication</td>
<td></td>
</tr>
<tr>
<td>or CMST&amp; 210</td>
<td>Interpersonal Communication</td>
<td></td>
</tr>
<tr>
<td>Select 10 term credits/units of other Humanities, five of which can be CMST (p. 265)</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Science</td>
<td></td>
</tr>
<tr>
<td>PSYC&amp; 100</td>
<td>General Psychology</td>
<td>5</td>
</tr>
<tr>
<td>PSYC&amp; 200</td>
<td>Lifespan Psychology</td>
<td>5</td>
</tr>
<tr>
<td>Select five credits/units of Social Science course (outside of Psychology) that has PPI designator (p. 264)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural Science</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 160</td>
<td>General Biology W/Lab</td>
<td>5</td>
</tr>
<tr>
<td>BIOL&amp; 260</td>
<td>Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 121</td>
<td>Intro to Chemistry: Pre-Health</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 131</td>
<td>Intro to Organic/Biochem</td>
<td>5</td>
</tr>
<tr>
<td>NUTR&amp; 101</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>Select from one of the following sequences:</td>
<td>10-15</td>
<td></td>
</tr>
<tr>
<td>BIOL&amp; 241 &amp; BIOL&amp; 242</td>
<td>Human Anatomy and Physiology I and Human Anatomy and Physiology II</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td>BIOL&amp; 251 &amp; BIOL&amp; 252 &amp; BIOL&amp; 253</td>
<td>Human A &amp; P I and Human A &amp; P II and Human A &amp; P III</td>
</tr>
<tr>
<td>Electives</td>
<td>Elective Courses (p. 267)</td>
<td>7-12</td>
</tr>
<tr>
<td>Total Credits/Units</td>
<td></td>
<td>90</td>
</tr>
</tbody>
</table>

1 Students need to be aware that Clark College’s nutrition class is only three credits/units, not the required five credits/units.

2 Up to ten (10) additional credits/units of general electives can apply. Courses must be 100-level or higher. Physical Education activity credits are limited to a maximum of three (3) credits/units. Coursework in FLPC cannot apply. Students should consult with the transfer institution to ensure courses are "fully transferable".

Notes

Basic Requirements

Quantitative/Symbolic Reasoning Requirement

UW Seattle and Seattle University require 10 credits in quantitative/symbolic reasoning with the additional class in college algebra or pre-calculus (at UW Seattle, a class in Logic also serves for the additional class).

Distribution Requirements

Humanities

In order to better prepare for successful transfer, students are encouraged to consult with the institution(s) to which they wish to transfer regarding the humanities courses that best support or may be required as prerequisites to their nursing curriculum.

A curriculum that provides students with an understanding of and sensitivity to human diversity is encouraged (required by WSU). Credits in the humanities distribution area provide one opportunity for such a curriculum.

Social Sciences

Walla Walla requires a course in General Sociology.

A curriculum that provides students with an understanding of and sensitivity to human diversity is encouraged (required by WSU). The credits/units in sociology provide one opportunity for such a curriculum.

Natural Sciences

Introductory survey courses or review courses do not meet the content level expectations for these natural science requirements.

At the time of application, when some of the coursework may not yet be completed, UW Seattle requires a minimum GPA of 3.0 for 3 out of the 7 courses or 2.8 for 4 out of the 7.

Students need to be aware that Clark College’s nutrition class is only 3 credits, not the required 5 credits.

Electives

Elective Courses

See notes under humanities, social science and natural science.

A curriculum that provides students with an understanding of and sensitivity to human diversity is encouraged (required by WSU). The elective credits provide one opportunity for such a curriculum. See the choices in the WSU "Diversity Course Identification Guidelines" for possible course selection or select courses that include minority, non-Western, ethnic or other "area" studies.

Total Required Credits: 90

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
• Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
• Analyze patterns of power, privilege, and inequity in the United States. (GE)
• Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
• Obtain, evaluate, and ethically use information. (GE)
• Evaluate claims about the natural world using scientific methodology. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
• Demonstrate progress toward healthier behaviors. (GE)
• Apply communication theory to demonstrate effective oral communication skills. (GE)

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

**Associates in Nursing DTA/MRP (Plan Code: RENDTAA)**

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>Select an additional five credits/units (p. 264)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>MATH&amp; 146</td>
<td>Introduction to Stat</td>
<td>5</td>
</tr>
<tr>
<td>NURS 110</td>
<td>Foundations of Nursing Concepts</td>
<td>2</td>
</tr>
<tr>
<td>NURS 111</td>
<td>Foundations of Clinical Nursing</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 112</td>
<td>Ethics and Policy in Healthcare I</td>
<td>2</td>
</tr>
<tr>
<td>NURS 113</td>
<td>Lifespan Assessment Concepts</td>
<td>3</td>
</tr>
<tr>
<td>NURS 114</td>
<td>Nursing Skills Application I</td>
<td>1</td>
</tr>
<tr>
<td>NURS 115</td>
<td>Nursing Skills Lab I</td>
<td>2</td>
</tr>
<tr>
<td>NURS 122</td>
<td>Family-Centered Nursing</td>
<td>2</td>
</tr>
<tr>
<td>PSYC 122</td>
<td>Psychosocial Issues In Health Care I</td>
<td>1</td>
</tr>
<tr>
<td>NURS 123</td>
<td>Family-Centered Clinical Nursing</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 124</td>
<td>Psychosocial Issues In Health Care II</td>
<td>2</td>
</tr>
<tr>
<td>NURS 127</td>
<td>Nursing Skills Application II</td>
<td>1</td>
</tr>
<tr>
<td>NURS 128</td>
<td>Nursing Skills Lab II</td>
<td>2</td>
</tr>
<tr>
<td>NURS 135</td>
<td>Medical Surgical Nursing Concepts I</td>
<td>3</td>
</tr>
<tr>
<td>NURS 136</td>
<td>Medical Surgical Clinical Nursing I</td>
<td>5</td>
</tr>
<tr>
<td>NURS 137</td>
<td>Nursing Skills Application III</td>
<td>1</td>
</tr>
<tr>
<td>NURS 138</td>
<td>Nursing Skills Lab III</td>
<td>2</td>
</tr>
<tr>
<td>NURS 241</td>
<td>Nutrition In Healthcare I</td>
<td>1</td>
</tr>
<tr>
<td>PSYC 242</td>
<td>Medical-Surgical Clinical Nursing II</td>
<td>8</td>
</tr>
<tr>
<td>NURS 251</td>
<td>Medical-Surgical Nursing Concepts III</td>
<td>2</td>
</tr>
<tr>
<td>NURS 252</td>
<td>Advanced Holistic Clinical Nursing</td>
<td>8</td>
</tr>
<tr>
<td>PSYC 253</td>
<td>Psychosocial Issues In Health Care III</td>
<td>2</td>
</tr>
<tr>
<td>NURS 261</td>
<td>Professional Leadership Transition to Practice</td>
<td>4</td>
</tr>
<tr>
<td>NURS 262</td>
<td>Professional Leadership in Practice</td>
<td>4</td>
</tr>
<tr>
<td>NURS 264</td>
<td>NCLEX-RN Preparation</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 273</td>
<td>Ethics and Policy In Healthcare II</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits/Units</td>
<td></td>
<td>135</td>
</tr>
</tbody>
</table>

1 Maximum of 5 (five) credits/units of ENGL credits/units allowed.
2 All Natural Science (NS) classes except BIOL 160 must be seven years current upon program entry.
3 Completion of BIOL 251, BIOL 252 and BIOL 253 may be used in place of both BIOL 241 and BIOL 242.

**Program Outcomes**

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Apply communication theory to demonstrate effective oral communication skills. (GE)
• Analyze and interpret quantitative information presented verbally, graphically, numerically, and/or symbolically. (GE)
• Analyze patterns of power, privilege, and inequity in the United States. (GE)
• Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
• Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
• Obtain, evaluate, and ethically use information. (GE)
• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
• Demonstrate progress toward healthier behaviors. (GE)
• Teamwork and Interprofessional Collaboration: Model open communication, mutual respect and shared decision making.
• Knowledge: Integrate relevant theoretical and practical knowledge.
• Clinical Judgment: Demonstrate effective problem solving and decision making.
• Caring: Integrate principles of diversity, holism, stewardship, dignity, and respect to reflect an environment of caring.
• Professionalism: Demonstrate personal accountability, ethical practices and continuing competence in nursing.
• Patient Safety: Minimize risk of harm to patients and providers through both clinical system effectiveness and individual performance.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
PHARMACY TECHNICIAN

Pharmacy technicians in Washington and Oregon are employed in hospitals and outpatient facilities. They assist licensed pharmacists in dispensing medications, assist with compounding and IV drug preparation, take inventory, stock supplies, type prescription labels, and perform other assignments as allowed by law. Pharmacy technicians, by law, are employed under the direct supervision of a licensed pharmacist. Both chain and community retail pharmacies, as well as all hospitals, employ pharmacy technicians. The profession of pharmacy requires highly motivated and trained technicians to provide the drug preparation and distributive functions that support the medication management and pharmaceutical care duties of the pharmacist. Clark College’s program consists of classroom and practicum education and training. Students learn the theory in class, practice in a mock pharmacy mini-lab, and then apply their knowledge in actual pharmacy practicum settings.

Graduates of the Clark College Pharmacy Technician program will be eligible for:

• Clark College Certificate of Proficiency
• Washington Board of Pharmacy Certificate
• Oregon Board of Pharmacy Registration
• National Pharmacy Technician Certification Exam

About the Program
For Financial Aid purposes, the Certificate of Proficiency in Pharmacy Technician is open enrollment which enables all students who wish to pursue this program to complete the “Pharmacy Technician Program Requirements” (courses in the areas of English, Sciences, Medical Terminology, etc.). The “Pharmacy Technician Program Requirements” provide the foundation for the subsequent “Pharmacy Technician Core” classes (classes with “PHAR” prefix). Due to clinical space limitations, although the program of study for the pharmacy technician is open enrollment, there is an application process for students to be able to begin the “Pharmacy Technician Core” classes. The instructions in the Pharmacy Technician Program Guide explain the Pharmacy Technician requirements and the application process to be able to begin the Pharmacy Technician Core classes.

Program Pathway
Clark College also offers an expanded Pharmacy Technician curriculum leading to an Associate in Applied Technology (AAT) degree in Pharmacy Technician Leadership. This degree program is intended for those students who would like to continue their education beyond the Pharmacy Technician Certificate of Proficiency. Courses offered for the AAT in Pharmacy Technician focus on developing skill sets in leadership, business relations, and professional development.

Disability Statement for Health Occupations
In accordance with the Americans with Disabilities Act and the Rehabilitation Act of 1973, accommodations for students with disabilities will be considered at the student’s request. The student may need to provide documentation of disability to the Disability Support Services Office to support his/her accommodation requests. Documentation guidelines and procedures can be found at www.clark.edu/dss (http://www.clark.edu/dss/). Once the student is qualified by DSS as having a disability, requested accommodations will be considered.

Accommodations for the classroom, laboratory, or clinical setting will be evaluated according to reasonableness. Accommodations that compromise patient care, or that fundamentally alter the essential functions of the program or activity, are not considered to be reasonable.

• Pharmacy Technician (CP)(Plan Code: PTAPTC45) (p. 92)
• Pharmacy Technician Leadership (AAT)(Plan Code: PTAPTAPT) (p. 93)

Pharmacy Technician (CP)(Plan Code: PTAPTC45)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 105</td>
<td>Introduction to Pharmacy</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 112</td>
<td>Pharmacology I</td>
<td>5</td>
</tr>
<tr>
<td>PHAR 114</td>
<td>Pharmacy Practice and Technology</td>
<td>5</td>
</tr>
<tr>
<td>PHAR 118</td>
<td>Pharmacy Externship I</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 119</td>
<td>Pharmacy Externship Seminar I</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 122</td>
<td>Pharmacology II</td>
<td>5</td>
</tr>
<tr>
<td>PHAR 123</td>
<td>Pharmacy Law</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 127</td>
<td>Pharmacy Compounding</td>
<td>5</td>
</tr>
<tr>
<td>PHAR 128</td>
<td>Pharmacy Externship II</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 129</td>
<td>Pharmacy Externship Seminar II</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 189</td>
<td>Pharmacy Capstone</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 198</td>
<td>Pharmacy Advanced Simulation Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

Additional Requisite Requirements
Completion of MATH 92, BUS 102, PTCS 110, MA 103 or equivalent with a grade of “C” or better (2.0) or higher, or placement into MATH 96 (Must be 7 years current upon program entry).

Total Credits/Units: 70-72
Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Exhibit effective communication skills in interactions with patients and other healthcare professionals.
- Demonstrate knowledge of pharmacy processes and information technology to accurately and safely prepare and dispense medications in a variety of pharmacy settings.
- Demonstrate professional clinical skills in the workplace while complying with laws, regulations, and ethical standards of practice.
- Successfully complete all criteria necessary for registration as a pharmacy tech in any state.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Pharmacy Technician Leadership (AAT)(Plan Code: PTAPTAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH 110</td>
<td>Medical Terminology I ^1</td>
<td>3</td>
</tr>
<tr>
<td>AH 100</td>
<td>Basic Concepts of Anatomy and Physiology ^1</td>
<td>3</td>
</tr>
<tr>
<td>AH 101</td>
<td>Basic Concepts of Anatomy and Physiology II ^1</td>
<td>3</td>
</tr>
<tr>
<td>AH 104</td>
<td>Health Care Delivery &amp; Career Exploration</td>
<td>3</td>
</tr>
<tr>
<td>AH 111</td>
<td>Medical Terminology II ^1</td>
<td>3</td>
</tr>
<tr>
<td>AH 120</td>
<td>Bloodborne Pathogens in Healthcare Settings</td>
<td>1</td>
</tr>
<tr>
<td>HLTH 124</td>
<td>Healthcare Provider CPR and First Aid</td>
<td>1</td>
</tr>
<tr>
<td>BUS 149</td>
<td>Computer Application Essentials</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education Requirements

Communication Skills

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL &amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
</tbody>
</table>

Computational Skills

1 Must be seven years current upon program entry.

Human Relations

CMST & 210 Interpersonal Communication 5
or CMST & 230 Small Group Communication

Major Area Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 105</td>
<td>Introduction to Pharmacy</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 110</td>
<td>Pharmacy Calculations</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 112</td>
<td>Pharmacology I</td>
<td>5</td>
</tr>
<tr>
<td>PHAR 114</td>
<td>Pharmacy Practice and Technology</td>
<td>5</td>
</tr>
<tr>
<td>PHAR 118</td>
<td>Pharmacy Externship I</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 119</td>
<td>Pharmacy Externship Seminar I</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 122</td>
<td>Pharmacology II</td>
<td>5</td>
</tr>
<tr>
<td>PHAR 123</td>
<td>Pharmacy Law</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 127</td>
<td>Pharmacy Compounding</td>
<td>5</td>
</tr>
<tr>
<td>PHAR 128</td>
<td>Pharmacy Externship II</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 129</td>
<td>Pharmacy Externship Seminar II</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 198</td>
<td>Pharmacy Advanced Simulation Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 189</td>
<td>Pharmacy Capstone</td>
<td>2</td>
</tr>
</tbody>
</table>

Additional Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 110</td>
<td>Customer Service</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 106</td>
<td>Motivation and Performance</td>
<td>3</td>
</tr>
<tr>
<td>BUS 148</td>
<td>Business Professional Self Development</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 112</td>
<td>Conflict Management</td>
<td>2</td>
</tr>
<tr>
<td>MGMT 101</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 133</td>
<td>Production and Operations Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional Requirements

Completion of ENGL 90 or equivalent with a grade of "C" or better (2.0) or placement into ENGL & 101 + ENGL 099. Completion of MATH 92, BUS 102, PTCS 110, MA 103 or equivalent with a grade of "C" (2.0) or higher or eligibility for MATH 096 (must be 7 years current upon program entry).

TotalCredits/Units 94

1 AH 100, AH 101, AH 110, and AH 111 must be seven years current upon program entry.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Demonstrate interpersonal/human relations skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Successfully complete all criteria necessary for registration as a pharmacy tech in any state.
- Exhibit effective communication skills in interactions with patients and other healthcare professionals.
- Demonstrate knowledge of pharmacy processes and information technology to efficiently manage pharmacy staffing issues and activities.
• Demonstrate professional and clinical leadership skills in the workplace while complying with laws, regulations, and ethical standards of practice.
• Demonstrate knowledge of pharmacy processes and information technology to accurately and safely prepare and dispense medications in a variety of pharmacy settings.
• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
PHLEBOTOMY

Phlebotomy is the practice of drawing blood for analysis, donation or medical testing. A career as a Phlebotomy technician is a rewarding path for someone who desires to work directly with patients. In just two quarters, Clark’s Phlebotomy Program prepares students for an entry-level position in a rapidly growing field. With hands-on training from highly experienced faculty, students gain competence in drawing blood using a variety of collection methods with adults, children, and infants. Coursework includes the handling and transportation of blood and non-blood specimens, safety and infection control, specimen processing, and performing CLIA-waived laboratory testing.

Clark’s Phlebotomy curriculum places emphasis on quality and follows the most up-to-date Clinical and Laboratory Standards Institute (CLSI) guidelines for phlebotomy. The second quarter of the program includes a clinical practicum in a health care facility providing ‘real world’ training and direct experience as a medical laboratory team member.

Graduates of the Clark College Phlebotomy program will be eligible for:

• Clark College Certificate of Achievement
• Washington State Phlebotomy Licensure
• National Phlebotomy Certification Exam

About the Program

The Certificate of Achievement in Phlebotomy is open enrollment which enables all students who wish to pursue this program to complete the “Phlebotomy Program Requirements” (courses in the areas of English, Sciences, Medical Terminology, etc.). The “Phlebotomy Program Requirements” provide the foundation for the subsequent “Phlebotomy Core” classes (classes with “PHLE” prefix). Due to clinical space limitations, although the program of study for the Phlebotomy is open enrollment, there is an application process for students to be able to begin the “Phlebotomy Core” classes. The instructions in the Phlebotomy Program Guide explain the Phlebotomy requirements and the application process to be able to begin the Phlebotomy Core classes.

The Phlebotomy Program Guide is posted on the Phlebotomy website at: www.clark.edu/phlebotomy (http://www.clark.edu/phlebotomy/)

Disability Statement for Health Occupations

In accordance with the Americans with Disabilities Act and the Rehabilitation Act of 1973, accommodations for students with disabilities will be considered at the student’s request. The student may need to provide documentation of disability to the Disability Support Services Office to support his/her accommodation requests. Documentation guidelines and procedures can be found at www.clark.edu/dss (http://www.clark.edu/dss/). Once the student is qualified by DSS as having a disability, requested accommodations will be considered. Accommodations for the classroom, laboratory, or clinical setting will be evaluated according to reasonableness. Accommodations that compromise patient care, or that fundamentally alter the essential functions of the program or activity, are not considered to be reasonable.

• Phlebotomy (CA)(Plan Code: PHLPHC20) (p. 95)

Phlebotomy (CA)(Plan Code: PHLPHC20)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Preliminary Requirements

• High School Diploma or Equivalent
• Must meet eligibility requirements for ENGL& 101 + 099
• Obtain a minimum APPLICABLE GPA of 2.5 prior to program entry
  • Applicable GPA designated courses are: AH 110, AH 104, AH 110, CMST& 210 and MA 124
• Complete each required course with grade of ‘C’ (2.0) or higher

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHLE 115</td>
<td>Phlebotomy Education W/Lab</td>
<td>3</td>
</tr>
<tr>
<td>PHLE 116</td>
<td>Basic Laboratory for The Phlebotomist</td>
<td>3</td>
</tr>
<tr>
<td>PHLE 197</td>
<td>Phlebotomy Clinical Experience</td>
<td>5</td>
</tr>
<tr>
<td>PHLE 198</td>
<td>Phlebotomy Clinical Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

| Total Credits/Units | 25-28 |

1 AH 100 and AH 110 must be seven (7) years current upon program entry.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Accurately perform phlebotomy procedures in variable clinical environments.
• Identify the varying clinical conditions that require a different methodology of sample collection.
• Communicate effectively, accurately, and professionally, using verbal, non-verbal, and written language with diverse populations of patients and other healthcare providers.
• Conduct self in an ethical and professional manner to provide quality patient care.
• Apply safety and infection control standards in the health care environment.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
SURVEYING & GEOMATICS

Degree Requirements

The Surveying and Geomatics program is designed to meet entry-level field and office skills in a variety of land surveying and geomatics occupations. Training will utilize precision electronic surveying instruments, including Global Positioning System equipment and sophisticated computerized drafting, mapping, design, and analysis software.

An Associate in Applied Science degree will be awarded upon successful completion of the course requirements. All core and general education list requirements must be met, with any additional credits to be selected as electives. Students are encouraged to complete basic skills at the beginning of their education. Refer to the Degree & Certificate Requirements Section of the Clark College Catalog to identify the courses needed to satisfy the General Education Requirements.

Full-time students seeking an Associate in Applied Science degree typically complete this program in a minimum of six quarters, if basic skills and prerequisites are complete. Students interested in pursuing a baccalaureate degree in a Surveying or GIS field, a formal articulation agreement between Clark College and the Oregon Institute of Technology in Klamath Falls, Oregon is in place. Please consult with an advisor for additional requirements regarding this specific educational path.

Student Preparation

It is recommended that students prepare for entrance into the program by emphasizing mathematics and science in high school. Two years of algebra and one year each of geometry, trigonometry, and physics are desirable prerequisites.

Career Opportunities

Completion of this program prepares students for work as Surveying Technicians and can lead to a career as a Professional Land Surveyor. The employment forecast for graduates in this field are exceptional. As increasing number of licensed surveyors across the nation retire, a personnel shortage has been created within this profession. As the increasing number of licensed surveyors across the nation retire, a personnel shortage has been created within this profession. This field is expected to experience rapid growth.

Surveying Geomatics Technician - Boundary (CP)(Plan Code: SUTBOC45)

Surveying Geomatics Technician - GIS (CP)(Plan Code: SUTSGC45)

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Communicate in written form, verbally, and graphically with surveyors and engineers.
- Demonstrate use of modern technology, industry standard software, and tools to collect, analyze and interpret data for surveying solutions.
- Practice a code of ethics prescribed by the professional organizations and state codes.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Surveying Geomatics Technician - Boundary (CP)(Plan Code: SUTBOC45)

Surveying Geomatics Technician - GIS (CP)(Plan Code: SUTSGC45)
To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Surveying/Geomatics (AAS)(Plan Code: SUTSGAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTWR 135</td>
<td>Introduction to Applied Technical Writing (recommended)</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 103</td>
<td>College Trigonometry</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST&amp; 210</td>
<td>Interpersonal Communication (recommended)</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 140</td>
<td>Basic Autocad</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 169</td>
<td>Introduction to Excel</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Apply problem solving skills as a member of a professional team in a field crew.
- Communicate in written form, verbally, and graphically with surveyors and engineers.
- Demonstrate use of modern technology, industry standard software, and tools to collect, analyze and interpret data for surveying solutions.
- Practice a code of ethics prescribed by the professional organizations and state codes.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.
Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
• Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
• Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
• Demonstrate progress toward healthier behaviors. (GE)
• Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
• Demonstrate interpersonal/human relations skills. (GE)
• Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
• Demonstrate use of modern technology, industry standard software, and tools to collect, analyze and interpret data for surveying solutions.
• Apply problem solving skills as a member of a professional team in a field crew.
• Communicate in written form, verbally, and graphically with surveyors and engineers.
• Solve applied mathematical problems related to land surveying.
• Prepare complete field records.
• Practice a code of ethics prescribed by the professional organizations and state codes.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

To view the current suggested map for your program please visit our website [https://programmap.clark.edu/academics](https://programmap.clark.edu/academics/)
TEACHER EDUCATION (BAS)

The Bachelor of Applied Science in Teaching Preschool – 3rd Grade (BASTE) is a two-year, career-oriented degree that combines technical, academic, and teaching method courses. Students also have the opportunity to endorse in Bilingual Teaching. This 90-credit program is designed for students who have completed an associate’s degree, or applied science degree in ECE or higher.

This program is limited entry and an additional program application is required. Please see the program page (https://www.clark.edu/academics/programs/public-service-society-and-education/baste/admission.php) for requirements.

• Teacher Education (BAS)(Plan Code: EETTEBAS) (p. 100)

Teacher Education (BAS)(Plan Code: EETTEBAS)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAS General Education Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Skills (WC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101  English Composition I</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 102  English Composition II</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Quantitative Skills (Q)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 122  Math for Elementary Teachers (recommended)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>or Select one option:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities (HA/HB)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>ART 330    Creative Arts in Teaching</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Humanities Course Options (p. 265)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Social Sciences (SS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC 360    Social Studies for Teachers</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Social Sciences Course Options (p. 266)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Natural Science (NS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVS 300  Inquiry-Based Science for Teachers</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Course Options (p. 267)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Additional General Education Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTA Natural Science, Social Science and/or Humanities distribution list courses</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>ECE, EDUC, and ECED courses and/or General Education Courses</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Major Area Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECED&amp; 160  Curriculum Development</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>EDUC&amp; 115  Child Development</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>EDUC&amp; 130  Guiding Behavior</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDUC&amp; 204  Inclusive Education</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>EDUC&amp; 240  Diversity in Education</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>BASTE 301  Leadership and Supervision</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BASTE 302  Integrated Health and Physical Education</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>BASTE 303  Language and Literacy Acquisition</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>BASTE 304  Effective and Meaningful Curriculum Design</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>BASTE 305  Observation and Assessment</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>BASTE 306  Law and Ethics</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>BASTE 307  Vision to Practice Anti-Bias Education</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>BASTE 401  Social Emotional Guidance and Trauma Informed Practices</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>BASTE 402  Meaningful Math Methods</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>BASTE 404  Individualized Teaching</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>BASTE 405  Residency Teaching 1</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>BASTE 406  Seminar 1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BASTE 407  Residency Teaching 2</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>BASTE 408  Seminar 2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BASTE 409  Issues of Child Abuse in Education</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Credits/Units</td>
<td>180</td>
<td></td>
</tr>
</tbody>
</table>

Bilingual Education Endorsement Option

This course is recommended in addition to the 180 credit degree

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASTE 403  Bilingual Teaching</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

• POWER, PRIVILEGE INEQUITY AND CULTURALLY RESPONSIVE PRACTICES: The candidate demonstrates awareness and evaluates own cultural identity, biases and beliefs while maintaining an understanding of differences in perspectives and approaches; and creates and maintains learning environments that are culturally safe and responsive for a variety of students and their families where all feel safe and have a place;
• PEDAGOGICAL SKILLS: The candidate will apply learning theories while incorporating a variety of evidence-based instructional strategies in teaching practices across disciplines that are culturally, linguistically, individually, and developmentally appropriate for students with a variety of learning needs, and includes navigation of technology and utilization of learning management systems;
• AREAS OF CONTENT KNOWLEDGE: The candidate will develop and implement central concepts of Language Arts, Science, Mathematics, Health and Fitness, Technology and Social Studies, Social and Emotional Development, all of which include 21st century skills such as critical thinking and the ability to identify resources the individual student needs for support, development and success;
• CHILD DEVELOPMENT AND INDIVIDUALIZATION: The candidate applies theory of child development, including awareness of cultural responsiveness and diverse learning needs in planning and implementing learning plans that support students for individual growth across all developmental domains including students who are second language learners;
• SUPPORTIVE COMMUNITIES: The candidate develops a teaching philosophy that includes the importance of relationships with students, families, colleagues and community resource agencies;
creates and maintains those relationships to support the growth and development of individual students;

- ASSESSMENT: The candidate will analyze and implement a variety of culturally and developmentally appropriate assessments while evaluating progress in collaboration with colleagues and families in order to guide the development of each student and demonstrate the ability to self-assess one's own teaching strategies;

- GUIDANCE AND SUPPORT: The candidate observes and analyzes the behavior of students, to develop and implement strategies that are culturally, developmentally and effective in maximizing the success of each student and of the classroom while utilizing resources available within and outside of the classroom;

- PROFESSIONALISM: The candidate, in pursuit of developing their teaching identity, is familiar with and engages with on-going professional development in alignment with district, state and national standards and trends, both collaboratively and individually;

- ORGANIZATION AND COMPLIANCE: The candidate appraises, implements strategies and monitors the Individual Family Service Plan (IFSP), Individual Education Plan (IEP), and 504 plans in collaboration with teams that include families, professionals and teachers to provide support necessary for an individual student’s success and has awareness of WAC’s and other codes of which apply to teaching standards;

- PLANNING: The candidate will prepare lesson plans based in theory and will routinely analyze, evaluate and synthesize the results of their own teaching practices and make appropriate changes that respond more effectively to student growth and development, recognizing cultural, ability and language diversity, while including appropriate partners in the process.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
WEB DEVELOPMENT

Gain foundational skills in web coding, multimedia, and web design practices that provide a well-rounded set of skills necessary for web developers to thrive in today’s market.

- Web Development (CP)(Plan Code: WMMWDC45) (p. 102)
- Web Development (AAT)(Plan Code: WMMWDAPT) (p. 102)

Web Development (CP)(Plan Code: WMMWDC45)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communication Skills</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>or PTWR 135</td>
<td>Introduction to Applied Technical Writing</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Computational Skills</strong></td>
<td></td>
</tr>
<tr>
<td>PTCS 110</td>
<td>Professional Technical Computational Skills (or completed MATH course with C or better where prereq requirements are MATH 96 or higher.)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Human Relations</strong></td>
<td></td>
</tr>
<tr>
<td>CTEC 165</td>
<td>Business Web Practices</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Major Area Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>COLL 101</td>
<td>College Essentials: Introduction to Clark</td>
<td>2</td>
</tr>
<tr>
<td>CTEC 121</td>
<td>Intro to Programming &amp; Problem Solving</td>
<td>5</td>
</tr>
<tr>
<td>CTEC 117</td>
<td>User Experience Design</td>
<td>4</td>
</tr>
<tr>
<td>CTEC 122</td>
<td>HTML Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>CTEC 126</td>
<td>JavaScript</td>
<td>5</td>
</tr>
<tr>
<td>CTEC 160</td>
<td>WordPress I</td>
<td>5</td>
</tr>
<tr>
<td>CTEC 166</td>
<td>Web Content and Social Media</td>
<td>5</td>
</tr>
<tr>
<td>CTEC 270</td>
<td>Web and Interface Design I</td>
<td>4</td>
</tr>
<tr>
<td>CTEC 271</td>
<td>Web and Interface Design II</td>
<td>4</td>
</tr>
<tr>
<td>DMA 101</td>
<td>Photoshop Raster Graphics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits/Units</strong></td>
<td>56</td>
</tr>
</tbody>
</table>

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Use written, verbal and visual means to effectively present and communicate web design projects.
- Demonstrate work and business ethics in web design practice.
- Synthesize multiple media assets with appropriate interactions and functions.
- Generate original ideas and utilize processes toward solving visual communication problems.
- Implement tools and technology to realize visual ideas.
- Interact, collaborate and implement projects with peers, clients or others in various work environments.
- Effectively organize and manage web design projects.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Web Development (AAT)(Plan Code: WMMWDAPT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communication Skills</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>or PTWR 135</td>
<td>Introduction to Applied Technical Writing</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Computational Skills</strong></td>
<td></td>
</tr>
<tr>
<td>PTCS 110</td>
<td>Professional Technical Computational Skills (or completed MATH course with C or better where prerequisite requirements are MATH 096 or higher)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Human Relations</strong></td>
<td></td>
</tr>
<tr>
<td>CTEC 165</td>
<td>Business Web Practices</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Major Area Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>COLL 101</td>
<td>College Essentials: Introduction to Clark</td>
<td>2</td>
</tr>
<tr>
<td>CTEC 121</td>
<td>Intro to Programming &amp; Problem Solving</td>
<td>5</td>
</tr>
<tr>
<td>CTEC 117</td>
<td>User Experience Design</td>
<td>4</td>
</tr>
<tr>
<td>CTEC 122</td>
<td>HTML Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>CTEC 126</td>
<td>JavaScript</td>
<td>5</td>
</tr>
<tr>
<td>CTEC 160</td>
<td>WordPress I</td>
<td>5</td>
</tr>
<tr>
<td>CTEC 166</td>
<td>Web Content and Social Media</td>
<td>5</td>
</tr>
<tr>
<td>CTEC 270</td>
<td>Web and Interface Design I</td>
<td>4</td>
</tr>
<tr>
<td>CTEC 271</td>
<td>Web and Interface Design II</td>
<td>4</td>
</tr>
<tr>
<td>DMA 101</td>
<td>Photoshop Raster Graphics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits/Units</strong></td>
<td>56</td>
</tr>
</tbody>
</table>
Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Web Foundations: Write, organize and publish well written content and code to engage web communities for personal and professional research, marketing, and interaction.
- Web Media: Create original visual graphics, audio, and integrated media design for the web.
- Web Design: Develop interactive websites from concept to design to execution with that provide an effective user experience and meet client needs.
- Web Development: Plan and execute industry standard code, web scripting, and server strategies to capture, integrate and manage data.
- Professional Practices: Demonstrate professional skills and business ethics to communicate and collaborate in various work environments.
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
WELDING TECHNOLOGY

The Welding Technology program prepares students for entry-level welder employment in production, job shop, or maintenance positions. Students master basic and advanced welding skills while operating heavy industrial fabrication equipment and state-of-the-art welding equipment. The curriculum places equal focus on the development of fabrication skills and techniques. Students will be expected to not only demonstrate their proficiency with various weld processes but their ability to fabricate projects within specified tolerances using those processes.

The multiple certificates and degree options available within this program allow students the option to stop-out and enter the workforce, and re-enter the program as needed, or complete their program of study without stopping. Students enrolled in a welding program will have the opportunity to earn multiple American Welding Society certifications.

- Flux Core Arc Welding (CA)(Plan Code: WETFCC20) (p. 104)
- Gas Metal Arc Welding (CA)(Plan Code: WETGMC20) (p. 104)
- Gas Tungsten Arc Welding (CA)(Plan Code: WETGTWC20) (p. 105)
- Shielded Metal Arc Welding (CA)(Plan Code: WETSMMC20) (p. 105)
- Welding Technician (CP) (Plan Code: WETWTC45) (p. 105)
- Welding Technologies (AAT)(Plan Code: WETWCAPT) (p. 106)

Flux Core Arc Welding (CA)(Plan Code: WETFCC20)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

### Major Area Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 120</td>
<td>Adult CPR and First Aid</td>
<td>1</td>
</tr>
<tr>
<td>WELD 102</td>
<td>Introduction to Welding</td>
<td>6</td>
</tr>
<tr>
<td>WELD 110</td>
<td>Welding Blueprint Reading</td>
<td>5</td>
</tr>
<tr>
<td>WELD 142</td>
<td>Flux Core Arc Welding</td>
<td>6</td>
</tr>
<tr>
<td>WELD 143</td>
<td>Flux Core Arc Fabrication</td>
<td>6</td>
</tr>
<tr>
<td>Total Credits/Units</td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

### Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Demonstrate Welding Technology principles of operation, terminology and safe practices related to Flux Core Arc Welding (FCAW) and cutting processes.
- Explain the use of FCAW electrodes.
- Demonstrate the functions of FCAW power sources, electrical parameters, output characteristics and auxiliary controls.
- Describe the criteria for visual inspection of FCAW weldments.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)

Gas Metal Arc Welding (CA)(Plan Code: WETGMC20)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 120</td>
<td>Adult CPR and First Aid</td>
<td>1</td>
</tr>
<tr>
<td>WELD 102</td>
<td>Introduction to Welding</td>
<td>6</td>
</tr>
<tr>
<td>WELD 110</td>
<td>Welding Blueprint Reading</td>
<td>5</td>
</tr>
<tr>
<td>WELD 140</td>
<td>Gas Metal Arc Welding</td>
<td>6</td>
</tr>
<tr>
<td>WELD 141</td>
<td>Gas Metal Arc Fabrication</td>
<td>6</td>
</tr>
<tr>
<td>Total Credits/Units</td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
### Gas Tungsten Arc Welding (CA) (Plan Code: WETGTC20)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 120</td>
<td>Adult CPR and First Aid</td>
<td>1</td>
</tr>
<tr>
<td>WELD 102</td>
<td>Introduction to Welding</td>
<td>6</td>
</tr>
<tr>
<td>WELD 110</td>
<td>Welding Blueprint Reading</td>
<td>5</td>
</tr>
<tr>
<td>WELD 240</td>
<td>Gas Tungsten Arc Welding</td>
<td>6</td>
</tr>
<tr>
<td>WELD 241</td>
<td>Gas Tungsten Arc Fabrication</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits/Units</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

### Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Demonstrate Welding Technology principles of operation, terms and safe practices related to Gas Tungsten Arc Welding (GTAW) and cutting processes.
- Explain the use of GTAW electrodes.
- Describe the functions of GTAW power sources, electrical parameters, output characteristics and auxiliary controls.
- Describe the criteria for visual inspection of GTAW weldments.
- Demonstrate Plasma Arc Welding and Plasma Arc Cutting principles of operation.
- Interpret blueprints and specifications.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website [https://programmap.clark.edu/academics](https://programmap.clark.edu/academics/)

### Shielded Metal Arc Welding (CA) (Plan Code: WETSMC20)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 120</td>
<td>Adult CPR and First Aid</td>
<td>1</td>
</tr>
<tr>
<td>WELD 102</td>
<td>Introduction to Welding</td>
<td>6</td>
</tr>
<tr>
<td>WELD 110</td>
<td>Welding Blueprint Reading</td>
<td>5</td>
</tr>
<tr>
<td>WELD 140</td>
<td>Gas Metal Arc Welding</td>
<td>6</td>
</tr>
<tr>
<td>WELD 141</td>
<td>Gas Metal Arc Fabrication</td>
<td>6</td>
</tr>
<tr>
<td>WELD 142</td>
<td>Flux Core Arc Welding</td>
<td>6</td>
</tr>
<tr>
<td>WELD 143</td>
<td>Flux Core Arc Fabrication</td>
<td>6</td>
</tr>
<tr>
<td>WELD 144</td>
<td>Shielded Metal Arc Welding</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits/Units</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

### Welding Technician (CP) (Plan Code: WETWTC45)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 110</td>
<td>Welding Blueprint Reading</td>
<td>5</td>
</tr>
<tr>
<td>WELD 144</td>
<td>Shielded Metal Arc Welding</td>
<td>6</td>
</tr>
<tr>
<td>WELD 145</td>
<td>Shielded Metal Arc Fabrication</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits/Units</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

### Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Demonstrate Welding Technology principles of operation, terms and safe practices related to Shielded Metal Arc Welding (SMAW) and cutting processes.
- Explain the use of SMAW electrodes.
- Describe the functions of SMAW power sources, electrical parameters, output characteristics and auxiliary controls.
- Describe the criteria for visual inspection of SMAW weldments.
- Demonstrate Plasma Arc Welding and Plasma Arc Cutting principles of operation.
- Interpret blueprints and specifications.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website [https://programmap.clark.edu/academics](https://programmap.clark.edu/academics/)
Successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- Demonstrate proficiency with basic shop drawings through assessments and sketching exercises. Identify and explain multi-view drawings, drawing line conventions, title blocks, bill of materials, dimensions and tolerances. Demonstrate the use and interpretation of welding symbols under AWS A2.4 standards, as they pertain to weld joint geometry.
- Demonstrate the ability to safely use all metal working shop equipment and perform safety inspections of said equipment.
- Demonstrate the ability to successfully weld and understand the processes and equipment used in manual and semi-automatic welding.
- Identify and describe Welding Technology principles of operation, terms and safe practices related to FCAW & GMAW welding and cutting processes. Understand and explain the use of specialty wire feed equipment. Apply FCAW/GMAW in out of position welding. Describe the criteria for visual inspection of FCAW/GMAW weldments. Apply OFC and PAC principles of operation to weld assignments.
- Identify and describe Welding Technology principles of operation, terms and safe practices related to FCAW welding and cutting processes. Understand and explain the use of FCAW electrodes. Describe the functions of FCAW power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of FCAW/TIG weldments. Describe OFC and CAC-A principles of operation.
- Identify and describe Welding Technology principles of operation, terms and safe practices related to GMAW welding and cutting processes. Understand and explain the use of GMAW electrodes. Describe the functions of GMAW power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of GMAW weldments. Describe OFC and PAC principles of operation.
- Identify and describe Welding Technology principles of operation, terms and safe practices related to GTAW welding and cutting processes. Understand and explain the use of GTAW electrodes. Describe the functions of GTAW power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of GTAW weldments. Describe PAW and PAC principles of operation.
- Identify and describe Welding Technology principles of operation, terms and safe practices related to OFC, CAC-A and SMAW welding and cutting processes. Understand and explain the use of SMAW electrodes. Describe the functions of SMAW power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of SMAW weldments. Describe OFC and CAC-A principles of operation.
- Identify and use Welding Technology principles of operation, terms and safe practices related to GMAW, FCAW, SAW welding, and OFC & PAC cutting processes. Understand and explain the use of wire electrodes in fabrication. Describe the functions of wire feed power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of wire feed weldments. Identify, select and proper use of layout tools.
- Obtain or work towards AWS certifications in multiple process. Enhance skills in FCAW, SMAW, GTAW, GMAW, SAW, PAC and Oxy/fuel cutting processes.
- Recognize and respond to emergencies effectively. Assess a victim(s) condition and determine proper care. Administer rescue breathing and CPR to adults. Identify injury prevention strategies. Assess a victim(s) condition and preform appropriate first aid. Determine the appropriate and proper response to situational questions and select the best answer.
- Recognize the many types of metals and their use. Write and speak clearly about the characteristics of metals. Define and use metallurgical terminology on tests, for written and/or oral reports and during individual and group presentations. Analyse lab results and understand their close relationship to everyday living. Apply metallurgical knowledge to welding and machining metals as well as other trade uses. Assess the value of metals in everyday use.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Describe the functions of PAW power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of PAW weldments.
- Identify and describe Welding Technology principles of operation, terms and safe practices related to GTAW welding and cutting processes. Understand and explain the use of GTAW electrodes. Describe the functions of GTAW power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of GTAW weldments. Describe PAW and PAC principles of operation.
- Identify and describe Welding Technology principles of operation, terms and safe practices related to OFC, CAC-A and SMAW welding and cutting processes. Understand and explain the use of SMAW electrodes. Describe the functions of SMAW power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of SMAW weldments. Describe OFC and CAC-A principles of operation.
- Identify and use Welding Technology principles of operation, terms and safe practices related to OFC, CAC-A and SMAW welding and cutting processes. Understand and explain the use of SMAW electrodes. Describe the functions of SMAW power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of SMAW weldments. Describe OFC and CAC-A principles of operation.
- Identify and describe Welding Technology principles of operation, terms and safe practices related to GMAW welding and cutting processes. Understand and explain the use of GMAW electrodes. Describe the functions of GMAW power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of GMAW weldments. Describe OFC and PAC principles of operation.
- Identify and describe Welding Technology principles of operation, terms and safe practices related to GTAW welding and cutting processes. Understand and explain the use of GTAW electrodes. Describe the functions of GTAW power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of GTAW weldments. Describe PAW and PAC principles of operation.
- Identify and describe Welding Technology principles of operation, terms and safe practices related to OFC, CAC-A and SMAW welding and cutting processes. Understand and explain the use of SMAW electrodes. Describe the functions of SMAW power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of SMAW weldments. Describe OFC and CAC-A principles of operation.
- Identify and use Welding Technology principles of operation, terms and safe practices related to OFC, CAC-A and SMAW welding and cutting processes. Understand and explain the use of SMAW electrodes. Describe the functions of SMAW power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of SMAW weldments. Describe OFC and CAC-A principles of operation.
Successful completion of this program, students will be able to:

- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate clearly interpersonal/human relations skills. (GE)
- Recognize and respond to emergencies effectively. Assess a victim(s) condition and determine proper care. Administer rescue breathing and CPR to adults. Identify injury prevention strategies. Assess a victim(s) condition and perform appropriate first aid. Determine the appropriate and proper response to situational questions and select the best answer.
- Demonstrate the ability to safely use all metal working shop equipment and perform safety inspections of said equipment.
- Demonstrate the ability to successfully weld and understand the processes and equipment used in manual and semi-automatic welding.
- Demonstrate proficiency with basic shop drawings through assessments and sketching exercises. Identify and explain multi-view drawings, drawing line conventions, title blocks, bill of materials, dimensions and tolerances. Demonstrate the use and interpretation of welding symbols under AWS A2.4 standards, as they pertain to weld joint geometry.
- Identify and describe Welding Technology principles of operation, terms and safe practices related to GMAW welding and cutting processes. Understand and explain the use of GMAW electrodes. Describe the functions of GMAW power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of GMAW weldments. Describe OFC and PAC principles of operation.
- Identify and describe Welding Technology principles of operation, terms and safe practices related to GMAW welding and cutting processes. Understand and explain the use of OFC electrodes. Apply GMAW in the assembly of layout projects. Describe the criteria for visual inspection of GMAW weldments. Apply OFC and PAC principles of operation to layout projects.
- Identify and describe Welding Technology principles of operation, terms and safe practices related to OFC, PAC and CAG-A principles of operation.
- Identify and describe Welding Technology principles of operation, terms and safe practices related to FCAW, SAW and OFC & PAC cutting processes. Understand and explain the use of FCAW electrodes. Describe the functions of FCAW power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of FCAW weldments. Describe OFC and CAG-A principles of operation.
- Obtain or work towards AWS certifications in multiple process. Enhance skills in FCAW, SMAW, GTAW, GMAW, SAW, PAC and Oxy/fuel cutting processes.
- Identify and use Welding Technology principles of operation, terms and safe practices related to OFC, PAC and GTAW welding and cutting processes. Understand and explain the use of GTAW electrodes. Describe the functions of GTAW power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of GTAW weldments. Identify, select and proper use of layout tools.
- Identify and describe Welding Technology principles of operation, terms and safe practices related to GMAW, FCAW, SAW welding, and OFC & PAC cutting processes. Understand and explain the use of wire electrodes in fabrication. Describe the functions of wire feed power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of wire feed weldments. Identify, select and proper use of layout tools.
• Identify and describe Welding Technology principles of operation, terms and safe practices related to GTAW welding and cutting processes. Understand and explain the use of GTAW electrodes. Describe the functions of GTAW power sources, electrical parameters, output characteristics and auxiliary controls. Describe the criteria for visual inspection of GTAW weldments. Describe PAW and PAC principles of operation.

• Recognize the many types of metals and their use. Write and speak clearly about the characteristics of metals. Define and use metallurgical terminology on tests, for written and/or oral reports and during individual and group presentations. Analyze lab results and understand their close relationship to everyday living. Apply metallurgical knowledge to welding and machining metals as-well-as other trade uses. Assess the value of metals in everyday use.

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)
COURSE DESCRIPTIONS

A
• Accounting (ACCT/ACCT&) (p. 111)
• Addiction Counselor Education (ACED) (p. 112)
• Allied Health (AH) (p. 114)
• American Sign Language (ASL/ASL&) (p. 115)
• Anthropology (ANTH/ANTH&) (p. 116)
• Art (ART/ART&) (p. 117)
• Astronomy (ASTR) (p. 121)
• Automotive Technology (AUTO) (p. 122)

B
• BAS Applied Management (BASAM) (p. 126)
• BAS Human Services (BASHS) (p. 128)
• BAS Teacher Education (BASTE) (p. 129)
• Biology (BIOL/BIOL&) (p. 131)
• Business Administration (BUS/BUS&) (p. 134)

C
• Chemistry (CHEM/CHEM&) (p. 136)
• College and Academic Preparation (CAP/CCAP) (p. 139)
• College Preparation (COLL) (p. 144)
• Communication Studies (CMST/CMST&) (p. 145)
• Computer Science & Engineering (CSE) (p. 146)
• Computer Technology (CTEC) (p. 149)
• Cuisine (CUIS) (p. 153)

D
• Dental Hygiene (DH) (p. 156)
• Diesel Technology (DIES) (p. 160)
• Digital Media Arts (DMA) (p. 161)
• Drama (DRMA/DRMA&) (p. 162)

E
• Early Childhood Education (ECE) (p. 163)
• Early Childhood Education (ECED/ECED&) (p. 165)
• Economics (ECON/ECON&) (p. 166)
• Education (EDUC/EDUC&) (p. 167)
• Emergency Medical Technician (EMT) (p. 168)
• Engineering (ENGR/ENGR&) (p. 169)
• Engineering Technology Construction Management (ETCM) (https://onlinencatalog.clark.edu/course-descriptions/etcm/)
• English (ENGL/ENGL&) (p. 172)
• English as a Second Language (ESL) (p. 176)
• Environmental Science (ENVS/ENVS&) (p. 178)

G
• Geography (GEOG/GEOG&) (p. 180)
• Geology (GEOL/GEOL&) (p. 182)

H
• Health & Physical Education (HPE) (p. 183)
• Health (HLTH) (p. 184)
• Health Information Management (HIM) (p. 185)
• History (HIST/HIST&) (p. 187)
• Honors (HONS) (p. 189)
• Human Services Substance Abuse (HSSA&) (p. 190)

I
• Intensive English Language Program (IELP) (p. 191)

J
• Japanese (JAPN/JAPN&) (p. 193)
• Journalism (JOUR) (p. 194)

M
• Management (MGMT) (p. 196)
• Mathematics (MATH/MATH&) (p. 197)
• Mechatronics (MTX) (p. 200)
• Medical Assisting (MA) (p. 203)
• Meteorology (METR) (p. 205)
• Music (MUSC/MUSC&/MUSCA) (p. 206)

N
• Network Technology (NTEC) (p. 216)
• Nursing (NURS) (p. 219)
• Nutrition (NUTR/NUTR&) (p. 221)

O
• Oceanography (OCEA&) (p. 222)

P
• Pharmacy (PHAR) (p. 223)
• Philosophy (PHIL/PHIL&) (p. 225)
• Phlebotomy (PHLE) (p. 226)
• Physical Education (PE) (p. 227)
• Physical Education Dance (PEDNO) (p. 232)
• Physical Education Exercise Science (PEEXS) (p. 234)
• Physical Education Martial Arts (PEMAR) (p. 235)
• Physical Science (PHSC) (p. 236)
• Physics (PHYS/PHYS&) (p. 237)
• Political Science (POLS/POLS&) (p. 239)
• Professional Baking (PBAK) (p. 241)
• Professional Technical Computational Skills (PTCS) (p. 243)
• Professional Technical Writing (PTWR) (p. 244)
• Psychology (PSYC/PSYC&) (p. 245)

S
• Sociology (SOC/SOC&) (p. 246)
• Spanish (SPAN/SPAN&) (p. 247)
• Surveying & Geomatics (SURV) (p. 248)
T
• Tutoring (TUTR) (p. 250)

W
• Welding (WELD) (p. 251)
• Women's Studies (WS) (p. 253)
ACCOUNTING (ACCT/ACCT&)

<table>
<thead>
<tr>
<th>Basic Accounting Procedures</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 129</td>
<td>5 Credits/Units</td>
</tr>
<tr>
<td>5 hours of lecture</td>
<td></td>
</tr>
<tr>
<td>Analyze financial transactions using the accounting equation and concepts by journalizing, posting transactions to the general ledger, preparing adjustments and closing entries, preparing financial statements that complete the accounting cycle, use an accounting system that has subsidiary ledgers and special journals and post transactions of a merchandising operation using perpetual and periodic inventory systems. [GE]</td>
<td></td>
</tr>
</tbody>
</table>

Accounting Applications

<table>
<thead>
<tr>
<th>Accounting Applications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 136</td>
<td>3 Credits/Units</td>
</tr>
<tr>
<td>3 hours of lecture</td>
<td></td>
</tr>
<tr>
<td>Prerequisite: ACCT 129 or (BUS 28 and BUS 29) (grades of &quot;C&quot; or higher). Compute the Cost of Inventories and Cost of Goods Sold using the periodic and perpetual inventory systems. Perform a bank reconciliation and a reconciliation of petty cash fund. Analyze the accounts and notes receivables and journalize for probable uncollectibles. Calculate due dates and interest due on notes receivable. Analyze long-term assets and calculate depreciation, depletion and amortization. Calculate payroll, payroll taxes and analyze current liabilities to determine adjustments. [GE]</td>
<td></td>
</tr>
</tbody>
</table>

Principles of Accounting I

<table>
<thead>
<tr>
<th>Principles of Accounting I</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 201</td>
<td>5 Credits/Units</td>
</tr>
<tr>
<td>5 hours of lecture</td>
<td></td>
</tr>
<tr>
<td>Prerequisite: ENGL&amp; 101 (grade of &quot;C&quot; or higher) and MATH 92 (grade of &quot;C&quot; or higher) or placement into Math level 30. Accounting theory and practice including the entire accounting cycle, accounting for merchandising operations, receivables, and current liabilities. [GE, SE]</td>
<td></td>
</tr>
</tbody>
</table>

Principles of Accounting II

<table>
<thead>
<tr>
<th>Principles of Accounting II</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 202</td>
<td>5 Credits/Units</td>
</tr>
<tr>
<td>5 hours of lecture</td>
<td></td>
</tr>
<tr>
<td>Prerequisite: ACCT&amp; 201 (grade of &quot;C&quot; or higher) Continuation of ACCT&amp; 201 with emphasis on payroll, partnership and corporation accounting, statement of cash flow, analysis and interpretation of financial statements, plant assets, depreciation, time value of money, long-term liabilities, and investments. [GE, SE]</td>
<td></td>
</tr>
</tbody>
</table>

Principles of Accounting III

<table>
<thead>
<tr>
<th>Principles of Accounting III</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 203</td>
<td>5 Credits/Units</td>
</tr>
<tr>
<td>5 hours of lecture</td>
<td></td>
</tr>
<tr>
<td>Prerequisite: ACCT&amp; 201 (grade of &quot;C&quot; or higher) Continuation of ACCT&amp; 201 with emphasis on responsibility and departmental accounting, manufacturing operations, cost accounting, budgeting and standard costs, cost-volume-profit analysis, incremental analysis and capital budgeting. [GE, SE]</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>ACED 101</td>
<td>Addictionology</td>
</tr>
<tr>
<td></td>
<td><strong>Prerequisite:</strong> ENGL&amp; 101 (grade of &quot;C&quot; or higher) or eligibility for ENGL&amp; 102</td>
</tr>
<tr>
<td></td>
<td>Biological, psychological, and sociological theories of the use of major drugs of abuse, as well as addictive behaviors. Explores the distinction between use, abuse and addiction. For majors and non-majors. [GE, HR, SE, SS]</td>
</tr>
<tr>
<td>ACED 125</td>
<td>Group Counseling In Addictions</td>
</tr>
<tr>
<td></td>
<td>Department consent required for enrollment. Use of group process for modifying individual attitudes and actions. Application of group counseling theories to an addiction client population. [GE]</td>
</tr>
<tr>
<td>ACED 132</td>
<td>Introduction to Counseling Family Members</td>
</tr>
<tr>
<td></td>
<td>Department consent required for enrollment. Knowledge and skills for working with significant persons in the addicted client's environment. Emphasis on counseling immediate family members. [GE]</td>
</tr>
<tr>
<td>ACED 136</td>
<td>Law and Ethics In Addictions Counseling</td>
</tr>
<tr>
<td></td>
<td>Department consent required for enrollment. Examination of state and federal laws governing the addictions field, including the Washington Administrative Code for CDP's. Legal and ethical duties in the client-counselor relationship. [GE]</td>
</tr>
<tr>
<td>ACED 137</td>
<td>Addictions and Mental Illness</td>
</tr>
<tr>
<td></td>
<td>Department consent required for enrollment. Differential and dual diagnosis. Use of current edition of Diagnostic and Statistical Manual. Referral and networking with mental health professionals; relapse prevention techniques; screening that includes comorbidity. [GE]</td>
</tr>
<tr>
<td>ACED 138</td>
<td>Prevention and Education In The Community</td>
</tr>
<tr>
<td></td>
<td>Department consent required for enrollment. Application of the Public Health and Social Development models to prevention activities. Knowledge of community resources in developing community education and prevention programs. [GE]</td>
</tr>
<tr>
<td>ACED 160</td>
<td>Pharmacology of Drugs of Abuse</td>
</tr>
<tr>
<td></td>
<td>Department consent required for enrollment. Pharmacological effects of alcohol and drugs on the human body and mind. [GE]</td>
</tr>
<tr>
<td>ACED 164</td>
<td>Adolescent Addiction Assessment &amp; Treatment</td>
</tr>
<tr>
<td></td>
<td>Department consent required for enrollment. An examination of adolescent development and the detrimental impact of addiction on youth development. The assessment process and treatment modalities for adolescents are presented. [GE]</td>
</tr>
<tr>
<td>ACED 170</td>
<td>Air- and Blood-Borne Pathogens</td>
</tr>
<tr>
<td></td>
<td>Department consent required for enrollment. Skills to reduce impact of air- and blood-borne pathogens on addiction clients. HIV/AIDS, pathogen, and suicidality brief risk intervention for the addiction client population. Community resources available to clients. [GE]</td>
</tr>
<tr>
<td>ACED 201</td>
<td>Theories of Counseling</td>
</tr>
<tr>
<td></td>
<td>Department consent required for enrollment. Introduces the major counseling theories and techniques focusing on individual counseling within a Human Services framework. Students are encouraged to develop a counseling orientation based on these theories which include their own personal and professional ethical orientation. For majors and non-majors. [GE, HR]</td>
</tr>
<tr>
<td>ACED 202</td>
<td>Multi-Cultural Addictions Counseling</td>
</tr>
<tr>
<td></td>
<td>Department consent required for enrollment. Culturally learned assumptions that shape a counseling interview. Culture as the heart of any counseling relationship. The impact of culture on treatment planning with an addiction client population. [GE]</td>
</tr>
<tr>
<td>ACED 203</td>
<td>Case Management In Addiction Medicine</td>
</tr>
<tr>
<td></td>
<td>Department consent required for enrollment. Requirements for managing cases in treatment clinics: treatment and aftercare plans, notes, testing, preparation of accurate reports and other documents, confidentiality, and advocacy. ASAM criteria and treatment. [GE]</td>
</tr>
<tr>
<td>ACED 204</td>
<td>Introduction to Addiction Counseling Skills</td>
</tr>
<tr>
<td></td>
<td>Department consent required for enrollment. Introduces the major counseling theories and techniques focusing on individual counseling with an addiction client population. [GE]</td>
</tr>
<tr>
<td>ACED 205</td>
<td>Advanced Techniques for Addiction Counsel</td>
</tr>
<tr>
<td></td>
<td>Department consent required for enrollment. Development of skills needed to establish and maintain effective helping relationships with clients. Integration of relapse prevention counseling in treatment. [GE]</td>
</tr>
<tr>
<td>ACED 210</td>
<td>Field Placement I</td>
</tr>
<tr>
<td></td>
<td>Department consent required for enrollment. Ten or twenty hours weekly of on-the-job supervised experience applying counseling theories and practiced. Addiction Counselor Competencies are used as a framework for assessment. [GE]</td>
</tr>
<tr>
<td>ACED 211</td>
<td>Field Placement II</td>
</tr>
<tr>
<td></td>
<td>Department consent required for enrollment. Ten or twenty hours weekly of on-the-job supervised experience applying counseling theories and practiced. Addiction Counselor Competencies will be used as a framework for assessment. [GE]</td>
</tr>
</tbody>
</table>
Selected Topics
ACED 280 1-3 Credits/Units
3 hours of lecture
Prerequisite: ENGL& 101 (grade of "C" or higher) or eligibility for ENGL& 102
Selected topics in Chemical Dependence. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE]

Special Projects
ACED 290 1-5 Credits/Units
5 hours of lecture
Department consent required for enrollment. Opportunity to plan, organize and complete special projects approved by the department. [GE]
ALLIED HEALTH (AH)

Basic Concepts of Anatomy and Physiology I
AH 100  3 Credits/Units
2 hours of lecture / 2 hours of lab
Admission into the program required for enrollment. Introduction to basic anatomical and physiological concepts as they apply to allied health occupations (excluding nursing and dental hygiene). Basic overview of body systems including integumentary, musculoskeletal, cardiovascular, lymphatic, immune, and endocrine systems. Includes a laboratory component that is integral to the course concepts and skills. [GE]

Basic Concepts of Anatomy and Physiology II
AH 101  3 Credits/Units
2 hours of lecture / 2 hours of lab
Prerequisite: AH 100 (grade of "C" or higher)
Admission into the program required for enrollment. Introduction to basic anatomical and physiological concepts as they apply to allied health occupations (excluding nursing and dental hygiene). Basic overview of body systems including nervous, sensory, respiratory, digestive, urinary, and reproductive systems. Includes a laboratory component that is integral to the course concepts and skills. [GE]

Health Care Delivery & Career Exploration
AH 104  3 Credits/Units
3 hours of lecture
Introduction to the healthcare delivery system in the United States and the many health professions available as career choices, as well as their academic, licensing, and certification requirements. [GE]

Medical Terminology I
AH 110  3 Credits/Units
3 hours of lecture
Introduction to medical word building with common medical roots, prefixes and suffixes. Study of terms related to the body as a whole, as well as terms to human anatomy, pathology, diagnostic tests, clinical procedures, and abbreviations associated with each body system. Medical Terminology I covers the following body systems: integumentary, musculoskeletal, cardiovascular, lymphatic, immune, and endocrine systems. Includes spelling and pronunciation of terms. [GE]

Medical Terminology II
AH 111  3 Credits/Units
3 hours of lecture
Prerequisite: AH 110 (grade of "C" or higher)
Continuation of Medical Terminology I, AH 110. Study of common medical roots, prefixes and suffixes and terms related to human anatomy, physiology, pathology, diagnostic tests, clinical procedures, and abbreviations associated with each body system. Medical Terminology II covers the following body systems: nervous, sensory, respiratory, digestive, urinary and reproductive systems. Course work will include spelling and pronunciation of terms. [GE]

Medical Terminology for Surgical Technology
AH 115  5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. Introduction to medical word building with common medical roots, prefixes, and suffixes. Study of terms related to the body, as well as terms related to human anatomy, pathology, diagnostic tests, clinical procedures, and abbreviations associated with each body system. Covers the following body systems: integumentary, musculoskeletal, nervous, sensory, circulatory, cardiovascular, lymphatic, respiratory, digestive, genitourinary, reproductive, and endocrine. Will cover commonly used abbreviations and the DO NOT USE list of abbreviations. [GE]

Bloodborne Pathogens in Healthcare Settings
AH 120  1 Credit/Unit
1 hours of lecture
Comprehensive study of primary bloodborne pathogens of concern in healthcare settings: HIV, hepatitis B, and hepatitis C. [GE]

Medical Microbiology
AH 150  5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. An introduction to basic microbiology theory. Learn the classifications of microorganisms, modes of disease transmission and disease process and epidemiology and practices in the control of pathogenic microorganisms. [GE]

Pathophysiology for Surgical Technology
AH 200  5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. Introduction to the general mechanisms of systemic disease including etiology, physical signs, and symptoms. Etiology focus will include infectious mechanisms, hereditary contributions, external physical agents and autoimmune conditions. Discussions of differences between disease and illness to include basic principles of pharmacology laboratory and diagnostic tests, overview of common therapies, prognosis and public health issues as it relates to surgical technology. [GE]

Statistics for Health Care Professionals
AH 261  3 Credits/Units
3 hours of lecture
Prerequisite: CAP 42 (grade of "C" or higher) or placement into Math level 10
Admission into the program required for enrollment. Introduction to statistical computations and analysis used in healthcare. Topics include patient census, occupancy, length of stay, mortality and morbidity statistics. [CP, GE]

Special Projects
AH 290  1-5 Credits/Units
5 hours of lecture
Opportunity to plan, organize and complete special projects approved by the faculty of the department. [GE]
# American Sign Language (ASL/ASL&)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits/Units</th>
<th>Hours of Lecture</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASL 125</td>
<td>American Deaf Culture</td>
<td>5</td>
<td>5</td>
<td>This course will focus on topics in the culture of deaf people including</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>studies of their beliefs, practices and language. [GE, HA, SE]</td>
</tr>
<tr>
<td>ASL 280</td>
<td>Selected Topics</td>
<td>1-3</td>
<td>3</td>
<td>Selected topics in American Sign Language. Topics vary and course theme and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>content change to reflect new topics. Because the course varies in content,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>it is repeatable for credit. Individual topics are listed in the term class</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>schedules. [GE][PNP]</td>
</tr>
<tr>
<td>ASL 290</td>
<td>Special Projects</td>
<td>1-5</td>
<td>5</td>
<td>Opportunity to plan, organize and complete special projects approved by the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>department. [GE]</td>
</tr>
<tr>
<td>ASL 121</td>
<td>Am Sign Language I</td>
<td>5</td>
<td>5</td>
<td>Introduction to American Sign Language emphasizing instruction and practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>in expressive and receptive ASL skills. Focus on basic vocabulary, grammar,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>and cultural aspects of the deaf community. [GE, HA, SE]</td>
</tr>
<tr>
<td>ASL 122</td>
<td>Am Sign Language II</td>
<td>5</td>
<td>5</td>
<td>Prerequisite: ASL 121 (grade of &quot;C&quot; or higher). Students with prior language</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>experience can request consent of instructional unit. Continuation of ASL I,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>developing skills for the student with a basic knowledge of ASL. Focus on</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>grammar, idioms, vocabulary building, culture and language. [GE, HA, SE]</td>
</tr>
<tr>
<td>ASL 123</td>
<td>Am Sign Language III</td>
<td>5</td>
<td>5</td>
<td>Prerequisite: ASL 122 (grade of &quot;C&quot; or higher). Students with prior language</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>experience can request consent of instructional unit. Continuation of ASL II,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>developing grammar and vocabulary skills, with emphasis on students expressive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>and receptive skills. Topics include abstract concepts of language and the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>deaf culture's values, attitudes, and community. [GE, HA, SE]</td>
</tr>
<tr>
<td>ASL 221</td>
<td>Am Sign Language IV</td>
<td>5</td>
<td>5</td>
<td>Prerequisite: ASL 123 (grade of &quot;C&quot; or higher). Students with prior language</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>experience can request consent of instructional unit. First of the second-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>year sequence in studying the language of Deaf Americans. Topics include</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>developing receptive and expressive skill and fluency; correct formation of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>signs, movement, rhythm, phrasing and clarity; vocabulary building; developing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>proficiency in ASL grammar. Students will develop a respect for ASL as a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>language, including acceptance and appreciation of its diverse regional and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>personal applications within its culture. [GE, HA, SE]</td>
</tr>
<tr>
<td>ASL 222</td>
<td>Am Sign Language V</td>
<td>5</td>
<td>5</td>
<td>Prerequisite: ASL 221 (grade of &quot;C&quot; or higher). Students with prior language</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>experience can request consent of instructional unit. Second of second-year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>sequence in studying the language of Deaf Americans. Topics include developing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>receptive and expressive skills in dialogue; applying ASL informal discourse</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>styles; vocabulary building; developing proficiency in ASL grammar for</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>recreation, social services, government and the workplace. Students will</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>develop a respect for ASL as a language, including acceptance and appreciation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>of its diverse regional and personal applications within its culture. [GE,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HA, SE]</td>
</tr>
<tr>
<td>ASL 223</td>
<td>Am Sign Language VI</td>
<td>5</td>
<td>5</td>
<td>Prerequisite: ASL 222 (grade of &quot;C&quot; or higher). Students with prior language</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>experience can request consent of instructional unit. Third of second-year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>sequence in studying the language of Deaf Americans. Continuing development</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>of receptive and expressive skills and fluency. Emphasis on increasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>vocabulary, classifier, phrases and grammatical usage with a decrease</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dependency on English syntax structure. Students will be able to initiate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>and converse in topics such as technical fields of work, college level</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>academic subjects, politics, and religion with consistent grammatical</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>accuracy with native ASL users. [GE, HA, SE]</td>
</tr>
</tbody>
</table>
ANTHROPOLOGY (ANTH/ANTH&)

Selected Topics

ANTH 280
1-3 Credits/Units
3 hours of lecture
Selected topics in Anthropology. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE, SE]

Special Projects

ANTH 290
1-5 Credits/Units
5 hours of lecture
Department consent required for enrollment. Opportunity to plan, organize, and complete special projects approved by the department. [GE]

Introduction to Archaeology

ANTH& 204
5 Credits/Units
5 hours of lecture
Study of ancient and prehistoric cultures of the world. Introduction to theories and techniques of archaeological investigation. [GE, SE, SS]

Introduction to Cultural Anthropology

ANTH& 206
5 Credits/Units
5 hours of lecture
The concept of culture, a study of cultures directed toward a broad understanding of how people view their world, cope with their environments, and organize their lives. [GE, SE, SS]

Bioanthropology W/Lab

ANTH& 215
5 Credits/Units
4 hours of lecture / 2 hours of lab
The biological study of human beings and primates, past and present: human genetics, biological adaptation and variation, evolutionary principles, the primate order, human origins, and applied biological anthropology. Fulfills social science or laboratory science (lab) distribution credit. [GE, NS, NS-LAB, SE, SS]

Primatology

ANTH& 245
5 Credits/Units
5 hours of lecture
Reviews current understandings of behavioral and biological diversity in the Primate order. Focus is on living primates and how they are distributed across the globe, the major biological differences between primate groups and what field and captive research has discovered regarding the range of social behaviors, group patterns, foods, communication systems and cognitive abilities they display. Students practice basic research techniques used to study primate behavior in the wild and examine the major challenges faced by modern conservation efforts in protecting wild primate habitats. [GE, NS, SE]
ART (ART/ART&)

Update made on 5.28.24. See course correction page (https://catalog.clark.edu/corrections/course-corrections/) for details.

3D Design

ART 101 5 Credits/Units
3 hours of lecture / 4 hours of lab
Foundational art course working with line, shape, value, color, and the principles of spatial organization. May include designing with computers. [GE, HB, SE][PNP]

Drawing

ART 103 5 Credits/Units
3 hours of lecture / 4 hours of lab
Introduction to drawing with a focus on expressive content and accurate seeing, measurement, and proportion. Assignments stress the use of line, gesture, value, and composition through observations of still life and the figure. Classes may include a nude model. [GE, HB, SE][PNP]

Observational Drawing

ART 104 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: ART 103 (grade of “C” or higher)
Continuation of ART 103. Analysis and control of value, color, and composition using a variety of techniques and drawing materials. Emphasis on accurate seeing, measurement, and proportion through still life, landscape, and the figure. Classes may include a nude model. [GE, HB, SE][PNP]

Comics

ART 105 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: ART 104 (grade of “C” or higher)
Introduction to comics and graphic narratives in a variety of genres and media. Emphasis is on form and process from ideation to finished art. Classes may include a nude model. [GE, HB, SE][PNP]

Conceptual Design

ART 110 3 Credits/Units
2 hours of lecture / 2 hours of lab
Prerequisite: ART 101 (grade of “C” or higher)
Introduction to creativity, conceptual thinking, and visual problem solving for artists, designers and other creative professionals. Focus on strategies and methods for developing original ideas such as brainstorming, sketching, automatic writing, etc; then translating those ideas to visual form using a variety of media and techniques. Hands-on studio activities contextualized by theoretical readings and in-class discussions. [GE, HB, SE]

3D Design

ART 117 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: ART 110
Introduction to sculptural design concepts including volume, space and scale. Explores a variety of media and construction techniques, with a focus on creative problem solving in the context of sculptural objects. Introduction to 3D modeling software and applicable computer aided manufacturing technologies such as laser cutting, 3D scanning, and 3D printing. [GE, HB, SE][PNP]

Time-Based Art and Design

ART 118 5 Credits/Units
3 hours of lecture / 4 hours of lab
Introduction to the concepts and tools of moving imagery including digital video, sound, animation, and elements of installation and performance. This course will explore the personal, cultural, formal, political, and historical aspects of the medium through readings, writings and critical reflection of relevant 20th and 21st century artworks. Activities include lectures, software and equipment tutorials, and studio time for experimental project development. [GE, HA, SE]

Printmaking

ART 120 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: ART 123 (grade of “C” or higher)
Introduction to basic materials, techniques, and concepts in a variety of printmaking processes. Special topics vary from term to term, but may include linocut, woodcut, screen printing, monotype, collagraph, drypoint, and various photo sensitive print processes. Stencils will be created through both hand drawn and digitally generated artwork. This is an introductory course, with no pre-requisite, however it will build on some drawing and design skills. [GE, HB, SE][PNP]

Printmaking II

ART 121 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: ART 120 (grade of “C” or higher)
Builds on the skills learned in ART 120 Printmaking I, and will refine handling of basic materials and concepts in a variety of printmaking processes. Students are welcome to choose an area of concentration within different printing disciplines. [GE, HB, SE][PNP]

Printmaking III

ART 122 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: ART 121 (grade of “C” or higher)
Builds on the skills learned in ART 120 Printmaking I, and ART 121 Printmaking II, and will refine handling of basic materials and concepts in a variety of printmaking processes. Projects are more self-directed and independent in this third class of the Printmaking sequence. [GE, HB, SE][PNP]

Photography I

ART 123 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: ART 120
Basic camera handling of both digital and 35mm Single Lens Reflex (SLR) cameras including metering and exposure. Film processing, printing, and darkroom procedures will be taught, as well as basic digital workflow. Special emphasis on the elements of photographic composition & design, ethical issues, aesthetic vocabulary, and the study of how images communicate. [GE, HB, SE][PNP]

Photography II

ART 124 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: ART 123 (grade of “C” or higher)
Continuation of ART 123. Particular emphasis on self-expression, series, sequence, and narrative. Special topics vary from quarter to quarter, but may include medium and large format photography, various image transfer techniques, liquid photographic emulsions, studio lighting, and advanced digital editing. Practice small group discussion to demonstrate visual literacy and develop media specific vocabulary. [GE, HB, SE][PNP]
Photography

ART 125
3 hours of lecture / 4 hours of lab

Prerequisite: ART 124 (grade of "C" or higher)
Continuation of ART 124. Opportunities to develop additional technical skill and continued exploration of self-expression. Projects are more self-directed and independent in this third class of Photography sequence. [GE, HB, SE][PNP]

Photographic Storytelling

ART 131
2 hours of lecture / 2 hours of lab

Introduction to photographic storytelling. Topics include: examining historical use of the medium, analysis of narrative photographic genres, and the creation of a personal photographic essay. Emphasis placed on seeing photographically and creating narrative. Includes field trip. Appropriate for non-majors and beginning photo students. Previous camera experience helpful, but not required. Student must provide digital camera. [GE, HA, SE]

Publication Production

ART 170
6 hours of lab

Prerequisite: ART 101 (grade of "C" or higher).
First of two courses offering an opportunity to learn real-world design and production for publication. Intended for art and graphic design majors and those interested in the publishing field. Topics vary by quarter and may include: Adobe InDesign for layout, preparing artwork for print, editing and proofing copy, creating promotional materials including social media, working with printers, budgeting, managing the project and working with a team. [GE, HB, SE][PNP]

Graphic Design Exploration

ART 172
5 hours of lecture

Survey of the discipline of graphic design and its cultural and historical context. Focus on how graphic design functions as a mode of visual communication and its role in society. Presented with a balance of theoretical and hands-on learning methods. Appropriate for non-majors. [GE, HA, SE]

Graphic Design Studio

ART 173
3 hours of lecture / 4 hours of lab

Prerequisite: ART 101 and (DMA 101 or DMA 102) (grades of "C" or higher)
Practical introduction to the discipline of graphic design. The elements and principles of design and the design process will be reviewed through a series of hands-on projects stressing visual literacy and unity of form, and utilizing common tools of the trade, including computers. [GE, HB, SE]

Typography

ART 174
4 hours of lecture / 2 hours of lab

Prerequisite: DMA 102 (grade of "C" or higher)
An introduction to the art and craft of designing and arranging type as applied to graphic design practice. Topics include the anatomy and nomenclature of letterforms, the history and classification of typefaces, choosing and combining fonts, using InDesign for typesetting, and may include the creation of original letterform designs. [GE, HB, SE]

Ceramics

ART 180
3 hours of lecture / 4 hours of lab


Ceramics II

ART 181
3 hours of lecture / 4 hours of lab

Prerequisite: ART 180 (grade of "C" or higher)
Potter's wheel techniques of centering and throwing a variety of shapes, attaching handles and spouts, and fitting lids. Optional advanced hand-building assignments offered. Introduction to kiln stacking and firing. [GE, HB, SE][PNP]

Metal Arts I

ART 182
3 hours of lecture / 4 hours of lab

Prerequisite: ART 181 (grade of "C" or higher)
Combining hand and wheel techniques to create original pieces as sculpture or for specific functions. Mold making, slip casting, underglazing, and kiln firing. [GE, HB, SE][PNP]

Metal Arts II

ART 189
3 hours of lecture / 4 hours of lab

Prerequisite: ART 189 (grade of "C" or higher)
Aesthetic expression within the context of applied design using metal. Design and technical skills will be equally emphasized. Fabrication and design of jewelry and other objects of metal. History of the fabrication of metal objects in other cultures and through other contemporary approaches. Techniques covered may include piercing, riveting, soldering, sizing jewelry, making chain, and use of hand tools. [GE, HB, SE][PNP]

Metal Arts III

ART 190
3 hours of lecture / 4 hours of lab

Prerequisite: ART 190 (grade of "C" or higher)
Continuation of ART 189. Aesthetic expression within the context of applied design using metal. Design and technical skills will be equally emphasized. Fabrication and design of jewelry and other objects of metal. History of the fabrication of metal objects in other cultures and through other contemporary approaches. Techniques covered may include hinge fabrication, pillow-forming with the use of a hydraulic press, fold-forming, scoring and bending, and advanced patination work. [GE, HB, SE][PNP]

Cooperative Work Experience

ART 199
15 hours of clinical

Supervised work experience in art or photography. Completion of specific learning objectives and employer evaluation. [GE]
The Human Figure I
ART 203 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: ART 103 (grade of "C" or higher)
Working from the male and female form in a variety of drawing media. Emphasis on accurate seeing, measuring, and proportion of the human body in space. Classes include a nude model. [GE, HB, SE]

The Human Figure II
ART 204 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: ART 203 (grade of "C" or higher)
Working from the male and female form in a variety of drawing media. Emphasis on expressive power and individual development. Classes include a nude model. [GE, HB, SE]

Digital Painting & Illustration
ART 208 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: DMA 101 (formerly CGT 101) and DMA 102 (formerly CGT 102) (grades of "C" or higher)
Developing digital illustration skills by using Adobe Illustrator and Photoshop software, as well as some traditional media, with a focus on developing a personal voice, and exploring various styles and techniques. Activities include a series of hands-on creative projects. Intended for the student with some previous Adobe experience. [GE, HB, SE]

Portfolio Development
ART 215 3 Credits/Units
2 hours of lecture / 2 hours of lab
Preparation and presentation of individual portfolio for submission to potential employers, galleries and educational institutions. Topics include traditional and digital portfolio formats, photographing, writing, critiquing, and speaking about artwork. Activities include selecting, refining, and incorporating projects from the entire program into portfolios. Instructors play advisory role, culminating with formal portfolio reviews by instructors, peers, and industry professionals. [GE, SE]

Art History: Ancient to Late Antique
ART 220 5 Credits/Units
5 hours of lecture
Survey of visual arts in the Mediterranean, the Near East, and in Northern Europe, covering the first arts of ancient humans through the Late Antique, 4,000 BCE-600 CE. Topics include why art and architecture exist and how they function in society; how religion, culture, artistic tradition, and patronage create, support, and influence art and architecture; how art and architecture achieve their effects, using materials, technique, style, and composition. [GE, HA, SE]

Art History: Medieval-Renaissance
ART 221 5 Credits/Units
5 hours of lecture
Survey of visual arts and architecture of Early Medieval through Late Renaissance Europe. 500-1600 CE. Topics include why art and architecture exist and how they function in society, how religion, culture, artistic tradition, and patronage create, support, and influence art and architecture, how art and architecture achieve their effects, using materials, technique, style, and composition. [GE, HA, SE]

Art History: Baroque-Modern
ART 222 5 Credits/Units
5 hours of lecture
Survey of the visual arts and architecture of Baroque through Modern Europe, ca. 1600-1914 CE. Topics include why art and architecture exist, and how they function in society; how religion, culture, artistic tradition, and patronage create, support, and influence art and architecture; how art and architecture achieve their effects, using materials, technique, style, and composition. [GE, HA, SE]

Art History: 20th Century
ART 223 5 Credits/Units
5 hours of lecture
Survey of visual arts and architecture of the Modern and Postmodern periods and beyond. Topics include how art and architecture were influenced by rapidly changing technologies in Europe and the Americas: how artists use iconography, composition, materials, technique and style to achieve their effects; the impact of art criticism; and artists' reflections on contemporary events and ideologies. We also explore the role of race and gender in the business of art. [GE, HA, SE]

Women Artists Through History
ART 250 5 Credits/Units
5 hours of lecture
Historical survey exploring themes in women's art and challenges women artists faced as professionals within their respective cultures; in-depth study of women artists working in Western traditions. [GE, HA, PPI, SE]

Painting I
ART 257 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: ART 101, ART 103 or ART 115 (grade of "C" or higher)
Introduction to the principles and practice of painting through basic theory, composition, and color. Assignments approach painting observationally through still life, landscape, and the figure with conceptual prompts encouraging expression and criticality. Classes may include a nude model. [GE, HB, SE]

Painting II
ART 258 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: ART 257 (grade of "C" or higher)
Intermediate approach to principles and practice of painting through formal and conceptual study. Emphasis is on methods of abstraction and new modes of seeing using line, color, and pattern as expressive elements. Classes may include a nude model. [GE, HB, SE]

Painting III
ART 259 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: ART 258 (grade of "C" or higher)
Advanced study in principles and practice of contemporary painting through the development of a body of work. Emphasis is on a focused independent practice including written artist statement and show proposals. Classes may include a nude model. [GE, HB, SE]
Watercolor I
ART 260 5 Credits/Units
3 hours of lecture / 4 hours of lab
**Prerequisite:** ART 103 (grade of "C" or higher)
Introduction to materials and methods of watercolor painting techniques. Topics include color theory, vocabulary, and composition; working in realistic and abstract styles. Activities include in-class critique and discussion. [GE, HB, SE]

Watercolor II
ART 262 5 Credits/Units
3 hours of lecture / 4 hours of lab
**Prerequisite:** ART 260 (grade of "C" or higher)
Intermediate level exploration of watercolor painting. Continued development of skills in color mixing and composition with an emphasis on fostering content and a personal creative voice through the material. Activities include in-class critique and discussion. [GE, HB, SE]

Watercolor III
ART 264 5 Credits/Units
3 hours of lecture / 4 hours of lab
**Prerequisite:** ART 261 (grade of "C" or higher)
Advanced level exploration of watercolor painting, with emphasis on developing one's own visual language through the material, experimentation and innovation with wet media and its expressive potential; student-initiated research and the creation of a unique body of work suitable for portfolio presentation. Activities include in-class critique and discussion. [GE, HB, SE]

Publication Production
ART 270 3 Credits/Units
6 hours of lab
**Prerequisite:** ART 170 (grade of "C" or higher)
Department consent required for enrollment. Second of two courses offering the opportunity to learn real-world design and production for publication. Intended for art and graphic design majors and those interested in the publishing field. Topics vary by quarter and may include: Adobe InDesign for layout, preparing artwork for print, editing and proofing copy, creating promotional materials including social media, working with printers, budgeting, managing the project and working with a team. [GE, HB, SE][PNP]

Typography II
ART 271 5 Credits/Units
3 hours of lecture / 4 hours of lab
**Prerequisite:** ART 174 (grade of "C" or higher)
Continuation of ART 174 with a focus on typesetting as applied to the discipline of graphic design. Topics include technical exercises using Adobe InDesign and its typographic tools, a survey of various publication formats, an introduction to using grids and proportional systems for designing page layouts, analyzing and applying legibility and readability factors, and culminating in an individual book project with a heavy emphasis on conveying a unique voice. [GE, HB, SE]

Graphic Design History
ART 272 5 Credits/Units
5 hours of lecture
A survey of influential individuals, artifacts, technologies and intellectual thought in graphic design from its origins to contemporary practice. Emphasis on the development of a visual vocabulary and providing historical and cultural context for design practice. Appropriate for non-majors. Fulfills PPI distribution requirement. [GE, HA, PPI, SE][PNP]
ASTRONOMY (ASTR&)

<table>
<thead>
<tr>
<th>Introduction to Astronomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR&amp; 101</td>
</tr>
<tr>
<td>5 Credits/Units</td>
</tr>
</tbody>
</table>

4 hours of lecture / 2 hours of lab
Survey of astronomy designed primarily for non-science majors. Includes study of the sun, solar system, stellar evolution, galaxies and cosmology. Evening observation sessions required. [GE, NS, NS-LAB, SE]
Admission into the program required for enrollment. Basic skills and knowledge necessary for success in automotive program courses. Topics include college information technology systems, access and use, written communication, computational processes, automotive safety, and entry level skills required in the automotive industry. This course provides foundational information students will utilize in subsequent program offerings. [GE, HR]

**Introduction to Toyota**

**AUTO 150**

2 hours of lecture / 10 hours of lab

Prerequisite: T-Ten Program Acceptance. See your advisor for more information.

**Introduction to Toyota**

**AUTO 151**

2 hours of lecture / 10 hours of lab

**Prerequisite:** T-Ten Program Acceptance. Acceptance into the program required for enrollment. Introduction to safety, service procedures, and responsibilities as a Toyota automotive service professional. Focus on soft skills used in daily customer interactions, technical skills needed to be successful in the current Toyota dealership environment. Emphasis on performing Toyota minor, intermediate, and major maintenance operations. Acceptance into the T-Ten Program. [GE]

**Toyota Electrical I**

**AUTO 152**

2 hours of lecture / 10 hours of lab

**Prerequisite:** T-Ten Program Acceptance. First of two courses introducing basic electrical properties, circuits and testing. Major focus on the proper use of the DVOM in voltage drop diagnosis with an introduction to chassis electrical systems operation and testing. This course is a prerequisite for all future Toyota courses. Acceptance and good standing in the T-Ten Program. [GE]

**Toyota Electrical II**

**AUTO 153**

2 hours of lecture / 10 hours of lab

**Prerequisite:** T-Ten Program Acceptance. Second of two courses exploring electrical properties, circuits and testing. Major focus on the proper use of the DVOM in voltage drop diagnosis of multiplexed circuits used in Toyota vehicles with an introduction to computer controlled electrical systems operation and testing using a DSO. This course is a prerequisite for all future Toyota courses. Acceptance and good standing in the T-Ten Program. [GE]

**Toyota Brakes**

**AUTO 154**

2 hours of lecture / 10 hours of lab

**Prerequisite:** T-Ten Program Acceptance. Theory and hands-on training in the operation, diagnostics, and service of Toyota vehicle braking systems. Initial focus on performing basic brake service procedures and diagnosis. Specific emphasis on the correct diagnostic strategies to locate and repair faults in ABS, VSC, and VDIM systems. This course is a prerequisite for all future Toyota courses. Acceptance and good standing in the T-Ten Program. [GE]

**Toyota Engine Performance I**

**AUTO 155**

2 hours of lecture / 10 hours of lab

**Prerequisite:** T-Ten Program Acceptance. Acceptance and good standing in the T-Ten Program. First of two courses exploring advanced level diagnostic skills related to engine-performance issues. Emphasis on fuel trim, DTC’s drivability, Mode $06$ scan tool usage, and emissions control systems. Acceptance and good standing in the T-Ten Program. [GE]

**Toyota Engine Performance II**

**AUTO 156**

2 hours of lecture / 10 hours of lab

**Prerequisite:** T-Ten Program Acceptance. Acceptance and good standing in the T-Ten Program. Second of two courses on operation, inspection, diagnosis, service and repair of Toyota Engine Management Systems. Focus on the operation and testing of the internal combustion engine and engine-and-fuel management systems. Emphasis on ignition, fuel delivery, and computer input sensor diagnosis. Necessary knowledge of diagnostic strategies and tools used daily in the dealership to repair drivability-related and/or engine performance-related issues. Acceptance and good standing in the T-Ten Program. [GE]

**Introduction to Dealership Operations**

**AUTO 160**

2 hours of lecture / 10 hours of lab

**Prerequisite:** HiTECC Program Acceptance. See your advisor for more information.

Admission into the program required for enrollment. Introduction to safety, service procedures, and responsibilities as a dealership automotive service professional. Initial focus will be soft skills used in daily customer interactions and will continue with technical skills needed to be successful in the current dealership environment. Finally, emphasis will be placed on performing minor, intermediate, and major maintenance operations. Acceptance and good standing in the HiTECC Program. [GE]
Admission into the program required for enrollment. Introduction to basic electrical properties, circuits and testing. Major focus will be placed on the proper use of the DVOM in voltage drop diagnosis. Will also offer an introduction to Chassis Electrical Systems operation and testing. This course is a prerequisite for all future HiTECC courses. Remain in good standing in the HiTECC Program. [GE]

**Brakes**
AUTO 163
7 Credits/Units
2 hours of lecture / 10 hours of lab
Admission into the program required for enrollment. Provides theory and hands-on training in the operation, diagnostics, and service of vehicle braking systems. Specific emphasis will be placed on the correct diagnostic strategies to locate and repair faults in ABS, VSC and VDIM systems. Initial focus will be placed on performing basic brake service procedures and diagnosis. This course is a prerequisite for all future HiTECC courses. Remain in good standing in the HiTECC Program. [GE]

**Internship**
AUTO 164
8 Credits/Units
4 hours of lecture / 8 hours of lab
Admission into the program required for enrollment. Provides students with a managed internship experience in an automotive dealership. Students will focus on practicing skills learned throughout their first term of automotive instruction, including performing basic maintenance and diagnosing/repairing electrical and braking systems. Students will be required to document and share these experiences as they work toward ASE Certification. Emphasis will also be placed on developing strong customer service and teamwork skills. Remain in good standing in the HiTECC Program. [GE]

**Steering and Suspension**
AUTO 165
7 Credits/Units
2 hours of lecture / 10 hours of lab
Admission into the program required for enrollment. Provides theory and hands-on training in the operation, diagnosis, and service of vehicle steering and suspension systems with specific emphasis on the correct diagnostic strategies to locate and repair faults in TPMS and EPS systems. Initial focus will be placed on performing basic tire, suspension and steering service procedures and diagnosis. This course is a prerequisite for all future HiTECC courses. Remain in good standing in the HiTECC Program. [GE]

**Engine Performance I**
AUTO 166
7 Credits/Units
2 hours of lecture / 10 hours of lab
Admission into the program required for enrollment. Instruction related to the operation, diagnosis, service and repair of engine management systems. Initial focus is on the operation and testing of the internal combustion engine then progress to engine and fuel management systems. Emphasis will be placed on ignition, fuel delivery, and computer input sensor diagnosis. Students will gain necessary knowledge of diagnostic strategies and tools used daily in the dealership to repair drivability and/or engine performance related issues. This course is a prerequisite for all future HiTECC courses. Remain in good standing in the HiTECC Program. [GE]

**Automotive Processes**
AUTO 170
3 Credits/Units
3 hours of lecture
Admission into the program required for enrollment. Introduction to and exploration of the automotive industry, with specific focus on vehicle service operations from a business standpoint. Students will complete a research assignment, write a paper, and deliver a presentation on their findings. [GE]

**Mechanical Processes**
AUTO 171
5 Credits/Units
4 hours of lecture / 2 hours of lab
Admission into the program required for enrollment. Expands on Automotive Process through demonstration and practice of vehicle servicing methods. Students will prepare vehicles for service and perform basic maintenance procedures in accordance with manufacturer’s recommendations. Emphasis on safety, using proper equipment, and overall vehicle systems. Combination lecture/lab format will be utilized for instruction. [GE]

**Maintenance Processes**
AUTO 172
8 Credits/Units
4 hours of lecture / 8 hours of lab
Admission into the program required for enrollment. Emphasis on maintenance procedures and processes performed in express service environments. Particular attention paid to practice of comprehensive vehicle inspection and preventative maintenance operations. Introduction to tire service procedures also included in the course. While a combination lecture/lab will be utilized for instruction, course will be delivered primarily through lab activities. [GE]
Admission into the program required for enrollment. Undercar maintenance processes with addition of light chassis repair procedures. Inspection and repair of brake systems, including minor diagnosis of common customer concerns, will be practiced. In addition, steering/suspension inspection and service will be presented. Continuation of tire servicing related to wheel alignment also included in course. While a combination lecture/lab will be utilized for instruction, course will be delivered primarily through lab activities. [GE]

**Undercar Service and Repair**

AUTO 173  
15 Credits/Units  
10 hours of lecture / 10 hours of lab  
Admission into the program required for enrollment. Undercar maintenance processes with addition of light chassis repair procedures. Minor diagnosis of common cylinder sealing faults and engine leak repair will be practiced. Introduction to engine controls and minor system diagnosis included. While a combination lecture/lab will be utilized for instruction, course will be delivered primarily through lab activities. [GE]

**Professionalism in Automotive**

AUTO 180  
5 Credits/Units  
3 hours of lecture / 6 hours of clinical  
Admission into the program required for enrollment. Focus on developing professionalism and technical proficiency while concurrently participating in a paid internship. [GE, HR]

**Cooperative Work Experience**

AUTO 199  
1-5 Credits/Units  
15 hours of clinical  
Admission into the program required for enrollment. Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE, HR]

**Toyota Climate Control**

AUTO 250  
7 Credits/Units  
2 hours of lecture / 10 hours of lab  
Admission into the program required for enrollment. Introduction to automotive heating and air conditioning systems used in Toyota vehicles. Topics include refrigerant handling, climate control system components, temperature system controls, refrigerant system diagnosis, recovery-recycling-recharging a/c systems, safety requirements for hybrid vehicles and dealership service. Acceptance and good standing in the T-Ten Program. [GE]

**Toyota Internship II**

AUTO 251  
4 Credits/Units  
2 hours of lecture / 4 hours of lab  
Admission into the program required for enrollment. Second managed internship experience in a Toyota/Lexus dealership, with focus on practicing skills learned throughout the second term of automotive instruction. Skills include performing repairs to braking, steering/suspension, and engine management systems. Emphasis on developing strong customer-service and teamwork skills. Students required to document and share these experiences while working towards ASE and Toyota Certification. Acceptance and good standing in the T-Ten Program. [GE]

**Toyota Engine Mechanical**

AUTO 252  
7 Credits/Units  
2 hours of lecture / 10 hours of lab  
Admission into the program required for enrollment. Operation, diagnosis, service and repair of a Toyota internal-combustion engine with focus on the tear-down and inspection of internal engine components. Emphasis on precision measurements and component failure identification. Acceptance and good standing in the T-Ten Program. [GE]

**Toyota Manual Transmission**

AUTO 253  
7 Credits/Units  
2 hours of lecture / 10 hours of lab  
Admission into the program required for enrollment. Introduction to automotive manual transmissions and drivetrains. Topics include the principles of torque multiplication, engine braking, and gear ratios. Emphasis on the diagnosis and repair of clutch assembly, manual transmission, transfer cases, and drivetrains of Toyota vehicles. Acceptance in and good standing in the T-Ten Program. [GE]

**Toyota Automatic Transmissions**

AUTO 254  
7 Credits/Units  
2 hours of lecture / 10 hours of lab  
Admission into the program required for enrollment. Theory and hands-on training in the operation, diagnostics, and service of Toyota automatic transmissions and transaxles. Initial focus on performing basic automatic transmission service procedures and diagnosis with specific emphasis on the correct diagnostic strategies to locate and repair faults in automatic transmission control systems. This course is a prerequisite for all future Toyota courses. Acceptance and good standing in the T-Ten Program. [GE]

**Toyota Hybrid Systems and Advanced Technologies**

AUTO 256  
7 Credits/Units  
2 hours of lecture / 10 hours of lab  
Admission into the program required for enrollment. 120-hr course with a focus on Hybrid Drivetrain Diagnosis and Repair. Additionally, develop diagnostic skills for other new and advanced technologies not covered in other courses. Successful completion will result in recognition as a Toyota Hybrid Certified Technician. [GE]

**Climate Control**

AUTO 260  
7 Credits/Units  
2 hours of lecture / 10 hours of lab  
Prerequisite: AUTO 165, AUTO 166 and AUTO 167 (grades of "C" or higher)  
Admission into the program required for enrollment. Instruction in automotive heating and air conditioning systems used in vehicles. Covers refrigerant handling, climate control system components, temperature system controls, refrigerant system diagnosis, recovery-recycling-recharging a/c systems, safety requirements for hybrid vehicles and dealership service. This course is a prerequisite for all future HITECC courses. Remain in good standing in the HITECC Program. [GE]

**Internship II**

AUTO 261  
4 Credits/Units  
2 hours of lecture / 4 hours of lab  
Admission into the program required for enrollment. Provides students with a managed internship experience in a dealership. Students will focus on practicing skills learned throughout their term quarter of automotive instruction performing repairs to Steering/Suspension, Climate Control, and Engine Management Systems. Students will be required to document and share these experiences as they work towards ASE certification. Emphasis will also be placed on developing strong customer service and teamwork skills. This course is a prerequisite for all future HITECC courses. Remain in good standing in the HITECC Program. [GE]
2024-2025
125

### Engine Mechanical

**AUTO 262**
- 7 Credits/Units
- 2 hours of lecture / 10 hours of lab
- Admission into the program required for enrollment. Instruction regarding the operation, diagnosis, service and repair of internal combustion engines. Focus on the tear down and inspection of internal engine components. Emphasis will be placed on precision measurements and components failure identification. This course is a prerequisite for all future HiTECC courses. Remain in good standing in the HiTECC Program. [GE]

### Manual Transmission

**AUTO 263**
- 7 Credits/Units
- 2 hours of lecture / 10 hours of lab
- Admission into the program required for enrollment. Instruction in automotive manual transmissions and drivetrains. Students will explore the principles of torque multiplication, engine braking, and gear ratios. Emphasis will be placed on the diagnosis and repair of clutch assemblies, manual transmissions, transfer cases, and vehicle drivetrains. This course is a prerequisite for all future HiTECC courses. Remain in good standing in the HiTECC Program. [GE]

### Automatic Transmissions

**AUTO 264**
- 7 Credits/Units
- 2 hours of lecture / 10 hours of lab
- Admission into the program required for enrollment. Theory and hands-on training in the operation, diagnostics, and service of automatic transmissions and transaxles. Specific emphasis will be placed on the correct diagnostic strategies to locate and repair faults in automatic transmission control systems. Initial focus will be placed on performing basic automatic transmission service procedures and diagnosis. This course is a prerequisite for all future HiTECC courses. Remain in good standing in the HiTECC Program. [GE]

### Advanced Applied Electrical

**AUTO 266**
- 7 Credits/Units
- 2 hours of lecture / 10 hours of lab
- Admission into the program required for enrollment. Advanced electrical applications with a focus on Hybrid/Electric Vehicle (HEV) drivetrain diagnosis and repair. Develop diagnostic skills for other new and advanced technologies not covered in previous courses, such as ADAS (Advanced Driver Assistance Systems), Stop/Start Technology, and others. Successful completion will prepare students to sit for the Automotive Service Excellence (ASE) L3 - Advanced Hybrid/Electric Vehicle Certification Test. [GE]

### Advanced Diagnostic Strategies

**AUTO 272**
- 15 Credits/Units
- 10 hours of lecture / 10 hours of lab
- Admission into the program required for enrollment. Vehicle electronic systems inspection, diagnosis and repair processes using advanced diagnostic tools. Focus on troubleshooting processes that lead to identification of root cause failures. Also, introduction to vehicle stability control and supplemental restraint systems included. While a combination of lecture/lab will be utilized for instruction course will be delivered primarily through lab activities. [GE]

### Capstone New Technology

**AUTO 273**
- 4 Credits/Units
- 1 hours of lecture / 6 hours of lab
- Admission into the program required for enrollment. An alternative to a internship in which students will study a new automotive technology of their choice. Final project will vary with each instructor. [GE]

### Internship

**AUTO 274**
- 4 Credits/Units
- 1 hours of lecture / 9 hours of clinical
- Admission into the program required for enrollment. Managed field experience course designed to provide reflective activities aimed at assisting students in creating a professional development plan. Students will participate in online activities coupled with periodic on-site evaluations. This option provided for students with an automotive service position and ready to work. Course will be delivered primarily through online interface with several worksite visits by instructor. [GE]

### Selected Topics

**AUTO 280**
- 1-8 Credits/Units
- 8 hours of lecture
- Admission into the program required for enrollment. Selected topics in Auto. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Specific topics are listed in the term class schedule. [GE]

### Special Projects

**AUTO 290**
- 1-3 Credits/Units
- 3 hours of lecture
- Admission into the program required for enrollment. For automotive majors only. Opportunity to plan, organize and complete special projects approved by the department. [GE]
BAS APPLIED MANAGEMENT (BASAM)

Foundations of Management

BASAM 301  5 Credits/Units
5 hours of lecture

Admission into the program required for enrollment. Serves as the core and foundation for the Bachelor of Applied Science in Applied Management Program. It merges both theories and management practices to serve as a practical tool for managers. Stresses good management practices and higher-level decision making, by ensuring that current changes in industry and technology are applied to problem-solving and innovative sources for the growth and survival of an organization. [GE]

Social Media In Business

BASAM 305  5 Credits/Units
5 hours of lecture

Admission into the program required for enrollment. With the growth of Internet and the popularity of social media among consumers, companies now communicate with consumers in what is becoming the new wave. Covers the knowledge and theories of these growing areas by illustrating topics such as E-commerce, E-marketing strategy, social media marketing strategy, social consumers in digital communities, and measuring the impact of social media marketing. Primary focus is to understand how marketing activities can be implemented, via Internet and social media, to reach target customers and strategic objectives. [GE]

Business Research Applications

BASAM 320  5 Credits/Units
5 hours of lecture

Admission into the program required for enrollment. Introduces to quantitative and qualitative research methods. Topics include customized research methodology to fit specific types and sizes of businesses and organizations, application of the research results for informed and relevant management decisions, and an examination of ethical research standards. Case methods will be applied to practical situations. [GE]

Business Principles

BASAM 325  5 Credits/Units
5 hours of lecture

Admission into the program required for enrollment. Provides a study of various facets of business from economic systems to forms of business ownership to considerations for running a business. Financial topics are introduced, including accounting, money and banking, and securities markets. Also included are discussions of business ethics, social responsibility, and decision making. [GE]

Accounting Principles for Managers

BASAM 330  5 Credits/Units
5 hours of lecture

Admission into the program required for enrollment. This is a BASAM foundation course in accounting theory and principles, applications, and language, with emphasis from a manager’s perspective for the requirement to measure and control. Students will analyze balance sheets, income statements, cash flow statements, cost behavior, financial statement interrelationships, financial analysis, product costing, and budgetary control systems. Topics include information reporting for planning, coordinating, and monitoring the performance of an organization. [GE]

Legal Issues In Management

BASAM 335  5 Credits/Units
5 hours of lecture

Admission into the program required for enrollment. Provides a basic understanding of several specific legal areas in business and management. Guides the student through the structure of the U.S. legal system and reviews management-specific areas. Helps to identify potential legal problems, create policies and practices that avoid problems and become efficient and effective consumers of legal services. Gives specific understanding and appreciation of the legal system, particularly as it relates to the conduct of business management. [GE]

Marketing for Managers

BASAM 340  5 Credits/Units
5 hours of lecture

Admission into the program required for enrollment. Develops the marketing knowledge and skills necessary for a successful manager of a profit business firm or a non-profit organization. Helps students identify and satisfy customers' needs and wants. Focuses on key aspects of marketing for firms both large and small, such as marketing research; target market planning and segmentation; product planning, pricing, promoting, and placement (general distribution); international marketing; and the development of general marketing goals, strategies, and their implementation, with a view toward quality societal standards. Students will develop a comprehensive marketing plan. [GE]

Human Resource Management

BASAM 400  5 Credits/Units
5 hours of lecture

Admission into the program required for enrollment. Designed to develop an understanding of the functions and skills needed by supervisors and managers concerning the human resource environment; acquiring, training, and developing human resources; assessing and improving performance; compensation; and other human resource functions. Recognize and apply functions to ensure success in managerial and leadership situations. [GE]

Principles of Project Management

BASAM 410  5 Credits/Units
5 hours of lecture

Admission into the program required for enrollment. Studies the concepts, issues, and approaches important in effectively managing projects, as standardized by the Project Management Body of Knowledge (PMBOK). Includes project selection, project planning and documentation, negotiation, budgeting, scheduling, resource allocation, project control, project auditing, and project closure. Topics are reviewed from a managerial perspective. [GE]

Financial Management

BASAM 415  5 Credits/Units
5 hours of lecture

Admission into the program required for enrollment. Shows managers how to interface with accounting and finance departments, facilitating their understanding of how firms meet their financial objectives, utilizing financial decision making. Describes financial tools and techniques which can be used to help firms maximize value by improving decisions relating to capital budgeting, capital structure, and working capital management. Topics also include multinational financial management, risk management, mergers, and acquisitions. [GE]
Operations and Logistics
BASAM 425  5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. Studies the physical movement and storage of goods, such as raw materials, semi-finished and finished goods, and all the associated managerial activities that are important for effective control. Close attention is paid to managerial concepts and responsibilities such as transportation, inventory, warehousing, packaging, materials handling, network design, and customer service. Covers the importance of interrelationships between logistics and production, marketing, financial management, and quality control. [GE]

Capstone: Strategic Management & Policy
BASAM 440  5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. Focuses on the key aspects that must be addressed for sustained organizational success, effective problem solving, and the capture of opportunities from the perspective of the general manager or the entrepreneur. Topics include strategic issues facing organizations such as the global economy, regulatory changes, competitive pressures, challenges from non-traditional competitors, and the identification and realization of new products; financial analysis, decision-making, communications, and the leadership required to affect and sustain positive organizational change. Complex case studies of both commercial and non-profit entities will be used to immerse the students in the integrated complexities that general managers face. [GE]

Applied Management Internship
BASAM 450  5 Credits/Units
2 hours of lecture / 9 hours of clinical
Admission into the program required for enrollment. Designed to provide students with major-related, supervised, and evaluated practical training work experiences which may be paid or voluntary. Students will be graded on the basis of the quality of documented learning acquired through hands-on, new experiences in an actual work setting. The course-related outcomes will be designed and agreed to by the student, the organization providing the internship, the faculty member teaching this course, and the BASAM program lead-faculty member. (Four credits application/one credit seminar). [GE]


BAS HUMAN SERVICES
(BASHS)

Special Projects

BASHS 290  1-6 Credits/Units
6 hours of lecture
Admission into the program required for enrollment. Opportunity to plan, organize and complete special projects approved by the department.

Introduction to Human Services

BASHS 301  5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. Overviews the role of the Human Services worker including the various settings, types of Human Services for specific populations and the history of the helping professions. Desirable skills and knowledge and personal characteristics for Human Services workers are also discussed. An emphasis on self-awareness required for Human Services workers are discussed with an emphasis placed on self-awareness. [GE]

Systems and Social Justice

BASHS 302  5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. Designed to improve student knowledge of power, privilege, inequity, and social justice. Students will learn to identify their own social location in relation to others. They will also apply class concepts to case studies in Human Services in order to analyze the impact of systemic oppression on potential clients, learn appropriate methods of resistance and intervention, and develop strategies for implementing social justice. [GE]

Ethics in Human Services

BASHS 303  5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. Explores the concepts of self-awareness in ethical decision-making, including theories of ethical decision making. Provides an overview of federal and state laws pertaining to specific populations and situations in the Human Services field. [GE]

Practical Family Therapy

BASHS 304  5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. Designed to improve student knowledge of power, privilege, inequity, and social justice. Students will learn to identify their own social location in relation to others. They will also apply class concepts to case studies in Human Services in order to analyze the impact of systemic oppression on potential clients, learn appropriate methods of resistance and intervention, and develop strategies for implementing social justice. [GE]

Advanced Co-Occurring Disorders Treatment

BASHS 305  5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. Provides clinical experience in assessing accurately the various aspects of common co-occurring disorders encountered in the behavioral health field including: personality disorders, mood disorders, bipolar, trauma disorders and other associated DSM-V disorders. [GE]

Trauma, Grief & Loss

BASHS 306  5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. Provides a theoretical and practical framework for working with traumatized and grieving populations and individuals in a broad Human Services context. [GE]

Multicultural Counseling in HS

BASHS 401  5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. Presents current theories and practices for working with clients of various cultural, racial, economic, and ethnic backgrounds and subcultures. [GE]

Research & Evaluation Methodologies in HS

BASHS 403  5 Credits/Units
5 hours of lecture
Prerequisite: MATH 146 (grade of "C" or higher)
Admission into the program required for enrollment. Focuses on critical understanding of qualitative and quantitative research methods and program evaluation employed in the fields of Human Services that empower and promote social and economic justice and respect for cultural and social diversity. Students will gain an understanding of the various research methods, program evaluation techniques, qualitative quantitative data analysis techniques, data management skills, and ethical issues around research. [GE]

Advanced Case Management in HS

BASHS 404  5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. Explores the clinical practice of working from an accurate psych-social assessment to the necessary steps in the development of an appropriate treatment plan. A previous knowledge of ASAM and the use of the DSM-V is recommended. [GE]

Human Services Field Placement I

BASHS 410  5 Credits/Units
15 hours of clinical
Admission into the program required for enrollment. Experiential learning in a Human Services environment. Students will assist in providing direct therapeutic, educational, referral, support and outreach services to those clients and family members of that service provider. [GE]

Human Services Field Placement II

BASHS 411  5 Credits/Units
15 hours of clinical
Admission into the program required for enrollment. Experiential learning in a Human Services environment. Students will assist in providing direct therapeutic, educational, referral, support and outreach services to those clients and family members of that service provider. [GE]
### BAS TEACHER EDUCATION

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits/Units</th>
<th>Hours of Lecture</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASTE 301</td>
<td>Supervision</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3 hours of lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Develop skills needed to</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>effectively collaborate with others including school personnel, community</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>partners personnel, students and their families to support student learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>preschool to third grade who are culturally, linguistically, and ability</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>diverse. Supervision of assistants and paraprofessionals will also be</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>specifically addressed. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASTE 302</td>
<td>Integrated Health and Physical Education</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Prepares pre-service</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>educators to teach health and fitness to young learners including strategies</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>for integrating culturally responsive health and physical education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>experiences into the classroom. Topics: nutrition, movement for fitness and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>joy, body image, current issues in health, and issues in access and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>discrimination in wellness. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASTE 303</td>
<td>Language and Literacy Acquisition</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Examine current research,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>including theories of first and second language acquisition, for supporting</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>the development of literacy and language skills for children, birth through</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>elementary age. A variety of culturally and developmentally appropriate</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>assessments are introduced and analyzed as part of the comprehensive</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>continuum of literacy and language acquisition. The study of curriculum,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>instruction, intervention and exemplary classroom practices is the focus of</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>this course [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASTE 304</td>
<td>Effective and Meaningful Curriculum Design</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Examines diverse</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>pedagogical approaches for teaching in educational settings that are</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>meaningful and representative, including ability, culturally and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>linguistically diverse learners. Emphasizes curriculum theory, design,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>practice, evaluation, as well as diverse approaches to learning and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>dispositions, Integrates Washington State Common Core Standards and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Developmental Guidelines. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASTE 305</td>
<td>Observation and Assessment</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Using a variety of</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>observation skills, select, administer, score and interpret formal assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>tools. Evaluate students for placement or resources needed for learning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Understand Individual Education Plans (IEPs) and Individual Family Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plans (IFSPs and 504 plans for children who are culturally, linguistically,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and ability diverse and their families). [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASTE 306</td>
<td>Law and Ethics</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Provide a clear</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>understanding of how special education standards, principles, and procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>impact service implementation for students with disabilities. Topics</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>addressed: issues, trends, and implementation of special education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>as well as historical perspectives of disability. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASTE 307</td>
<td>Vision to Practice Anti-Bias Education</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>5 hours of lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. An approach to</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>expectations of Anti-bias education that sets forth actions against bias and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>unfairness that shifts from the theoretical ideal of addressing bias to the</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>implementation of anti-bias curriculum. Objective: to create education that</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>supports dismantling a systemic oppression through an increase in children's</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>understanding of social problems and to equip teachers with applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>strategies to improve the equitable learning experiences of their students</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>including those students who are linguistically, culturally, and ability</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>diverse. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASTE 401</td>
<td>Social Emotional Guidance and Trauma Informed Practices</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>5 hours of lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. A foundational</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>understanding of social emotional learning (SEL) standards and practices,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>positive behavior guidance, and tools to support the development of</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>executive functioning. Includes: SEL competencies for students and adults,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>creating an inclusive culturally responsive classroom climate, consideration</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>of adverse childhood experiences, and trauma informed approaches. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASTE 402</td>
<td>Meaningful Math Methods</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>5 hours of lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Examine spatial and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>mathematical learning across all content strands using state early learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>guidelines and standards for children preschool through 3rd grade and their</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>families who are culturally, linguistically, and ability diverse. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASTE 403</td>
<td>Bilingual Teaching</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>5 hours of lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. A comprehensive survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>of bilingual education through the lens of the three pillars of dual language</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>education (bilingualism/biliteracy, high academic achievement, and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>sociocultural competence). [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASTE 404</td>
<td>Individualized Teaching</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>5 hours of lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Fundamental knowledge and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>experiences for designing and implementing Individualized Education Programs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Additional topics: effective use of assessments, successful collaboration,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>provision of specially designed instruction, evidence-based supports and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>strategies, accommodation and modifications and considerations for inclusion.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASTE 405</td>
<td>Residency Teaching</td>
<td>8</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>24 hours of clinical</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Candidates will</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>demonstrate all Professional Educator Standards Board (PESB) competencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>required for the endorsement they are seeking. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASTE 406</td>
<td>Seminar</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>4 hours of lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Reflection on residency</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>experience in school settings with children who are culturally, linguistically,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and ability diverse. [GE]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Residency Teaching 2
BASTE 407 9 Credits/Units
27 hours of clinical
Admission into the program required for enrollment. Candidates will
demonstrate all Professional Educators Standards Board (PESB)
competencies required for the endorsement they are seeking. [GE]

Seminar 2
BASTE 408 3 Credits/Units
3 hours of lecture
Admission into the program required for enrollment. Student candidates
will reflect on their residency experience in their school setting with
children who are culturally, linguistically, and ability diverse. [GE]

Issues of Child Abuse in Education
BASTE 409 1 Credit/Unit
1 hours of lecture
Admission into the program required for enrollment. Scope and problems
of child abuse, including, but not limited to neglect, family violence,
community violence and/or exploitation, and behaviors exhibited by
abused and neglected children. Includes identification and reporting
procedures, the legal and professional responsibilities of the educator
and other mandated reporters (nurses, social workers, etc.). Methods
of teaching personal safety will also be addressed including ways to
evaluate appropriate curriculum. [GE]
BIOLOGY (BIOL/BIOL&)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits/Units</th>
<th>Hours of Lecture</th>
<th>Hours of Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 101</td>
<td>Population Management and Ecosystem Management</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 102</td>
<td>The Process of Discovery</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 105</td>
<td>Environmental Science</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 106</td>
<td>Small World in Antibiotics Research 1</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 107</td>
<td>Small World in Antibiotics Research 2b</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 108</td>
<td>Introduction to Wildlife</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>BIOL 109</td>
<td>Marine Biology</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 110</td>
<td>Freshwater Fishes of the Pacific Northwest</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 111</td>
<td>Small World of Biology</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 112</td>
<td>Human Genetics</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>BIOL 113</td>
<td>Bioethics</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>BIOL 114</td>
<td>Cooperative Work Experience</td>
<td>1-5</td>
<td>15</td>
<td>0</td>
</tr>
</tbody>
</table>

Overview of basic concepts and issues related to the interaction between humans and their environment. Topics include population growth, loss of biodiversity, global climate change, ozone depletion, energy consumption and various types of pollution. This course is intended for non-majors and fulfills the laboratory science distribution requirement. It is also required for WSU-Vancouver Environmental Science/Regional Planning majors. [GE, NS, NS-LAB, SE]

Introduction to the processes of discovery used in the natural and social sciences. Includes authentic research on factors that contribute to college student success, studied in social, psychological, and physiological contexts. Research topics include hypothesis development, experimental design, literature searches, data analysis, research ethics and human subjects research considerations. Course fulfills COLL 101: College Essentials outcomes including goal setting, personal management skills, developing an academic plan, developing cultural competence and communication skills, financial literacy, and an introduction to student resources at the college. [GE, NS, NS-LAB, SE][PNP]

Investigative course involving authentic research to discover potentially new antibiotics. Overview of basic concepts and issues in biology including the cellular basis of life, metabolism, principles of inheritance, evolution and ecology as they relate to soil microbiology and human disease processes and treatment. Strong emphasis on scientific inquiry including critical thinking, laboratory research methodology, and communication abilities. This course is intended for non-biology majors and fulfills the laboratory science requirements or a as recommended course for other biology courses. English writing skills are highly recommended. [GE, NS, NS-LAB, SE][PNP]

Focuses on research to discover new antibiotics to help alleviate the current worldwide crisis of antibiotic-resistant bacteria including microbial cell structure, growth, genetics and antibiotic production, DNA sequencing, PCR, nanopore-based genome sequencing, and bioinformatic analysis. Lab work will focus on determining, analyzing and `mining` the genome sequence of antibiotic-producing bacteria isolated in BIOL 105, with the aim of discovering novel antibiotics. Strong emphasis on scientific inquiry including critical thinking, laboratory research methodology, and communication abilities. [GE, NS, NS-LAB, SE][PNP]

Wildlife conservation and management in the U.S. and throughout the world. Examines the social and political aspects of wildlife conservation and management, challenges to management of biodiversity, wildlife population management, and ecosystem management. [GE, NS, SE]

Important mammals of the Pacific Northwest. Their identification, classification, life histories, ecology, current status, and management. [GE, NS, SE]

Important Birds of the Pacific Northwest. Their identification, classification, life histories, ecology, current status, and management. [GE, NS, SE]

Important fishes of the Pacific Northwest. Identification, classification, and basic biology of freshwater fishes of the Pacific Northwest. Introduction to fishery management concepts. Overview of factors affecting salmon in the Columbia River Basin. [GE, NS, SE]

Introduction to the biology, ecology, evolution, and geographic distribution of Pacific Northwest reptiles and amphibians. [GE, NS, SE]

The marine environment (physical and chemical properties), its plants, bacteria, animal life (vertebrates, invertebrates), ecosystems, fisheries and pollution. [GE, NS, NS-LAB, SE]

An introduction to a variety of genetics topics for non-science majors. Topics include: basic cell biology, DNA structure & function, mutations, inherited diseases, home genetic/ancestry testing, pedigree analysis, forensic sciences, gene therapy, cloning, eugenics, and realized and/or potential societal impacts. Gain greater knowledge & understanding of genetics and how it does/can impact you. [GE, NS, SE][PNP]

Study of biological science and ethics. Ethical principles and theories are used in solving bioethical dilemmas. Concepts studied include genetic engineering, inherited disorders, cloning, physician assisted suicide, allocation of health resources, organ donation, and environmental ethics. [GE, NS][PNP]

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]
**BIOL 208**  1-10 Credits/Units
2 hours of lecture / 16 hours of lab

**Prerequisite:** Completion of a 100- or 200-level Biology course (BIOL, BIOL&) grade of "C" or higher

For students interested in biology. An ecological approach with a diversity of habitats being visited (marine in winter, Great Basin Desert and marsh lands in spring). Credits for BIOL 208 are accumulated for each trip with a total of 15 credits possible for all trips. [GE, NS, NS-LAB, SE]

**Flowering Plants of The Pacific Northwest**

BIOL 224  5 Credits/Units
3 hours of lecture / 4 hours of lab
Identification and ecology of local wildflowers through the use of taxonomic keys, preparation of specimens and field trips to study native species in their habitats. For forestry, wildlife, recreation, botany and non-biology majors interested in learning to recognize local wildflowers. [GE, NS, NS-LAB, SE]

**Human Cadaver Dissection**

BIOL 275  1-6 Credits/Units
6 hours of lab
Department consent required for enrollment. Dissection of the muscular, circulatory, nervous, digestive and reproductive systems. [GE, SE]

**Selected Topics**

BIOL 280  1-5 Credits/Units
5 hours of lecture
Selected topics in Biology. Topics vary, and course contents change to reflect new topics. Because the course varies in content it is repeatable for credit for different topics. [GE, SE]

**Special Projects**

BIOL 290  1-5 Credits/Units
5 hours of lecture
Opportunity to plan, organize, and complete special projects approved by department. [GE]

**Survey of Biology**

BIOL 100  5 Credits/Units
3 hours of lecture / 4 hours of lab
Overview of basic concepts and issues in biology including the cellular basis of life, metabolism, principles of inheritance, evolution and diversity. Strong emphasis on the process of scientific inquiry using critical thinking and communication abilities. This course is intended for non-biology majors and fulfills the laboratory science requirements or as a recommended course for other biology courses. English writing skills are highly recommended. Required for psychology majors. [GE, NS, NS-LAB, SE]

**General Biology W/Lab**

BIOL 160  5 Credits/Units
3 hours of lecture / 4 hours of lab
Introduction to the study of the cell, the basic component of all living organisms. Emphasis on cell chemistry, structure, metabolism, energetics, cell division and genetic principles. Intended for students seeking a two-year degree in the health occupations. Lab work is required. [GE, NS, NS-LAB, SE][PNP]
Human Anatomy and Physiology II
BIOL& 242 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: BIOL& 241 (grade of "C" or higher)
The second in a two-term sequence exploring the relationships between structure and function in the human body. The sequence is intended as a prerequisite for students planning to major in Nursing, Dental Hygiene or other allied health programs, or as life science credit for non-biology majors. Topics include endocrine, cardiovascular, respiratory, digestive, urinary, and reproductive systems and fluid and electrolyte balance. [GE, NS, NS-LAB, SE]

Human A & P I
BIOL& 251 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: BIOL& 100 or BIOL& 160 or (BIOL 164 and BIOL 165), or BIOL& 221 or CHEM& 121 or CHEM& 141 (grade of "C" or higher)
The first in a three-term sequence exploring the relationships between structure and function in the human body. The sequence is intended as a prerequisite for students planning to major in Nursing, Dental Hygiene or other allied health programs, or as life science credit for non-biology majors. Topics include homeostasis, terminology, cells, protein synthesis, DNA replication, histology, the integumentary, skeletal, articular, and muscular systems, and bone, muscle and membrane physiology. [GE, NS, NS-LAB, SE]

Human A & P II
BIOL& 252 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: BIOL& 251 (grade of "C" or higher)
The second in a three-term sequence exploring the relationships between structure and function in the human body. The sequence is intended as a prerequisite for students planning to major in Nursing, Dental Hygiene or other allied health programs, or as life science credit for non-biology majors. Topics include homeostasis, neural tissue, the spinal cord and spinal nerves, the brain and cranial nerves, integration of neural function, the special senses, the endocrine and reproductive systems, development and inheritance. [GE, NS, NS-LAB, SE]

Human A & P III
BIOL& 253 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: BIOL& 252 (grade of "C" or higher)
The third in a three-term sequence exploring the relationships between structure and function in the human body. The sequence is intended as a prerequisite for students planning to major in Nursing, Dental Hygiene or other allied health programs, or as life science credit for non-biology majors. Topics include homeostasis, the cardiovascular, lymphatic, digestive, respiratory and urinary systems, cellular metabolism, and fluid and electrolyte balance. [GE, NS, NS-LAB, SE]

Microbiology
BIOL& 260 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: BIOL& 160 (grade of "C" or higher)
History of microbiology and a survey of organisms included in the study of microbiology with emphasis on bacteria. Physiology, morphology, genetics, growth and reproduction of bacteria. Experiments stress lab techniques and organisms that are a factor in clinic and hospital environments. [GE, NS, NS-LAB, SE]
# Business Administration (BUS/BUS&)

<table>
<thead>
<tr>
<th>Business</th>
<th>Math</th>
<th>Applications</th>
<th>5 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 102</td>
<td></td>
<td></td>
<td>5 hours of lecture</td>
</tr>
</tbody>
</table>

**Prerequisite:** CAP 42 (grade of “C” or higher) or placement into Math level 10

Application of mathematics in common business situations. Emphasis is on practical applications and problem-solving skills for the business professional as well as the consumer and investor. Topics include: trade and cash discounts, simple and compound interest, mark up and markdown, and consumer credit. [CP, GE]

## Keyboarding & Word Processing

<table>
<thead>
<tr>
<th>Introduction to International Business</th>
<th>1-3 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 104</td>
<td></td>
</tr>
</tbody>
</table>

1 hour of lecture / 4 hours of lab

Introduction to the keyboard, development of touch typing, speed and accuracy, and basic word processing skills for formatting simple letters, memos, tables, and reports. [GE][PNP]

## Introduction to International Business

<table>
<thead>
<tr>
<th>BUS 105</th>
<th>3 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 hours of lecture</td>
</tr>
</tbody>
</table>

A survey course, as well as a preparatory course for advanced study, of globalization and international business issues discussed include the history and development of international business, international institutions, regional alliances, sociocultural and political forces, national resources and environmental sustainability, labor forces, and the development of international competitive strategy. [GE]

## Office English

<table>
<thead>
<tr>
<th>BUS 107</th>
<th>5 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 hours of lecture</td>
</tr>
</tbody>
</table>

Develop proficiency in the language skills necessary for business writing. Strong emphasis placed on grammar, punctuation, sentence structure, capitalization, subject/verb agreement, and editing. [CA, CT, GE, SE]

## Customer Service

<table>
<thead>
<tr>
<th>BUS 110</th>
<th>3 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 hours of lecture</td>
</tr>
</tbody>
</table>

Introduction to customer-centered business organization. Topics include the principles and practices of customer relations, the history of consumerism and customer relations departments, and methods to develop internal/external customer service skills, including identifying and responding to their needs, improving skills in providing information, dealing with conflict situations, and developing a positive customer relations climate. [GE][PNP]

## Small Business Management

<table>
<thead>
<tr>
<th>BUS 115</th>
<th>5 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 hours of lecture</td>
</tr>
</tbody>
</table>

Designed to help students explore the elements of starting and managing a small business. Topics include conducting a feasibility analysis, finding sources of capital, acquiring critical human resources, managing assets, and dealing with various internal and external factors, including stakeholders. The foundation of the course will enable students to develop a coherent business plan as well as connect with business owners. [GE][PNP]

## Advertising

<table>
<thead>
<tr>
<th>BUS 117</th>
<th>3 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 hours of lecture</td>
</tr>
</tbody>
</table>

Introduction to advertising. Topics include the problems faced by advertisers and their agencies, along with the policies and procedures for solutions in the development of advertising objectives and strategies, selection of media, determination of budgeting methods, and preparation of copy and layout for effective results. [GE][PNP]

## Computerized Accounting

<table>
<thead>
<tr>
<th>BUS 130</th>
<th>3 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 hours of lecture</td>
</tr>
</tbody>
</table>

Prerequisite: ACCT 129 or ACCT& 201 (grade of “C” or higher)

Computerized accounting techniques in the basic areas of financial accounting, including the processes of analyzing, recording, reporting and interpreting accounting data in a business environment. A systems approach with real world applications of the general ledger, accounts receivable, accounts payable, purchasing, cash receipts, accounting for sales, payroll, and month and year-end closing for both a service and a merchandising business. QuickBooks software is utilized in this course. [GE][PNP]

## Business Professional Self Development

<table>
<thead>
<tr>
<th>BUS 148</th>
<th>3 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 hours of lecture</td>
</tr>
</tbody>
</table>

An overview of the job search process and exploration of the importance of developing and using soft skills in a business setting. Professional business concepts and communication skills for employees or prospective employees who wish to improve their professional relations and growth potential. [GE, HR][PNP]

## Computer Application Essentials

<table>
<thead>
<tr>
<th>BUS 149</th>
<th>3 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 hours of lecture</td>
</tr>
</tbody>
</table>

Fundamentals of common business applications: word processing, spreadsheet, presentation software, and file management. [GE][PNP]

## Computer Business Applications

<table>
<thead>
<tr>
<th>BUS 150</th>
<th>5 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 hours of lecture</td>
</tr>
</tbody>
</table>

Introduction to creating business projects using MS Office that emphasize critical thinking and problem-solving skills. Assignments include managing files/folders, creating and formatting Word documents, Excel workbooks, PowerPoint presentations, Access databases, and in teams, creating and giving a presentation based on research. [GE]

## Personal Finance

<table>
<thead>
<tr>
<th>BUS 160</th>
<th>5 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 hours of lecture</td>
</tr>
</tbody>
</table>

Buying insurance (life, health, property, and auto), buying and financing a home, minimizing Federal income tax, borrowing, saving, and investing. [GE][PNP]

## Introduction to Excel

<table>
<thead>
<tr>
<th>BUS 169</th>
<th>3 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 hours of lecture</td>
</tr>
</tbody>
</table>

Skills to create, edit, format, and print spreadsheets, tables, graphs and charts using Microsoft Excel; skills to create and edit formulas and simple functions; skills to create, sort, and filter worksheet databases; skills to use PivotTables, templates, and manage multiple worksheets and workbooks. Prior experience with keyboard and/or ten-key by touch and logical thinking are extremely helpful. [GE][PNP]
### Excel for Business (BUS 170)
- **Credits/Units:** 3
- **Lecture Hours:** 3

**Prerequisite:** BUS 102 and (BTEC 169 or BUS 169) (grades of "C" or higher)

Advanced Microsoft Excel skills including creating, editing, and printing professional workbooks, using advanced formulas and charts, auditing and validating worksheet data, and solving complex problems with Excel. Integrating Excel with other office applications and understanding how technology is critical to solving business problems. An introduction to Visual Basics for Applications (VBA), macros, and making an application in Excel. [GE][PNP]

### Cooperative Work Experience (BUS 199)
- **Credits/Units:** 1-5
- **Clinical Hours:** 15

Up to 5 credits for supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE][PNP]

### Principles of Finance I (BUS 206)
- **Credits/Units:** 5
- **Lecture Hours:** 5

**Prerequisite:** ACCT& 201 (grade of "C" or higher)

Finance theory and practice through the lens of Time Value of Money by examining the financial health of a company based on market conditions, risk, and profitability; evaluate sources of financing based on risk, cost, terms and valuation; and analyze asset structure and financing framework. [GE]

### Principles of Finance II (BUS 207)
- **Credits/Units:** 5
- **Lecture Hours:** 5

**Prerequisite:** BUS 206 (grade of "C" or higher)

A continuation of Principles of Finance I to investigate finance theory and practice through the lens of Time Value of Money by examining the mix of debt and equity to fund assets as well as dividend distributions, apply measurement tools to make informed capital budgeting decisions, evaluate factors influencing the risk of an investment, and identify capital markets. [GE]

### Business Communications (BUS 211)
- **Credits/Units:** 3
- **Lecture Hours:** 3

**Prerequisite:** ENGL& 101 (grade of "C" or higher) or eligibility for ENGL& 102

Developing proficiency in written and oral communications appropriate for business by composing, organizing, and editing documents such as letters, reports, memos, emails, and presentations from a variety of business cases and managerial interviews. Emphasis on team work, collaboration, diversity, intercultural communication, and the delivery of oral presentations, using specialized software. [CA, CT, GE, SE, WC]

### Professional Selling (BUS 251)
- **Credits/Units:** 3
- **Lecture Hours:** 3

Introduction to personal selling concepts for the relationship era of business. Focus on selling stages, including prospecting, qualifying, developing rapport, overcoming objections, closing techniques, and following up with customer service. Focus on personal, retail, and organizational selling. [GE][PNP]

### Principles of Marketing (BUS 260)
- **Credits/Units:** 5
- **Lecture Hours:** 5

Introduction to concepts of marketing, with practical emphasis on the research, evaluation, and segmentation of markets. Focus on behavior of consumer and organizational buyers. Activities include developing a marketing plan to include product planning, pricing, promoting, and placement. [GE][PNP]

### Introduction to Digital Marketing (BUS 270)
- **Credits/Units:** 5
- **Lecture Hours:** 5

Gain an understanding of how digital marketing works and develop the critical insights necessary to succeed in digital and social media marketing. Learn various methodologies of marketing efforts to digital technologies such as search engines, email, social media, mobile and more. [GE, SE]

### Selected Topics (BUS 280)
- **Credits/Units:** 1-5
- **Lecture Hours:** 5

Selected topics in Business. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE]

### Special Projects (BUS 290)
- **Credits/Units:** 1-5
- **Lecture Hours:** 5

Opportunity to plan, organize and complete special projects approved by the department. [GE]

### Introduction to Business (BUS& 101)
- **Credits/Units:** 5
- **Lecture Hours:** 5

Learn about the business functions of management, human resources, marketing, law, computers, accounting, finance, production, small business and international business. [GE, HR, SE][PNP]

### Business Law (BUS& 201)
- **Credits/Units:** 5
- **Lecture Hours:** 5

**Prerequisite:** Sophomore Standing (completion of 45 credits or more)

Practical applications of the law of contracts, agency, employment, real and personal property, and bailments in the business world and in one’s personal affairs. Legal reasoning and illustrative case problems. [GE, SE]
## CHEMISTRY (CHEM/CHEM&)

<table>
<thead>
<tr>
<th>Selected</th>
<th>Topics</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 80</td>
<td></td>
<td>1-5</td>
</tr>
<tr>
<td></td>
<td>5 hours of lecture</td>
<td></td>
</tr>
</tbody>
</table>

Selected topics in chemistry. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules.

<table>
<thead>
<tr>
<th>Small World Antibiotics Research 2a</th>
<th>CHEM 106</th>
<th>5 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 hours of lecture / 4 hours of lab</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Prerequisite:** BIOL 105 (grade of "C" or higher)
Investigates authentic research to discover potentially new antibiotics. Overview of basic chemical concepts including a chemical history of antibiotics, their sources and discovery, and modes of action in bacteria. Strong emphasis on scientific inquiry including critical thinking, laboratory research methodology, and communication abilities. [GE, NS, NS-LAB, SE][PnP]

<table>
<thead>
<tr>
<th>Cooperative Work Experience</th>
<th>CHEM 199</th>
<th>1-5 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 hours of clinical</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]

<table>
<thead>
<tr>
<th>Selected</th>
<th>Topics</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 280</td>
<td></td>
<td>1-5</td>
</tr>
<tr>
<td></td>
<td>5 hours of lecture</td>
<td></td>
</tr>
</tbody>
</table>

Selected topics in chemistry. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules.

<table>
<thead>
<tr>
<th>Special Projects</th>
<th>CHEM 290</th>
<th>1-6 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 hours of lecture</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Opportunity to plan, organize and complete special projects approved by the department. [GE]

<table>
<thead>
<tr>
<th>CHEMISTRY Concepts: Your Intricate Environment</th>
<th>CHEM&amp; 105</th>
<th>5 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 hours of lecture</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Designed to increase scientific literacy in non-science majors, with little or no scientific background. Together we will explore your world through the lens of chemistry. You will be introduced to basic chemical concepts, the laws that govern them, and use that foundation to explore the connection between human actions and the state of the environment. This course is distinct from CHEM& 110 in both content and practice; since it uses a relatively non-mathematical approach it does not serve as a prerequisite to other CHEM courses. [GE, NS, SE]

<table>
<thead>
<tr>
<th>Chemical Concepts W/Lab</th>
<th>CHEM&amp; 110</th>
<th>5 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 hours of lecture / 2 hours of lab</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Introductory chemistry course to fulfill the General Education Science with Laboratory requirement, intended for non-science majors who will not take additional chemistry. Focus on unit factor and equation problem solving skills as related to chemical concepts, also stoichiometry and stoichiometric problem solving skills. Topics include the structure of the atom, chemical reactions, and chemical and physical properties to describe matter. [GE, NS, NS-LAB, SE]

---

<table>
<thead>
<tr>
<th>Intro to Chemistry: Pre-Health</th>
<th>CHEM 121</th>
<th>5 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 hours of lecture / 2 hours of lab</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Prerequisite:** MATH 96 (grade of "C" or higher), placement into Math level 45, or concurrent enrollment in MATH 6.
Topics in general chemistry applicable to students seeking a 2-year degree in the health-occupations fields. Unit-factor method is applied to problem solving. Topics covered include units of measurement, atomic structure, chemical bonding, energy, the mole concept, nomenclature of inorganic compounds, writing and balancing equations, properties of gases, solutions and colloids, reaction rates and equilibrium, acids, bases and salts, radiation and health. Completion of elementary algebra recommended. [GE, NS, NS-LAB, SE]

<table>
<thead>
<tr>
<th>Intro to Organic/Biochem</th>
<th>CHEM 131</th>
<th>5 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 hours of lecture / 2 hours of lab</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Prerequisite:** CHEM 121 (grade of "C" or higher)
Aspects of organic and biochemistry emphasizing how chemicals affect functioning of the human body. Applicable to students seeking a 2-year degree in the health-occupations fields. Topics covered include aliphatic and aromatic compounds, alcohols, ethers, amines, aldehydes, ketones, carboxylic acids and their derivatives, carbohydrates and carbohydrate metabolism, lipids and lipid metabolism, proteins and protein metabolism, enzymes and hormones, nucleic acids and the chemistry of heredity, body fluids and the human circulation system and nutrition. [GE, NS, NS-LAB, SE]

<table>
<thead>
<tr>
<th>General Chemistry Preparation</th>
<th>CHEM&amp; 139</th>
<th>4 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 hours of lecture</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Prerequisite:** MATH 96 (grade of "C" or higher) or placement into Math level 50.
For students who need additional background in applied mathematics and chemistry to enroll in the CHEM& 141-142-143 sequence for science and engineering majors. Topics include scientific methods of measurement, significant figures, nomenclature, properties of elements, compounds, and solutions, the periodic table, writing and balancing chemical equations, and focused (extensive) practice on stoichiometric problem solving. [GE, SE]

<table>
<thead>
<tr>
<th>General Chemistry I</th>
<th>CHEM&amp; 141</th>
<th>4 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 hours of lecture</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Prerequisite:** Both CHEM& 141 and CHEM& 151 must be in your shopping cart to register. (Eligibility for College Algebra (Math Level 50)) and (CHEM& 139 (grade of "C" or higher) or score on chem placement test), and (concurrent enrollment in CHEM& 141 and CHEM& 151).
First of a 3-term sequence designed for science and engineering majors. Applications of the scientific method by correlating theory with experimental observation. Topics include systems of measurement, atomic structure, chemical bonding and shape, stoichiometric calculations, properties of gases, nomenclature of inorganic compounds, and writing and balancing equations. [GE, NS, SE]
<table>
<thead>
<tr>
<th>General Chemistry</th>
<th>II</th>
<th>CHEM&amp; 142</th>
<th>4 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite: CHEM&amp; 141 and CHEM&amp; 151 (grades of &quot;C&quot; or higher), and concurrent enrollment in CHEM&amp; 142 and CHEM&amp; 152</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second of a 3-term sequence designed for science and engineering majors. Applications of the scientific method by correlating theory with experimental observation. Topics include properties of liquids and solids, solutions, equilibria, reaction kinetics, acid-base theories, ionic equilibria and an introduction to organic chemistry. [GE, NS, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 hours of lecture</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Chemistry</th>
<th>III</th>
<th>CHEM&amp; 143</th>
<th>4 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite: CHEM&amp; 142 and CHEM&amp; 152 (grades of &quot;C&quot; or higher). Concurrent enrollment in CHEM&amp; 153 is recommended.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third of a three-term sequence designed for science and engineering majors. Applications of the scientific method by correlating theory with experimental observation. Topics include ionic equilibria, thermodynamics, nuclear chemistry, electrochemistry, transition metal chemistry, and applications of all chemical concepts to the elements on the periodic table. [GE, NS, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 hours of lecture</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Chemistry Laboratory</th>
<th>I</th>
<th>CHEM&amp; 151</th>
<th>1 Credit/Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite: Both CHEM&amp; 141 and CHEM&amp; 151 must be in your shopping cart to register. (Eligibility for College Algebra (Math Level 50)) and (CHEM&amp; 139 (grade of &quot;C&quot; or higher) or score on chem placement test). and (concurrent enrollment in CHEM&amp; 141 and CHEM&amp; 151).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First of a 3-term lab sequence designed for science and engineering majors, to coincide with CHEM&amp; 141 General Chemistry I. Applications of the scientific method by correlating theory with experimental observation. Topics include systems of measurement, observing and affecting chemical reactions, energy considerations, chemical behavior of aqueous systems, the nature of chemical bonding, gas laws, graphing techniques, using technological interfaces to collect and manipulate data, and mathematical calculations to support chemical observations. Students must register for CHEM&amp; 141, or consent of Instructional Unit. [GE, NS, NS-LAB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 hours of lab</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Chemistry Laboratory</th>
<th>II</th>
<th>CHEM&amp; 152</th>
<th>1 Credit/Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite: CHEM&amp; 141 and CHEM&amp; 151 (grades of &quot;C&quot; or higher), and concurrent enrollment in CHEM&amp; 142 and CHEM&amp; 152</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second of a 3-term lab sequence designed for science and engineering majors, to coincide with CHEM&amp; 142 General Chemistry II. Applications of the scientific method by correlating theory with experimental observation. Topics include phenomena of solid and liquid states, colligative properties of aqueous and non-aqueous systems, reaction kinetics, general equilibria, acid/base equilibria, graphing techniques, using technological interfaces to collect and manipulate data, and mathematical calculations to support chemical observations. [GE, NS, NS-LAB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 hours of lab</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Chemistry Laboratory</th>
<th>III</th>
<th>CHEM&amp; 153</th>
<th>2 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 hour of lecture / 2 hours of lab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite: CHEM&amp; 142 and CHEM&amp; 152 (grades of &quot;C&quot; or higher), and concurrent enrollment in CHEM&amp; 143 and CHEM&amp; 153</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third of a 3-term lab sequence to coincide with CHEM&amp; 143 General Chemistry III for science and engineering majors. Applications of the scientific method by correlating theory with experimental observation. Topics include chemical and ionic equilibria, acid-base theories of aqueous solutions and selected principles of electrolyrochemistry, gravimetric analysis, coordination chemistry, volumetric analysis, inorganic synthesis, and the statistical handling of data. [GE, NS, NS-LAB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organic Chemistry</th>
<th>I</th>
<th>CHEM&amp; 241</th>
<th>4 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 hours of lecture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite: CHEM&amp; 143 and CHEM&amp; 153 (grades of &quot;C&quot; or higher) and concurrent enrollment in CHEM&amp; 241 and CHEM&amp; 251</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First of a 3-term sequence designed for science and engineering majors, or students seeking a career in the health professions. Topics include mechanistic approach applied to hydrocarbons and alkenes, spectroscopic methods, molecular orbitals, hybridization, resonance, acid/base theory, nomenclature, structure and reactivity, kinetic and thermodynamic theories of reactions. [GE, NS, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organic Chemistry</th>
<th>II</th>
<th>CHEM&amp; 242</th>
<th>4 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 hours of lecture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite: CHEM&amp; 241 and CHEM&amp; 251 (grades of &quot;C&quot; or higher) and concurrent enrollment in CHEM&amp; 242 and CHEM&amp; 252</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second of a 3-term sequence designed for science and engineering majors, or students seeking careers in the health professions. Topics include organic synthesis and mechanistic approach applied to polar molecules; topics may include alcohols, ethers, organometallic compounds, aromatic systems, aldehydes and ketones. [GE, NS, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organic Chemistry</th>
<th>III</th>
<th>CHEM&amp; 243</th>
<th>4 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 hours of lecture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite: CHEM&amp; 242 and CHEM&amp; 252 (grades of &quot;C&quot; or higher) and concurrent enrollment in CHEM&amp; 243 and CHEM&amp; 253</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third of a 3-term sequence designed for science and engineering majors, or students seeking careers in the health professions. Topics include mechanistic and synthetic approach applied to polar molecules; topics may include reactions of carboxylic acids and derivatives, dicarbonyl compounds, amines, conjugated systems, polymer systems and an introduction to biomolecules. [GE, NS, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organic Chemistry Laboratory</th>
<th>I</th>
<th>CHEM&amp; 251</th>
<th>1 Credit/Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 hours of lab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite: CHEM&amp; 143 and CHEM&amp; 153 (grades of &quot;C&quot; or higher) and concurrent enrollment in CHEM&amp; 241 and CHEM&amp; 251</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First of a 3-term laboratory sequence designed for science and engineering majors, or students seeking a career in the health professions. Focus on basic organic laboratory techniques such as recrystallizations, melting points, distillations, reflux, extractions, chromatography, and spectroscopy; laboratory notebook-keeping skills and scientific writing methods. [GE, NS, NS-LAB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Organic Chemistry Laboratory II
CHEM& 252 1 Credit/Unit
4 hours of lab
Concurrent enrollment in CHEM& 242, or consent of Instructional Unit.

Prerequisite: CHEM& 241 and CHEM& 251 (grades of "C" or higher) and concurrent enrollment in CHEM& 242 and CHEM& 252

Second of a 3-term laboratory sequence designed for science and engineering majors, or students seeking a career in the health professions. Focus on organic laboratory techniques, spectroscopic characterization of molecules, and introduction to synthetic techniques, including multi-step syntheses and handling moisture- or air-sensitive compounds. [GE, NS, NS-LAB, SE]

Organic Chemistry Laboratory III
CHEM& 253 2 Credits/Units
1 hour of lecture / 4 hours of lab

Prerequisite: CHEM& 242 and CHEM& 252 (grades of "C" or higher) and concurrent enrollment in CHEM& 243 and CHEM& 253

Third of a 3-term sequence designed for science and engineering majors, or students seeking careers in the health professions. Advanced synthetic techniques, project-based experiments and identification. CHEM& 253 replaces CHEM 214. [GE, NS, NS-LAB, SE]
COLLEGE AND ACADEMIC PREPARATION (CAP/CCAP)

Educational Interviewing
CAP 1 1 Credit/Unit
1 hours of lecture
For students who are new to Transitional Studies. Students will be assessed and advised into appropriate classes, set goals and create an educational plan. [PNP]

Technology for Pathways
CAP 3 1 Credit/Unit
1 hours of lecture
Improve technology skills, with a focus on navigating Canvas, while also learning about the career pathways leading from Transitional Studies to college completion. HS+ students will earn 0.5 credit toward the HS+ diploma. [PNP]

Jumpstart: Reading & Writing
CAP 5 1-6 Credits/Units
6 hours of lecture
Development of standards-based reading and writing skills in the contexts of science and social studies to successfully transition into appropriate HS+ courses.

Intensive Fast Track 1: Portfolio
CAP 11 2 Credits/Units
2 hours of lecture
Improve the ability to listen actively, speak so others can understand, read with understanding, and convey ideas in writing while developing a career portfolio. Upon successful completion of Intensive Fast Track 1, students will have gained the study skills as well as the academic skills to transition into Fast Track 2, Integrated English CAP coursework. HS+ students who concurrently take CAP 11, CAP 12, CAP 13, CAP 14 and CAP 15 will earn 1 Occupational Education credit toward the HS+ diploma.

Intensive Fast Track 1: Written Communication
CAP 12 6 Credits/Units
6 hours of lecture
Improve the ability to read with understanding and convey your ideas in writing. Upon successful completion of Intensive Fast Track 1, students will have gained the study skills as well as the academic skills to transition into Fast Track 2, Integrated English CAP coursework. HS+ students who concurrently take CAP 11, CAP 12, CAP 13, CAP 14 and CAP 15 will earn 1 Occupational Education credit toward the HS+ diploma.

Intensive Fast Track 1: Oral Communication
CAP 13 3 Credits/Units
3 hours of lecture
Improve the ability to listen actively and speak so others can understand. Upon successful completion of Intensive Fast Track 1, students will have gained the study skills as well as the academic skills to transition into Fast Track 2, Integrated English CAP coursework. HS+ students who concurrently take CAP 11, CAP 12, CAP 13, CAP 14 and CAP 15 will earn 1 Occupational Education credit toward the HS+ diploma.

Intensive Fast Track 1: Technology
CAP 14 3 Credits/Units
3 hours of lecture
Improve the ability to use technology. Upon successful completion of Intensive Fast Track 1, students will have gained the study skills as well as the academic skills to transition into Fast Track 2, Integrated English CAP coursework. HS+ students who concurrently take CAP 11, CAP 12, CAP 13, CAP 14 and CAP 15 will earn 1 Occupational Education credit toward the HS+ diploma.

Intensive Fast Track 1: Study Skills
CAP 15 2 Credits/Units
2 hours of lecture
Strengthen study skills and reflect on various strategies and characteristics of successful college students. Upon successful completion of Intensive Fast Track 1, students will have gained the study skills as well as the academic skills to transition into Fast Track 2, Integrated English CAP coursework. HS+ students who concurrently take CAP 11, CAP 12, CAP 13, CAP 14 and CAP 15 will earn 1 Occupational Education credit toward the HS+ diploma.

CAP 16 6 Credits/Units
6 hours of lecture
Development of computer skills to support your ability to listen actively and speak so others can understand in the context of college and work. Upon successful completion of Fast Track 1 (both CAP 016 and CAP 018), students will have gained the study skills as well as the academic skills to transition into Fast Track 2, Integrated English CAP coursework. HS+ students will earn 0.5 Occupational Education credit toward their HS+ diploma.

CAP 18 6 Credits/Units
6 hours of lecture
Development of computer skills as you improve your ability to read with understanding and convey your ideas in writing. Upon successful completion Intensive Fast Track 1 (both CAP 016 and CAP 018), students will have gained the study skills as well as the academic skills to transition into Fast Track 2, Integrated English CAP coursework. HS+ students will earn 0.5 Occupational Education credit toward the HS+ diploma.

CAP 21 6 Credits/Units
6 hours of lecture
Development of written communication skills, focusing on college readiness. Improve written fluency as well as accuracy in writing, grammar, and vocabulary use. Upon successful completion of Fast Track 2, students will have gained the skills to transition into Integrated English CAP coursework. HS+ students will earn 0.5 Elective credit toward the HS+ diploma.

CAP 22 6 Credits/Units
6 hours of lecture
Development of oral communication skills, focusing on college readiness. Improve listening comprehension as well as fluency and accuracy in speaking. HS+ students will earn 0.5 Elective credit toward the HS+ diploma.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits/Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 23</td>
<td>College and Academic Preparation (CAP/CCAP)</td>
<td>6 Credits/Units</td>
<td>Development of oral and written communication skills both face-to-face and on-line in the context of healthcare. Upon successful completion of On-Ramp to Healthcare, students will have gained the skills to transition into job training and college courses. HS+ students will earn 1 Health or Occupational Education credit toward the HS+ diploma. [PNP]</td>
</tr>
<tr>
<td>CAP 31</td>
<td>Washington State History</td>
<td>3 Credits/Units</td>
<td>Prepare for the GED or the HS+ diploma. Provides a social, political, economic history of the Pacific Northwest with particular emphasis on the state of Washington, including Native American history and gender/ethnic history. HS+ students will earn 1 WA State History credit toward the HS+ diploma.</td>
</tr>
<tr>
<td>CAP 24</td>
<td>Integrated English and Business</td>
<td>7 Credits/Units</td>
<td>Development of both oral and written communication skills in the context of Business. Upon successful completion of On-Ramp to Business, students will have gained the skills to transition into job training and college courses. HS+ students will earn 1 Occupational Education credit toward the HS+ diploma.</td>
</tr>
<tr>
<td>CAP 32</td>
<td>Washington State History &amp; Fine Arts</td>
<td>7 Credits/Units</td>
<td>Earn credits toward HS+ diploma, prepare for the GED test or improve skills to transition to college-level courses. Gain a deeper understanding of WA State History and how it relates to Fine Arts. HS+ students will earn 1 WA State History credit, 1 Fine Arts credit and 1 Elective credit toward the HS+ diploma.</td>
</tr>
<tr>
<td>CAP 27</td>
<td>Civics</td>
<td>3 Credits/Units</td>
<td>Preparation for GED or HS+ diploma: study of our national government, constitution, and rights and responsibilities of citizenship at federal, state, and local levels. Topics: federal, state, tribal, and local government organization procedures; current issues addressed at each level of government; electoral issues, including elections, ballot measures, initiatives, and referenda; study and completion of the civics component of the federally administered naturalization test required of persons seeking to become naturalized citizens; and character traits and basic values of living in a free society. HS+ students will earn 1 Civics credit toward the HS+ diploma.</td>
</tr>
<tr>
<td>CAP 33</td>
<td>US History &amp; Government</td>
<td>7 Credits/Units</td>
<td>Earn credits toward HS+ diploma, prepare for the GED test or improve skills to transition to college-level courses. Gain a deeper understanding of US history and government. HS+ students will earn 1 US History and Government credit, 0.5 Civics credit and 1 Elective credit toward the HS+ diploma.</td>
</tr>
<tr>
<td>CAP 28</td>
<td>Ecology Basics</td>
<td>3 Credits/Units</td>
<td>Elements of life science that are focused on ecological understanding. Explore relationships between living organisms and relate these relationships to ecological issues locally and globally. HS+ students will earn 1 lab science credit toward the high school diploma.</td>
</tr>
<tr>
<td>CAP 34</td>
<td>Science &amp; Contemporary World Problems</td>
<td>7 Credits/Units</td>
<td>Earn credits toward HS+ diploma, prepare for the GED test or improve skills to transition to college-level courses. Gain a deeper understanding of the sciences and how they relate to current world problems. HS+ students will earn 1 Science credit, 1 Contemporary World Problems credit and 1 Elective credit toward the HS+ diploma.</td>
</tr>
<tr>
<td>CAP 40</td>
<td>Integrated Math and Occupations</td>
<td>8 Credits/Units</td>
<td>For students needing to learn or review math fundamentals. Apply math skills (e.g. whole numbers, fractions, decimals, integers, percents, basic geometry, standard American measurement, basic tables/graphs) in various occupational contexts. HS+ students will earn 1 Occupational Education credit and 1 Elective credit toward the HS+ diploma.</td>
</tr>
<tr>
<td>CAP 42</td>
<td>Integrated Math and Science</td>
<td>7 Credits/Units</td>
<td>Apply math skills (e.g. using integers, fractions, mixed numbers, order of operations, proportions, percents, algebraic expressions, multi-step equations, Metric system, standard and scientific notation, tables, graphs, diagrams) in the context of science. HS+ students will earn 2 Math credits and 1 Lab Science credit toward the HS+ diploma.</td>
</tr>
</tbody>
</table>
Math Applications
CAP 46 7 Credits/Units
10 hours of lecture
Prerequisite: Eligibility for CAP 46
Prepare to transition to MATH 107 and MATH 146 with MATH 6. Apply math skills in appropriate contexts and develop critical thinking skills. Topics include complex expressions, equations, inequalities, compound inequalities, graphs and equations using point-slope and slope-intercept form, square roots, exponential, polynomial expressions and equations, exponential and polynomial functions, exponential and logarithmic functions. HS+ students will earn 1 Math credit and 1 Elective Credit toward the HS+ diploma.

Transitional Studies Math Support
CAP 49 1-3 Credits/Units
3 hours of lecture
Designed to provide additional instruction and support for student success in CAP Math classes. Reviews important concepts and skills introduced during CAP Math classes.

Integrated English and Health
CAP 61 6 Credits/Units
6 hours of lecture
Earn credits toward HS+ diploma, prepare for the GED test or improve skills to transition to college-level courses. Gain a deeper understanding of the human body's systems while improving reading and writing skills. HS+ students will earn 1 Health credit toward the HS+ diploma.

Integrated English and WA State History/Fine Arts
CAP 64 7 Credits/Units
7 hours of lecture
Earn credits toward HS+ diploma, prepare for the GED test or improve skills to transition to college-level courses. Integrates WA State history and Fine Arts with critical reading and writing skills. HS+ students will earn 3 English credits, 1 WA State History credit and 1 Fine Arts credit toward the HS+ diploma.

Integrated English and US History & Government
CAP 70 7 Credits/Units
7 hours of lecture
Earn credits toward HS+ diploma, prepare for the GED test or improve skills to transition to college-level courses. Integrates US history and government with critical reading and writing skills. HS+ students will earn 3 English credits, 1 US History and Government credit and 0.5 Civics credit toward the HS+ diploma.

Integrated English and Science/CWP
CAP 74 7 Credits/Units
7 hours of lecture
Earn credits toward HS+ diploma, prepare for the GED test or improve skills to transition to college-level courses. Integrates Science and CWP with critical reading and writing skills. HS+ students will earn 3 English credits, 1 Science credit and 1 Contemporary World Problems credit toward the HS+ diploma.

CAP Special Topics
CAP 80 1-10 Credits/Units
10 hours of lecture
Variable topics in Basic Education Career and Academic Prep. Content to reflect the selected topics. Because the course varies in content, it is repeatable for credit for different topics. Individual topics are listed in the term class schedule. Outcomes are determined by level of placement into the course and are based on the Washington State Basic Education Learning Indicators. Students must attempt a CASAS post-test after 45 hours of attendance in this course.

Academic Grammar
CAP 88 1-4 Credits/Units
4 hours of lecture
Development of writing skills for academic purposes that will emphasize concepts such as sentence types, sentence structure, clauses, phrases and verb tenses. Students will apply academic English conventions to their own writing. HS+ students will earn 0.5 Elective credit toward the HS+ diploma.

Integrated English/CWP (PP&I)
CAP 90 7 Credits/Units
7 hours of lecture
Prepare for the GED, HS+ diploma and/or college coursework. Gain a deeper understanding of the systems of power, privilege, and inequity and how they relate to current world problems. This is an advanced CAP writing course that will emphasize college-prep reading and writing skills. HS+ students will earn 1 Contemporary World Problems credit and English credit toward the HS+ diploma. Number of English credits earned will depend on the student’s high school graduation year. [PNP]

Health
CAP 93 1-2 Credits/Units
2 hours of lecture
Earn health credit for the HS+ diploma. Gain a deeper understanding of a healthy lifestyle. HS+ students will earn 1 Health credit toward the HS+ diploma.

Occupational Education
CAP 94 1-2 Credits/Units
2 hours of lecture
Earn occupational education credit for the HS+ diploma. Gain a deeper understanding of preparing for a job and working successfully with co-workers. HS+ students will earn 1 credit of Occupational Education toward the HS+ diploma.

Physical Education
CAP 95 1-2 Credits/Units
2 hours of lecture
Earn physical education credit for the HS+ diploma. Gain a deeper understanding of preparing for a job and working successfully with co-workers. HS+ students will earn 1 credit of Occupational Education toward the HS+ diploma.

Electives
CAP 96 2 Credits/Units
2 hours of lecture
Earn elective credit for the HS+ diploma. Work on independent projects in a variety of subject areas. HS+ students will earn elective credits toward the HS+ diploma.

CAP Special Projects
CAP 99 1-10 Credits/Units
10 hours of lecture
Competency-based course designed for those preparing for the GED® test or need to earn credit for the HS+ diploma. Topics include: Pre-Algebra, Basic Statistics, Algebra, Geometry, Measurement, Reading and Writing (English), Science, and Social Studies. [PNP]
Jump Start

CCAP 11  1-12 Credits/Units
24 hours of lab
Competency-based course designed for those preparing for the GED® test or need to earn credit for the HS+ diploma. Topics include: Pre-Algebra, Basic Statistics, Algebra, Geometry, Measurement, Reading and Writing (English), Science, and Social Studies. [PNP]

Science

CCAP 27  1-3 Credits/Units
3 hours of lecture
Prerequisite: Eligible for CCAP 27
Competency-based course designed to earn Science credit for the HS+ diploma. Explore the scientific method in the areas of ecology, sustainability and the environment. Demonstrated achievement of competencies will award 1 Science credit toward the HS+ diploma.

Contemporary World Problems

CCAP 28  1-3 Credits/Units
3 hours of lecture
Prerequisite: Eligible for CCAP 28
This competency-based course is designed for students who need to earn CWP credit for the HS+ diploma. Evaluation of major world events and human activity in order to better understand human impacts on our world. Evaluation of global civil rights movements and exploitation of resources to further understand the implications of human activity on local and global environments. Demonstrated achievement of the competencies will award 1 credit of CWP toward the HS+ diploma. [PNP]

Lab Science

CCAP 29  1-3 Credits/Units
3 hours of lecture
Prerequisite: Eligible for CCAP 29
Competency-based course designed to earn Lab Science credit for the HS+ diploma. Introduction of concepts from biology, chemistry and physics. Explore the scientific method through designing, implementing, and sharing a project using scientific inquiry. Demonstrated achievement of competencies will award 1 Lab Science credit toward the HS+ diploma.

Fine Arts

CCAP 30  1-3 Credits/Units
3 hours of lecture
Prerequisite: Eligible for CCAP 30
Competency-based course designed to earn Fine Arts credit for the HS+ diploma. Gain a deeper understanding of the arts and how to evaluate the impressions gained by exposure to different forms of media. Demonstrated achievement of the competencies will award 1 credit of Fine Arts toward the HS+ diploma. [PNP]

Washington State History

CCAP 31  1-3 Credits/Units
3 hours of lecture
Prerequisite: Eligible for CCAP 31
This competency-based course is designed for students who need to earn WA State History credit for the HS+ diploma. Provides a social, political, economic history of the Pacific Northwest with particular emphasis on the state of Washington, including Native American history and gender/ethnic history. Demonstrated achievement of the competencies will award 1 credit of WA State History toward the HS+ diploma. [PNP]

US History & Government

CCAP 33  1-3 Credits/Units
3 hours of lecture
Prerequisite: Eligible for CCAP 33
This competency-based course is designed for students who need to earn US History and Government credit. Demonstrated achievement of the competencies will award 1 credit of US History & 1 credit of Government toward the HS+ diploma, or 1 elective credit if Government credit is not needed. This course will analyze key events and time periods in US history to develop a more informed understanding of why and how the US exists today. [PNP]

Pre-Algebra

CCAP 40  1-6 Credits/Units
6 hours of lecture
Prerequisite: Eligible for CCAP 40
This competency-based course is designed for students who need to earn credit for the HS+ diploma. Application of math skills in real world contexts. Topics include: basic math skills, percent, decimals, fractions, mean, median, mode, graphs, expressions, equations, exponents, order of operation, perimeter, area, volume, formulas, measurement (metric and standard), signed numbers, absolute value, ratio, and proportion. Demonstrated achievement of competencies will award 1 elective credit for HS+ diploma. [PNP]

Algebra

CCAP 41  1-6 Credits/Units
6 hours of lecture
Prerequisite: Eligible for CCAP 41
This competency-based course is designed for students who need to earn Algebra credit toward the HS+ diploma. Topics: how equations work, factoring, graphing linear equations, solving inequalities and simplifying polynomials with various operations. Demonstrated achievement of the competencies will award 1 Algebra credit toward the HS+ diploma.

Geometry

CCAP 43  1-6 Credits/Units
6 hours of lecture
Prerequisite: Eligible for CCAP 43
This competency-based course is designed for students who need to earn Geometry credit for the HS+ diploma. Topics: geometry properties, area, perimeter, surface area, volume, and various transformations. Demonstrated achievement of the competencies will award 1 Geometry credit toward the HS+ diploma.

Algebra 2

CCAP 45  1-6 Credits/Units
6 hours of lecture
Prerequisite: Eligible for CCAP 45
This competency-based course is designed for students who need to earn Algebra 2 credit for the HS+ diploma. Topics: graph & solve inequalities, linear and exponential equations; simplify, add, subtract, multiply, divide and factor polynomials; solve quadratic equations; solve and simplify logarithms; identify functions; and solve & graph system of equations problems. Demonstrated achievement of competencies will award 1 Algebra 2 credit toward the HS+ diploma.

Applied English

CCAP 63  1-6 Credits/Units
6 hours of lecture
Prerequisite: Eligible for CCAP 63
This competency-based course is designed to earn English credit for the HS+ diploma. Emphasis on critical reading and analytical writing skills. Demonstrated achievement of the competencies will award 1-3 credits of English toward the HS+ diploma.
<table>
<thead>
<tr>
<th>CCAP</th>
<th>Special Topics</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCAP 80</td>
<td>10 hours of lecture</td>
<td>1-12 Credits/Units</td>
</tr>
</tbody>
</table>

Variable topics in Career and Academic Preparation. Content to reflect the selected topics. Because the course varies in content, it is repeatable for credit for different topics. Individual topics are listed in the term class schedule. Outcomes are determined by level of placement into the course.

**Health**

<table>
<thead>
<tr>
<th>CCAP 93</th>
<th>1-2 Credits/Units</th>
</tr>
</thead>
</table>

2 hours of lecture

**Prerequisite:** Eligible for CCAP 93

This competency-based course is designed for students who need to earn Health credit for the HS+ diploma. Students will gain a deeper understanding of a healthy lifestyle. Demonstrated achievement of the competencies will award 1 Health credit toward the HS+ diploma. [PNP]

**Physical Education & Fitness**

<table>
<thead>
<tr>
<th>CCAP 95</th>
<th>1-2 Credits/Units</th>
</tr>
</thead>
</table>

2 hours of lecture

**Prerequisite:** Eligible for CCAP 95

Competency-based course designed to earn physical education credit for the HS+ diploma. Gain a deeper understanding of physical education by creating a personalized self-directed exercise plan. Demonstrated achievement of the competencies will award 1.5 physical education credits toward the HS+ diploma. [PNP]

**Electives**

<table>
<thead>
<tr>
<th>CCAP 96</th>
<th>1-2 Credits/Units</th>
</tr>
</thead>
</table>

2 hours of lecture

**Prerequisite:** Eligible for CCAP 96

This competency-based course is designed for students who need to earn elective credit for the HS+ diploma. Students will work on independent projects in a variety of subject areas in order to fulfill graduation requirements for a high school diploma. Demonstrated achievement of the competencies will provide .5-1 electives credits toward the HS+ diploma.
College Essentials: Introduction to Clark
COLL 101 2 Credits/Units
2 hours of lecture
Introduction to Clark College for new students, focusing on making a successful transition to college life. Topics include goal setting, personal management skills, developing an academic plan, developing cultural competence and communication skills, financial literacy, and an introduction to student resources at the college. [GE, HR][PnP]
COMMUNICATION STUDIES
(CMST/CMST&)

Professional Communication and Technology
CMST 103 3 Credits/Units
3 hours of lecture
Professional use of current communication technology in a variety of settings. Examination of internet profile and development of communication competence in social media environments. Course concepts taught and assessed using a variety of communication technology tools and applications. [GE, HA, HR, SE]

Cooperative Work Experience
CMST 199 1-5 Credits/Units
15 hours of clinical
Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]

Selected Topics
CMST 280 1-5 Credits/Units
5 hours of lecture
Selected topics in Communication Studies. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE, SE]

Special Projects
CMST 290 1-5 Credits/Units
5 hours of lecture
Opportunity to plan, organize and complete special projects approved by the department. [GE]

Organizational Communication
CMST 310 5 Credits/Units
5 hours of lecture
Prerequisite: CMST 210, CMST 220, or CMST 230 (grade of "C" or higher)
Introduction to the communication dynamics of an organization. Analyzes relationships between structural variables in the organization and informal communication channels, organizational culture, and strategic communication. Covers the major theories of organizational communication, identifying and defining primary concepts, applying them to discussions of real-world situations. Topics include public and human relations, conflict resolution, organizational structure, motivation, coaching, leadership, informal communication networks, corporate culture, socialization, globalization, the role of technology, and external communication as they relate to organizations. Theory and research are made more applicable through case studies of actual organizational problems/issues. [GE, SE, WC]

Intro to Mass Media
CMST 102 5 Credits/Units
5 hours of lecture
Survey of the various major communication media, their primary functions and social impact. Explores the ways in which various mass media impact us and how we impact the mass media. Focuses on critical analysis of issues regarding the mass media to help students develop their own personal and informed approach toward the dynamics of mass communication in society and increase their media literacy. [GE, HA, HR, OC, SE]

Interpersonal Communication
CMST 210 5 Credits/Units
5 hours of lecture
Person-to-person communication emphasizing theoretical principles and their application. How self-concept, perception, verbal and nonverbal attributes and attitudes influence communication within the family, between friends, and at work. [GE, HA, HR, OC, SE]

Public Speaking
CMST 220 5 Credits/Units
5 hours of lecture
Introduction to speechmaking based primarily on a traditional public speaking approach. Aids students in developing theoretical understanding and practical application of oral communication skills. Techniques in controlling speech anxiety, how to structure and organize information to present to a variety of audiences; and physical and vocal delivery skills. [GE, HA, OC, SE]

Small Group Communication
CMST 230 5 Credits/Units
5 hours of lecture
Prerequisite: ENGL 101 or PTWR 135 (grade of "C" or higher)
Small group communication emphasizing theoretical principles and their application, enabling students to become more comfortable and competent participants in the group communication process. Emphasis will be on the study and application of the dynamics of group development, problem solving methodologies, and the use of power, including leadership and conflict. Formerly titled CMST 201. Credit not allowed for both CMST 201 and CMST 230. [GE, HA, HR, OC, SE, SS]

Intercultural Communication
CMST 240 5 Credits/Units
5 hours of lecture
Examination of the impact of culture on communication. Analysis of patterns of communications which affect the ability to establish clear understanding and effective interpersonal relationships. Skills to improve communication across cultural boundaries. Cannot receive credit for both CMST 216 and CMST 240. [GE, HA, SE]
Programming Tools
CSE 224 5 Credits/Units
5 hours of lecture
Prerequisite: CSE 121 (grade of "C" or higher)
Study of tools and techniques that facilitate programming and debugging, including debuggers, profilers, and scripting. [GE, SE]

Digital Logic Design
CSE 250 5 Credits/Units
4 hours of lecture / 2 hours of lab
Prerequisite: CSE 120 and CSE 121 (grades of "C" or higher).
Introduction to digital logic elements, design, and analysis techniques and tools. Course labs provide hands-on design and implementation of digital systems. [GE]

Selected Topics
CSE 280 1-5 Credits/Units
2 hours of lecture
Prerequisite: CSE 120 and CSE 224 (grades of "C" or higher).
Selected topics in Computer Science & Engineering. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE]

Special Projects
CSE 290 1-5 Credits/Units
5 hours of lecture
Prerequisite: CSE 223 (grade of "C" or higher)
Opportunity to plan, organize, and complete special projects approved by the department. [GE]

Software Engineering
CSE 310 4 Credits/Units
4 hours of lecture
Prerequisite: CSE 223 (grade of "C" or higher)
Practical experience in all stages of software development lifecycle from requirement analysis to release. Topics include requirements analysis, specification, design, abstraction, programming style, testing, maintenance, communication, teamwork, and software project management, with emphasis on effective teamwork in software development. [GE]

Programming Language Design
CSE 315 4 Credits/Units
4 hours of lecture
Prerequisite: CSE 223 (grade of "C" or higher)
Key topics in programming language design and implementation. Additionally, students evaluate three distinct programming languages based on principles and practices of programming language design. [GE]

Design & Analysis of Algorithms
CSE 320 4 Credits/Units
4 hours of lecture
Prerequisite: CSE 223 and CSE 215 (grades of "C" or higher)
Intermediate analysis and design of algorithms with an emphasis on efficiency and effectiveness. Topics include techniques to evaluate an algorithm's efficiency and effectiveness, as well as design algorithms for commonly encountered problems. [GE]

Software Design & Development
CSE 325 4 Credits/Units
4 hours of lecture
Prerequisite: CSE 223 and CSE 215 (grades of "C" or higher)
Intermediate software design and development with emphasis on user interface design, architectures, and software patterns. [GE]
Introduction to Database Systems
CSE 340 4 Credits/Units
4 hours of lecture
Prerequisite: CSE 223 and CSE 370 (grades of "C" or higher).
Introduction to database design and use of databases to manage application and user data, as well as SQL programming in the relational database context to demonstrate database language concepts and identify issues and potential solutions. Topics also include core database design concepts such as indexing and optimization. [GE]

Computer Organization & Architecture
CSE 370 5 Credits/Units
4 hours of lecture / 2 hours of lab
Prerequisite: CSE 250 (grade of "C" or higher).
Introduction to computer organization, microprocessor system architecture, instruction sets, interfacing and assembly language. Application of concepts using Microchip microcontroller in lab projects. [GE]

Ethics & Intellectual Property
CSE 415 4 Credits/Units
4 hours of lecture
Prerequisite: CSE 223 and ENGL& 235 (grade of "C" or higher).
Emphasis on techniques and tools required to manage software projects effectively and efficiently, while ensuring the software meets the quality standards and user requirements. Topics include goal setting, resource planning, scheduling, and risk management in the context of Lean Software development and Agile Methodology. [GE]

Human-Computer Interface
CSE 420 4 Credits/Units
4 hours of lecture
Prerequisite: CSE 223 and ENGL& 235 (grade of "C" or higher).
Introduction to Human-Computer Interaction with an emphasis on developing effective and easy-to-use graphical user interfaces. [GE]

Introduction to Artificial Intelligence
CSE 430 2 Credits/Units
2 hours of lecture
Prerequisite: CSE 223 (grade of "C" or higher).
First in a three-course sequence in Artificial Intelligence. Introduction to Artificial Intelligence (AI) general theories, machine learning with emphasis on techniques, theory, and algorithms, that enable computers to learn. Topics include AI's current and future effects on society (economic, employment, social, military, politics). [GE]

Fundamentals of Artificial Intelligence
CSE 431 4 Credits/Units
4 hours of lecture
Prerequisite: CSE 223, CSE 430, and MATH 215 (grades of "C" or higher).
Second course in a three-course sequence in Artificial Intelligence. Topics include AI's general theories and algorithms with emphasis on techniques and tools of Machine Learning (ML) and associated hardware platforms (e.g. neuromorphic computing, GPUs, etc.). [GE]

Application of Artificial Intelligence
CSE 432 4 Credits/Units
4 hours of lecture
Prerequisite: CSE 431 (grade of "C" or higher).
Third and final course in a three-course sequence focuses on application of key concepts of Artificial Intelligence (AI), with emphasis on application of Machine Learning (ML) techniques, theory, and algorithms to design project and analyzing real world case studies. [GE]

Introduction to Data Science
CSE 435 2 Credits/Units
2 hours of lecture
Prerequisite: CSE 223 (grade of "C" or higher).
First in a three-course sequence. Introduction to opportunities and challenges in Data Science. Topics include Python data science packages, statistical analysis methods and effective data visualization. [GE]

Fundamentals of Data Science
CSE 436 4 Credits/Units
4 hours of lecture
Prerequisite: CSE 223 and CSE 435 (grades of "C" or higher).
Second in a three-course sequence on Data Science. Developing skills in analyzing and visualizing a broad range of large data sets using Data Science fundamentals and techniques. Topics include predictions through probabilistic modeling, statistical inference, Python Data Science tools, and visualization techniques. [GE]

Application of Data Science
CSE 437 4 Credits/Units
4 hours of lecture
Prerequisite: CSE 436 (grade of "C" or higher).
Third and final course in a three-course sequence on Data Science. Emphasis on developing visualization and decision-making tools based on industry-relevant large data sets using Data Science processes, tools, and techniques. Case studies in various industry domains is used to develop skills required for an informed and effective Data Science practitioner. [GE]

Introduction to Cloud Computing
CSE 440 2 Credits/Units
2 hours of lecture
First in a three-course sequence on Cloud Computing. Introduction to concepts, opportunities, and challenges in cloud computing. Topics include cloud storage, compute, event, messaging, web app, security, and monitoring. [GE]
Fundamentals of Cloud Computing  
CSE 441  
4 Credits/Units  
4 hours of lecture  
Prerequisite: CSE 325, CSE 330, CSE 340, and CSE 440 (grades of "C" or higher).  
Second course in a three-course sequence in Cloud Computing. Topics include Fundamentals of cloud computing, cloud storage, compute, event, messaging, web app, security, and monitoring. [GE]

Application of Cloud Computing  
CSE 442  
4 Credits/Units  
4 hours of lecture  
Prerequisite: CSE 441 (grade of "C" or higher).  
Third and final course in a three-course sequence on Cloud Computing. Emphasis on developing cloud computing applications using Microsoft Azure cloud infrastructure and C# programming language. [GE]

Introduction to Mobile Application  
CSE 445  
2 Credits/Units  
2 hours of lecture  
Prerequisite: CSE 223 (grade of "C" or higher).  
First in a three-course sequence on mobile application. Introduction to concepts, opportunities, and challenges in mobile application development. Topics will include designing, developing, deploying, and testing mobile applications using the Dart programming language and the Flutter development environment. [GE]

Fundamentals of Mobile Application  
CSE 446  
4 Credits/Units  
4 hours of lecture  
Prerequisite: CSE 325, CSE 340, and CSE 445 (grades of "C" or higher).  
Second in a three-course sequence on mobile application. Focus on fundamentals of mobile application development. Topics include designing, developing, deploying, and testing mobile application fundamentals. [GE]

Developing Mobile Applications  
CSE 447  
4 Credits/Units  
4 hours of lecture  
Prerequisite: CSE 446 (grade of "C" or higher).  
Third and final course in a three-course sequence on mobile application. Focus on mobile computing application development. Topics include designing, developing, deploying, and testing mobile applications using the Dart programming language and the Flutter development environment. [GE]

Survey of Cybersecurity  
CSE 450  
2 Credits/Units  
2 hours of lecture  
Prerequisite: CSE 223 (grade of "C" or higher).  
First course in a three-course sequence in Cybersecurity. Introduction to Cybersecurity concepts, opportunities, and challenges. Topics include cyber-attack types, access control, authentication, cryptography, network security and application security. [GE]

Capstone Project I  
CSE 490  
4 Credits/Units  
4 hours of lecture  
Prerequisite: CSE 310, CSE 325, and CSE 340 (grades of "C" or higher) and concurrent enrollment in CSE 410.  
First of a three-course sequence on capstone project. Emphasis on working in teams to propose an industry-relevant project by defining problem statements, evaluating existing solutions, and proposing more effective or more efficient solutions. [GE]
**Computer Technology (CTEC)**

<table>
<thead>
<tr>
<th>Computing Essentials</th>
<th>CTEC 101</th>
<th>2 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 hours of lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite:</strong></td>
<td>Eligibility for ENGL 90 (CAP 64, CAP 70, or CAP 74 (grade of &quot;C&quot; or higher), recommending score on placement test, or qualifying HS GPA).</td>
<td></td>
</tr>
</tbody>
</table>

Introduction to basic skills and problem solving involved with computer hardware, operating systems, and application programs with a special emphasis on conventions and skills universal to a variety of computing settings and skills which promote portability between systems and applications. Provides an overview of key skills in a variety of operating system environments and digital interactive settings. Skills and topics include: essential interactions in major operating system environments, basic hardware components of a personal computer system, an overview of file formats and management with an emphasis on backup and portable document strategies, basic interactions in email and worldwide web including how to document and save web pages, and a survey of the purposes of various types of application programs. [GE] **IT Support**

<table>
<thead>
<tr>
<th>CTEC 104</th>
<th>3 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 hours of lecture</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite:</strong></td>
<td>Eligibility for ENGL 90 (CAP 64, CAP 70, or CAP 74 (grade of &quot;C&quot; or higher), recommending score on placement test, or qualifying HS GPA).</td>
</tr>
</tbody>
</table>

Communication skills for working in a technical environment. Topics covered: professional ethics and behavior, health and safety issues, and developing a service attitude. [GE, HR] **Information Technology Fundamentals**

<table>
<thead>
<tr>
<th>CTEC 106</th>
<th>5 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 hours of lecture</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite:</strong></td>
<td>Eligibility for ENGL 90 (CAP 64, CAP 70, or CAP 74 (grade of &quot;C&quot; or higher), recommending score on placement test, or qualifying HS GPA).</td>
</tr>
</tbody>
</table>

Provides foundational skills utilized in information and computer technology and a functional understanding of information technology-related careers. Topics include hardware and software technologies, configuring and setting up workstations, network fundamentals and computer security. Course is based on CompTIA IT Fundamentals certification. [GE] **Powershell Fundamentals**

<table>
<thead>
<tr>
<th>CTEC 111</th>
<th>3 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 hours of lecture</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite:</strong></td>
<td>Eligibility for ENGL 90 (CAP 64, CAP 70, or CAP 74 (grade of &quot;C&quot; or higher), recommending score on placement test, or qualifying HS GPA).</td>
</tr>
</tbody>
</table>

Provides skills and experience in the Windows PowerShell command line environment for preparation towards careers in computer and information technology related fields. Topics include command line syntax, file system interactions and managing network systems in PowerShell, scripting, functions and using PowerShell with Active Directory. [GE] **Internet Research and Living Online**

<table>
<thead>
<tr>
<th>CTEC 115</th>
<th>3 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 hours of lecture</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite:</strong></td>
<td>Eligibility for ENGL 90 (CAP 64, CAP 70, or CAP 74 (grade of &quot;C&quot; or higher), recommending score on placement test, or qualifying HS GPA).</td>
</tr>
</tbody>
</table>

Introduction to global networking and the Internet with an emphasis on the basic skills for interacting and utilizing the Internet for research. Topics include strategies for locating, analyzing and evaluating information, as well as network fundamentals, Internet origins, social, legal and ethical issues regarding Internet interactions. [GE] **User Experience Design**

<table>
<thead>
<tr>
<th>CTEC 117</th>
<th>4 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 hours of lecture / 4 hours of lab</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite:</strong></td>
<td>Eligibility for ENGL 90 (CAP 64, CAP 70, or CAP 74 (grade of &quot;C&quot; or higher), recommending score on placement test, or qualifying HS GPA).</td>
</tr>
</tbody>
</table>

Investigation into the field of user experience design, web usability and interaction design. Focus on strategies and best practices to better understand how to create successful user experiences. Topics include: fundamentals of user centered design, user research, the role of design thinking in user experience design, user testing, information architecture and interface design. Students will design and conduct usability testing. [GE] **Intro to Programming & Problem Solving**

<table>
<thead>
<tr>
<th>CTEC 121</th>
<th>5 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 hours of lecture</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite:</strong></td>
<td>Eligibility for ENGL 101 and (PTCS 110 (grade of &quot;C&quot; or higher), or placement into Math Level 50).</td>
</tr>
</tbody>
</table>

Fundamental concepts related to designing and writing computer programs and procedures. Topics include: problem-solving techniques, program design, coding, debugging, testing and documentation. Students will use the Python programming language to write simple programs while being exposed to concepts common to all programming. The course serves as an available prerequisite pathway for further studies in programming. [CP;GE, SE] **HTML Fundamentals**

<table>
<thead>
<tr>
<th>CTEC 122</th>
<th>4 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 hours of lecture</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite:</strong></td>
<td>Eligibility for ENGL 90 (CAP 64, CAP 70, or CAP 74 (grade of &quot;C&quot; or higher), recommending score on placement test, or qualifying HS GPA).</td>
</tr>
</tbody>
</table>

Introduction to website development through the mastery of the fundamentals of HTML, XHTML, and CSS coding for web pages. Intended to give the student the basic skills required to hand-code web pages from scratch. A website will be developed in compliance with current web standards, practices, and usability. Topics include: XHTML, HTML5, CSS, CSS3, web server organization and structure, text editors, images, links, lists, forms, tables, and code validation. [GE, SE] **JavaScript Fundamentals**

<table>
<thead>
<tr>
<th>CTEC 126</th>
<th>5 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 hours of lecture</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite:</strong></td>
<td>(CTEC 112, CTEC 121 or CSE 121) and CTEC 122 (grades of &quot;C&quot; or higher)</td>
</tr>
</tbody>
</table>

Introduction to the fundamentals and concepts of JavaScript including web scripting with jQuery, AJAX, and related libraries. Student will create dynamic websites and code demonstrating for debugging and testing JavaScript based design and code functionality. [GE]
This course is an introduction to the server-side programming language PHP and its use in creating dynamic web applications, providing students with a functional knowledge of database design, SQL statements, dynamic web applications, and the methods implemented in PHP for manipulating MySQL databases. [GE]

**Microsoft Windows OS Fundamentals**

CTEC 130

3 Credits/Units

**Prerequisite:** Eligibility for ENGL 90 (CAP 64, CAP 70, or CAP 74 (grade of "C" or higher), recommending score on placement test, or qualifying HS GPA).

Fundamental Windows interactions and key skills and issues important in providing support for Windows users. Topics include basic interactions with Windows, system configuration, installing and upgrading systems, managing devices, system maintenance and other support issues. Course is based on the Windows Operating System Microsoft Technology Associate (MTA) Certification, which students will have an opportunity to earn as a component of the course curriculum. [GE]

**Microsoft Networking Fundamentals**

CTEC 131

3 Credits/Units

**Prerequisite:** Eligibility for ENGL 90 (CAP 64, CAP 70, or CAP 74 (grade of "C" or higher), recommending score on placement test, or qualifying HS GPA).

Foundational concepts and skills associated with computer networking. Topics include basics of local area networking and wide area networks, the OSI Model, wired and wireless networks, Internet Protocol/Transmission Control Protocol (TCP/IP), and network security. Course is based on the Networking Fundamentals Microsoft Technology Associate (MTA) Certification which students will have an opportunity to earn as a part of the course curriculum. [GE]

**Microsoft Windows Server Fundamentals**

CTEC 132

4 Credits/Units

**Prerequisite:** NTEC 103 (grade of "C" or higher)

Foundational skills associated with Windows server installation, performance management and server maintenance. Topics include roles of servers, active directory and storage. Course is based on the Windows Network Administration Server Microsoft Technology Associate (MTA) Certification, which students will have an opportunity to earn as a component of the course curriculum. [GE]

**Microsoft Security Fundamentals**

CTEC 133

3 Credits/Units

**Prerequisite:** Eligibility for ENGL 90 (CAP 64, CAP 70, or CAP 74 (grade of "C" or higher), recommending score on placement test, or qualifying HS GPA).

Introduces concepts and fundamentals of network security. Topics include security layers, operating system security, network security and security software. Course is based on the Security Fundamentals Microsoft Technology Associate (MTA) Certification, which students will have an opportunity to earn as a component of the course curriculum. [GE]

**Microsoft Database Development With C#**

CTEC 134

5 Credits/Units

**Prerequisite:** Eligibility for ENGL 90 (CAP 64, CAP 70, or CAP 74 (grade of "C" or higher), recommending score on placement test, or qualifying HS GPA).

Provides a foundational overview of concepts, practices, and operation as associated with designing, developing and administrating a database. Topics include core database concepts, creating database objects, manipulating data, data storage, and administering a database. Students will have an opportunity to earn the Microsoft Database Administration Fundamentals Microsoft Technology Associate (MTA) certification as a component of the course curriculum. Familiarity with Windows and MS Office highly recommended. [GE]
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits/Units</th>
<th>Prerequisite/Eligibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTEC 165</td>
<td>Business Web Practices</td>
<td>4</td>
<td>Eligibility for ENGL 90 (CAP 64, CAP 70, or CAP 74 (grade of &quot;C&quot; or higher), recommending score on placement test, or qualifying HS GPA).</td>
</tr>
<tr>
<td>CTEC 166</td>
<td>Help Desk Technician I</td>
<td>5</td>
<td>CTEC 122, CTEC 160 and (ENGL&amp;101 or PTWR 135) (grades of &quot;C&quot; or higher)</td>
</tr>
<tr>
<td>CTEC 199</td>
<td>Cooperative Work Experience</td>
<td>1-5</td>
<td>CTEC 104 (grade of &quot;C&quot; or higher) and eligibility for ENGL 99</td>
</tr>
<tr>
<td>CTEC 200</td>
<td>PHP With SQL II</td>
<td>3</td>
<td>CTEC 127 (grade of &quot;C&quot; or higher)</td>
</tr>
<tr>
<td>CTEC 201</td>
<td>Help Desk Technician II</td>
<td>3</td>
<td>CTEC 200 (grade of &quot;C&quot; or higher)</td>
</tr>
<tr>
<td>CTEC 205</td>
<td>Introduction to Managed Information Systems</td>
<td>5</td>
<td>ENGL&amp; 101 or PTWR 135 (grade of &quot;C&quot; or higher)</td>
</tr>
<tr>
<td>CTEC 213</td>
<td>CompTIA A+ Fundamentals</td>
<td>4</td>
<td>CTEC 106 (grade of &quot;C&quot; or higher) and eligibility for ENGL 99</td>
</tr>
<tr>
<td>CTEC 214</td>
<td>CompTIA A+ Operating Systems &amp; Networking</td>
<td>4</td>
<td>CTEC 106 (grade of &quot;C&quot; or higher) and eligibility for ENGL 99</td>
</tr>
<tr>
<td>CTEC 227</td>
<td>PHP With SQL II</td>
<td>5</td>
<td>CTEC 106 (grade of &quot;C&quot; or higher) and eligibility for ENGL 99</td>
</tr>
<tr>
<td>CTEC 233</td>
<td>CompTIA Security+</td>
<td>5</td>
<td>CTEC 106 (grade of &quot;C&quot; or higher) and eligibility for ENGL 99</td>
</tr>
<tr>
<td>CTEC 235</td>
<td>CompTIA Cybersecurity</td>
<td>5</td>
<td>CTEC 233 (grade of &quot;C&quot; or higher) and eligibility for ENGL 99</td>
</tr>
</tbody>
</table>

*Note: All courses require a minimum GPA of 2.0.*

**Course Descriptions:**
- **Business Web Practices:** Surveys business standards and professional best practices for professions associated with web content creation, web design, and web development. Topics include distinctions between freelance, contracted and salaried work environments, web production practices in content strategy, project management, workflow and version control, current practices in marketing, web analytics and search engine optimization, and legal and ethical issues. 

- **CompTIA A+ Fundamentals:** Covers the skills required to install, configure and troubleshoot PC operating systems and networking software for desktop computers and mobile devices. Course is based on outcomes and objectives related to the CompTIA A+ certifications. 

- **CompTIA A+ Operating Systems & Networking:** Covers the skills required to install, configure and troubleshoot PC operating systems and networking software for desktop computers and mobile devices. Course is based on outcomes and objectives related to the CompTIA A+ certification. 

- **CompTIA Security+:** Covers the essential principles for network security and risk management. Topics include cloud security, expansion of Virtualization and how to secure it, mobile device security and analysis of metrics obtained from monitoring and tracking tools. Course is based on, and is intended for, students to prepare for the CompTIA Security+ certification. 

- **CompTIA Cybersecurity:** Covers critical knowledge and skills that are required to prevent, detect and combat cyber security threats. Covers tools such as packet sniffers, intrusion detection systems (IDS) and security information and event management (SIEM) systems. The class is based on the CompTIA Cybersecurity Analyst (CSA+) certification.
Web and Interface Design I
CTEC 270  
4 Credits/Units  
2 hours of lecture / 4 hours of lab  
**Prerequisite:** CTEC 122 (grade of "C" or higher)  
Fundamentals of web design and site development. Students learn web authoring standards, tools and techniques to conceive, design, produce and publish web sites. Topics include client and marketing analysis, information architecture, conceptual and visual design, workflow and team process, coding, content integration and website testing. [GE]

Web and Interface Design II
CTEC 271  
4 Credits/Units  
2 hours of lecture / 4 hours of lab  
**Prerequisite:** CTEC 270 (grade of "C" or higher)  
Further study in web design and site development. Focus on web authoring trends and strategic methodology to better understand how to extend website functionality and value. Topics include strategies such as cross platform and browser compatibility, content management, search engine optimization, site statistics, accessibility, project management and maintenance planning. [GE]

Emerging Technologies
CTEC 275  
5 Credits/Units  
5 hours of lecture  
**Prerequisite:** CSE 121 or CTEC 121 (grade of "C" or higher).  
Overview of robotics, artificial intelligence and 3D printing. Topics: interactive review of statistics, machine learning, artificial intelligence, review of the Python programming, security in robotics, and big data analysis. Apply programming skills for robotic devices, Artificial Intelligence and machine learning services. Develop 3D models that will be generated on 3D printers. [GE]

Selected Topics
CTEC 280  
1-6 Credits/Units  
6 hours of lecture  
Selected topics in Computer Technology. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE]

Special Projects
CTEC 290  
1-5 Credits/Units  
5 hours of lecture  
Opportunity to plan, organize, and complete special projects approved by the department. [GE]

Web Skills Portfolio
CTEC 293  
5 Credits/Units  
15 hours of clinical  
Department consent required for enrollment. Capstone projects and activities for Web Development AAT. Create a website and an online presence that will demonstrate proficiency in various skill sets of web development. Develop resume and professional branding, perform job research, develop job search strategies, and make contacts with potential employers. [GE]

Capstone Experience
CTEC 295  
3 Credits/Units  
3 hours of lecture  
Department consent required for enrollment. Capstone experience for CTEC degree and certificate, to assess and refine final skill set. Focus on developing and engaging in learning experiences to demonstrate and expand workplace skills and abilities. Development of employment-package resources and job-acquisition strategies. [GE]
CUISINE (CUIS)

Culinary Fundamentals I
CUIS 110 5 Credits/Units
2 hours of lecture / 6 hours of lab
Prerequisite: CAP 42 (grade of "C" or higher) or placement into Math level 10, eligibility for ENGL 99, and concurrent enrollment in CUIS 110 and CUIS 111.

Introduction to fundamentals of cooking. Includes history of food service industry, professionalism in the workplace, kitchen safety and sanitation, nutrition, equipment, kitchen math, weights and measures, knife skills, aromatics and flavorings. Theory of cooking methods, stocks and sauces. [GE]

Professional Cooking I
CUIS 111 8 Credits/Units
16 hours of lab
Prerequisite: CAP 42 (grade of "C" or higher) or placement into Math level 10, eligibility for ENGL 99, and concurrent enrollment in CUIS 110 and CUIS 111.

Hands-on preparation of product utilizing those skills introduced in culinary fundamentals I. Emphasizes kitchen safety, knife skills, basic cooking preparations, sanitation, stock preparation, basic meat/protein fabrication. Production for customer service and application of techniques through kitchen station rotation. [GE]

Culinary Fundamentals II
CUIS 120 5 Credits/Units
2 hours of lecture / 6 hours of lab
Prerequisite: CUIS 110 and CUIS 111 (grades of "C" or higher), and concurrent enrollment in CUIS 120 and CUIS 121.

Continuation of Culinary Fundamentals I with greater emphasis on cooking techniques, specific food and flavoring identification, nutrition with healthy cooking techniques, breakfast cookery, salads, cold dressings and sauces. Introduction to regional and international fare. [GE]

Professional Cooking II
CUIS 121 8 Credits/Units
16 hours of lab
Prerequisite: CUIS 110 and CUIS 111 (grades of "C" or higher), and concurrent enrollment in CUIS 120 and CUIS 121.

Hands-on preparation of product utilizing those skills introduced in Culinary Fundamentals I and II through kitchen station rotation. Emphasis on breakfast cookery, healthy cooking, regional and international dishes for customer service. Apply cooking techniques and refine customer service through kiosk service and station rotation. [GE]

Culinary Fundamentals III
CUIS 130 5 Credits/Units
2 hours of lecture / 6 hours of lab
Prerequisite: CUIS 120 and CUIS 121 (grades of "C" or higher), and concurrent enrollment in CUIS 130 and CUIS 131.

Introduction to restaurant-level cooking, menu planning, preparing/producing complete meals, restaurant and dining organization. Focus on recipe conversions, yields, and yield grades, fabrication, plate presentation, inventory and cost controls. [GE]

Professional Cooking III
CUIS 131 8 Credits/Units
16 hours of lab
Prerequisite: CUIS 120 and CUIS 121 (grades of "C" or higher), and concurrent enrollment in CUIS 130 and CUIS 131.

Hands-on preparation of product utilizing those skills introduced in culinary fundamentals theory through kitchen station rotation. Emphasis on breakfast cookery, healthy cooking, regional and international dishes for customer service. Apply cooking techniques and refine customer service through kiosk service and station rotation. [GE]

Classic and Modern Soups and Sauces
CUIS 140 2 Credits/Units
1 hours of lecture / 2 hours of lab
Prerequisite: CUIS 110 and CUIS 111 (grades of "C" or higher)

Hands-on exploration of classic soups and sauces and their advancement into the modern cuisine. Create updated versions to reflect today's culture and healthy lifestyle. [GE]

Meat Cutting and Fabrication
CUIS 141 3 Credits/Units
1 hours of lecture / 4 hours of lab
Prerequisite: CUIS 110 and CUIS 111 (grades of "C" or higher)

Identification of carcass and boxed meats and their fabrication into restaurant cuts. Cutting of poultry, beef, hog, lamb, fish and introduction to sausage production. [GE]

Wine, Beer, Spirits and Food Pairings
CUIS 142 2 Credits/Units
1 hours of lecture / 2 hours of lab
Prerequisite: CUIS 110 and CUIS 111 (grades of "C" or higher)

Gain an understanding of how to choose a wine, beer or spirit to compliment a dish. Discuss flavor profiles and how incorporating beverages can elevate the dining experience. Hands on use of beverages in production of a variety of flavorful dishes. [GE]

Restaurant Baking
CUIS 143 2 Credits/Units
1 hours of lecture / 2 hours of lab
Prerequisite: CUIS 110 and CUIS 111 (grades of "C" or higher)

Introduction of restaurant style baking including yeast breads, biscuits, scones, muffins, cookies, pies, quick breads, plated desserts and sauces. Basic understanding of baking science. [GE]

Catering Operations
CUIS 144 2 Credits/Units
1 hours of lecture / 2 hours of lab
Prerequisite: CUIS 110 and CUIS 111 (grades of "C" or higher)

Effective planning and execution of banquet and buffet operations including service, buffet settings, menu design, yields, and cooking techniques. Includes hors d'oeuvres production and basic garniture. [GE]

Wine Appreciation
CUIS 145 3 Credits/Units
3 hours of lecture
A course designed for the student to understand the components necessary to becoming a competent and consistent wine taster and appreciator, a valuable asset for the wine enthusiast. [GE]

Culinary Essentials
CUIS 146 5 Credits/Units
3 hours of lecture / 4 hours of lab
A hands-on approach of learning basic kitchen skills. Emphasizes kitchen safety, knife skills, basic cooking preparations, sanitation, stock preparation, basic meat/protein fabrication. This course is designed for both beginners and those who want to enhance their cooking skills. [GE]
Barbeque Basics
CUIS 147 4 Credits/Units
2 hours of lecture / 4 hours of lab
**Prerequisite:** CUIS 110 and CUIS 111 (grades of "C" or higher)
A hands-on approach of learning basic barbecue and grilling techniques. Emphasizes kitchen safety, knife skills, basic rub, marinade and sauce preparation, sanitation, indirect cooking, basic meat/protein fabrication, cold smoking and preservation. This course is designed for both beginners and those who want to enhance their barbecue and grilling skills. [GE]

Advanced Garde Manger
CUIS 148 2 Credits/Units
1 hours of lecture / 2 hours of lab
**Prerequisite:** CUIS 110 and CUIS 111 (grades of "C" or higher)
Hands-on practical application of Garde Manger applications including garnishes, carvings and classic chaud froid. [GE]

The History and Evolution of Food Media in the 20th Century & Beyond
CUIS 151 4 Credits/Units
4 hours of lecture
Future Culinarians, be empowered to explore career paths within the vast range of Food/Culinary Media, advocate for accurate representation in media, bridge the gap as it relates to creating a universal standard of expectation towards media, and the ways in which narratives are delivered & received. Explore current trends and standards and discuss how the culinary world has been affected by media and the ways in which we are informed. [GE][PNP]

Selected Topics
CUIS 180 1-5 Credits/Units
5 hours of lecture
Selected topics in Cuisine. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Specific topics are listed in the quarterly class schedule.

Career Explorations
CUIS 200 9 Credits/Units
1 hours of lecture / 16 hours of lab
**Prerequisite:** CUIS 130 and CUIS 131 (grades of "C" or higher).
Apply acquired knowledge providing food service to the campus community through Kiosk cookery and an industry internship. Rotate within various cooking stations to hone culinary skills preparation of second year curriculum. Take part in the first of two internships, supervised on-the-job work experience at an approved industry location, preferably a Career Launch partner, with specific learning objectives and employer evaluation. Apply and hone culinary skills, as well as, further develop employment skills within industry. [GE]

Advanced Culinary Fundamentals
CUIS 210 5 Credits/Units
2 hours of lecture / 6 hours of lab
**Prerequisite:** CUIS 130, CUIS 131 and CUIS 200 (grades of "C" or higher), and concurrent enrollment in CUIS 210 and CUIS 211.
Advanced theory with emphasis on international and regional cuisine including terminology, nutrition discussion, menu feasibility and ingredient identification, international cooking methods and adaptations. Advanced plate presentation, garnitures, menu writing and recipe study. Understanding of management skills focusing on team leadership. Introduction to banquet and buffet. [GE]

Advanced Culinary Practices
CUIS 211 8 Credits/Units
16 hours of lab
**Prerequisite:** CUIS 130, CUIS 131 and CUIS 200 (grades of "C" or higher), and concurrent enrollment in CUIS 210 and CUIS 211.
Utilizing skills and knowledge gained, focusing on international and regional cuisine, prepare meals for campus service. Build management skills by supervision of students in skills and teamwork to achieve food service goals through rotation within the food service areas and/or banquet and buffet settings applying appropriate customer relations. [GE]

Management and Banquet Theory
CUIS 220 5 Credits/Units
2 hours of lecture / 6 hours of lab
**Prerequisite:** CUIS 210 and CUIS 211 (grades of "C" or higher), and concurrent enrollment in CUIS 220 and CUIS 221
Explores the expectations of a kitchen manager through numerous aspects of the position including leadership, safety and sanitation, training, production and service, menu and sales analysis and cost control. Banquet and catering practices. Identify and arrange internship with a local food service vendor. Plan activities in preparation of final quarter capstone project. [GE]

Management Practices
CUIS 221 8 Credits/Units
16 hours of lab
**Prerequisite:** CUIS 210 and CUIS 211 (grades of "C" or higher), and concurrent enrollment in CUIS 220 and CUIS 221
Utilizing acquired skills, supervise workers in food service settings. Manage product ordering, inventory and control for selected menu. Display proper execution of the entire menu including preparation, personnel management, service, menu and sales analysis. [GE]

Cuisine Capstone
CUIS 230 6 Credits/Units
1 hours of lecture / 10 hours of lab
**Prerequisite:** CUIS 220 and CUIS 221 (grades of "C" or higher), and concurrent enrollment in CUIS 230 and CUIS 231
In conjunction with the management of assigned kitchen stations, students in their final quarter shall plan and execute one or more restaurant dinner service, and/or banquet service to include menu planning, inventory and requisition, kitchen management and function execution. [GE]

Industry Internship
CUIS 231 4 Credits/Units
12 hours of clinical
**Prerequisite:** CUIS 220 and CUIS 221 (grades of "C" or higher), and concurrent enrollment in CUIS 230 and CUIS 231
Supervised on-the-job work experience at an approved industry location in the local community with specific learning objectives and employer evaluation. Students will apply and hone their culinary skills, as well as, further develop employment skills within industry. [GE]

Selected Topics
CUIS 280 1-5 Credits/Units
5 hours of lecture
Selected topics in Cuisine. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Specific topics are listed in the quarterly class schedule. [GE]
Selected Topics - Lab

CUIS 281
1-5 Credits/Units
10 hours of lab
Selected topics in Cuisine. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Specific topics are listed in the quarterly class schedule. [GE]

Special Projects

CUIS 290
1-6 Credits/Units
6 hours of lecture
Opportunity to plan, organize and complete special projects approved by the department. [GE]
### DENTAL HYGIENE (DH)

<table>
<thead>
<tr>
<th>Selected Topics</th>
<th>Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH 281</td>
<td>1-5 Credits/Units</td>
</tr>
<tr>
<td>10 hours of lab</td>
<td></td>
</tr>
<tr>
<td>Admission into the program required for enrollment. Selected topics in Dental Hygiene. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules.</td>
<td></td>
</tr>
<tr>
<td>Pharmacology</td>
<td>1 Credit/Unit</td>
</tr>
<tr>
<td>DH 282</td>
<td></td>
</tr>
<tr>
<td>1 hours of lecture</td>
<td></td>
</tr>
<tr>
<td>Admission into the program required for enrollment. Introduction to the classification, pharmacodynamics, dosages, and therapeutic effects of drugs most commonly encountered or prescribed by the dental office. Topics include drugs of abuse, autonomic nervous system, gastrointestinal, respiratory, vitamin, and minerals. [GE]</td>
<td></td>
</tr>
<tr>
<td>Clinical Dental Hygiene Techniques I</td>
<td>6 Credits/Units</td>
</tr>
<tr>
<td>DH 283</td>
<td></td>
</tr>
<tr>
<td>3 hours of lecture / 6 hours of lab</td>
<td></td>
</tr>
<tr>
<td>Admission into the program required for enrollment. Introduction to the classification, pharmacodynamics, dosages, and therapeutic effects of drugs most commonly encountered or prescribed by the dental office. Topics include drugs of abuse, autonomic nervous system, gastrointestinal, respiratory, vitamin, and minerals. [GE]</td>
<td></td>
</tr>
<tr>
<td>Oral Medicine</td>
<td>2 Credits/Units</td>
</tr>
<tr>
<td>DH 284</td>
<td></td>
</tr>
<tr>
<td>2 hours of lecture</td>
<td></td>
</tr>
<tr>
<td>Admission into the program required for enrollment. Introduction to the classification, pharmacodynamics, dosages, and therapeutic effects of drugs most commonly encountered or prescribed by the dental office. Topics include drugs of abuse, autonomic nervous system, gastrointestinal, respiratory, vitamin, and minerals. [GE]</td>
<td></td>
</tr>
<tr>
<td>Periodontics I</td>
<td>3 Credits/Units</td>
</tr>
<tr>
<td>DH 285</td>
<td></td>
</tr>
<tr>
<td>2 hours of lecture / 2 hours of lab</td>
<td></td>
</tr>
<tr>
<td>Admission into the program required for enrollment. Introduction to histological and clinical characteristics of normal and diseased periodontium. Introduction to tooth accumulated materials and preventive oral aids. [GE]</td>
<td></td>
</tr>
<tr>
<td>Dental Anatomy</td>
<td>3 Credits/Units</td>
</tr>
<tr>
<td>DH 286</td>
<td></td>
</tr>
<tr>
<td>3 hours of lecture</td>
<td></td>
</tr>
<tr>
<td>Admission into the program required for enrollment. Introduction to histological and clinical characteristics of normal and diseased periodontium. Introduction to tooth accumulated materials and preventive oral aids. [GE]</td>
<td></td>
</tr>
<tr>
<td>Special Projects</td>
<td>1-15 Credits/Units</td>
</tr>
<tr>
<td>DH 290</td>
<td></td>
</tr>
<tr>
<td>15 hours of lecture</td>
<td></td>
</tr>
<tr>
<td>Admission into the program required for enrollment. Opportunity to plan, organize and complete special projects approved by the department. [GE] [PNP]</td>
<td></td>
</tr>
</tbody>
</table>

**Introduction to Digital Management Systems**

- **DH 292** 1 Credit/Unit

2 hours of lab
Admission into the program required for enrollment. An introduction to axiUm - the digital management system designed for dental patient records, student clinical assessments, and radiography. Students will learn to navigate the system, enter data pertaining to clinical patient treatment, and track clinical skills assessments. [GE]

**Introduction to Dental Materials/Assisting**

- **DH 301** 3 Credits/Units

2 hours of lecture / 2 hours of lab
Admission into the program required for enrollment. Introduction to properties and manipulation of basic restorative materials including resin, bases, liners, varnishes, cements, and sealants. Introduction to four-handed chairside assisting, study model preparation, and pit and fissure sealant application. Clinical practice through assisting in restorative situations. [GE]

**Head and Neck Anatomy**

- **DH 303** 3 Credits/Units

3 hours of lecture
Admission into the program required for enrollment. Embryological, histological, and anatomical development of the head and neck as it applies to the practice of dental hygiene. [GE]

**Educational Theory and Application**

- **DH 304** 2 Credits/Units

2 hours of lecture
Admission into the program required for enrollment. Survey of principles and concepts of teaching and learning and use of motivational techniques as they apply to both group and individual education and cultural differences. Students will develop skills as a dental health educator and dental health resource person. [GE]

**Clinical Dental Hygiene Techniques II**

- **DH 313** 5.5 Credits/Units

2 hours of lecture / 8 hours of lab
Admission into the program required for enrollment. Emphasis on the principles of instrumentation and patient management. Clinical practice in oral prophylaxis, preventive procedures, and patient management at the introductory level. [GE]

**Clinical Dental Hygiene Techniques III**

- **DH 314** 5.5 Credits/Units

2 hours of lecture / 8 hours of lab
Admission into the program required for enrollment. Clinical practice at the introductory and developmental levels in patient assessment, care planning, management, and periodontal therapy. Includes prevention and control of oral disease and proper safety and infection control procedures. [GE]

**Clinical Dental Hygiene Techniques IV**

- **DH 321** 4 Credits/Units

8 hours of lab
Admission into the program required for enrollment. Clinical practice at the introductory and developmental levels in patient assessment, care planning, management, and periodontal therapy. Includes prevention and control of oral disease and proper safety and infection control procedures. [GE]
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits/Units</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH 323</td>
<td>Oral Radiology I</td>
<td>3</td>
<td>2 lecture / 2 lab</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Radiographic theory, equipment, patient safety, and techniques for exposing, processing, and mounting dental radiographs. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH 324</td>
<td>Oral Radiology II</td>
<td>1</td>
<td>2 lab</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Second in a series on radiographic theory application and radiographic image interpretation. Continued experience in exposing, processing and mounting, and critiquing dental radiographs. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH 331</td>
<td>Oral Radiology III</td>
<td>2</td>
<td>2 lecture</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Third in a series on radiographic theory application and image interpretation. Introduction of principles of contemporary panoramic radiographic techniques and comprehensive analysis of panoramic images. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH 344</td>
<td>General and Oral Pathology</td>
<td>3</td>
<td>3 lecture</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Fundamentals of oral pathology including the inflammatory processes, tumor development, metabolic pathways and developmental disturbances. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH 353</td>
<td>Ethics and The Profession</td>
<td>1</td>
<td>1 lecture</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Basic ethical principles and ethical problem solving methods. Includes the Principles of Ethics of the American Dental Hygienist Association and Washington State Laws applicable to the practice of dental hygiene. These elements will enable the student to apply professional attitudes and judgments when treating clinical patients. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH 364</td>
<td>Local Anesthesia &amp; Pain Control</td>
<td>4</td>
<td>2 lecture / 3 lab</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Integration of anatomy, physiology, pharmacology and the most commonly encountered emergency procedures as they apply to the administration of local anesthesia. Clinical practice in the administration of local anesthesia is a required component of the course. Weekly clinical lab practice focuses on the 8 most commonly administered injections. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH 373</td>
<td>Cariology</td>
<td>2</td>
<td>2 lecture</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Presentation of cause, progression, and prevention of dental caries with an emphasis on fluoride and other remineralization strategies. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH 380</td>
<td>Dental Public Health - Research Methods I</td>
<td>1-9</td>
<td>9 lecture</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Specific topics are listed in the quarterly class schedule. Please refer to course syllabus for details. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH 383</td>
<td>Pharmacology II</td>
<td>1</td>
<td>1 lecture</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Continuation of the classification, pharmacodynamics, dosages, and therapeutic effects for drugs most commonly encountered or prescribed by the dental office. Topics include antimicrobial, antifungal, and antiviral medications, opioid and non-opioid analgesics, and cardiovascular medications. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH 384</td>
<td>Pharmacology III</td>
<td>1</td>
<td>1 lecture</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Continuation of the classification, pharmacodynamics, dosages, and therapeutic effects for drugs most commonly encountered or prescribed by the dental office. Topics include endocrine, psychotherapeutic, sedative/hypnotic, anti-anxiety, anticonvulsants, ophthalmic, anti-neoplastic, immune function, anti-Parkinson, and Alzheimer’s disease medications. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH 390</td>
<td>Special Projects</td>
<td>1-9</td>
<td>9 lecture</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Opportunity to plan, organize and complete special projects approved by the department. [GE] [PNP]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH 393</td>
<td>Clinical Dental Hygiene Techniques II Lab</td>
<td>0.5</td>
<td>0.5 lab</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Clinical practice at an introductory level, evaluating the potential treatment needs of a diverse community including reviewing medical histories, current medications, and general oral and systemic health assessments. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH 394</td>
<td>Clinical Dental Hygiene Techniques III Lab</td>
<td>0.5</td>
<td>0.5 lab</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Clinical practice at a developmental level, evaluating the potential treatment needs of a diverse community including reviewing medical histories, current medications, and general oral and systemic health assessments. [GE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DH 402</td>
<td>Dental Public Health - Research Methods II</td>
<td>2</td>
<td>2 lecture / 2 lab</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. A systematic approach to the prevention and control of dental disease and the promotion of oral health through organized community efforts. Practical application of public health techniques in the assessment of the community to establish what types of oral health programs are needed. Basic principles of research and the development of the skills required for evaluation of professional research. [GE]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Admission into the program required for enrollment. Continuation of Dental Public Health - Research Methods I. Advanced application of public health concepts to plan, implement and evaluate oral health programs that prevent and control dental disease and promote oral health for a designated population. Basic principles of research and the development of the skills required for evaluation of professional research. [GE]

Dental Public Health - Research Methods III
DH 404  1 Credit/Unit
2 hours of lab
Admission into the program required for enrollment. Continuation of Dental Public Health - Research Methods II. Implementation and evaluation of oral health programs at a variety of community settings. Basic principles of research and the development of the skills required for evaluation of professional research. [GE]

Behavior Modification
DH 410  1 Credit/Unit
2 hours of lab
Admission into the program required for enrollment. Fundamentals of behavior modification strategies to help patients progress toward healthier lifestyles. Develop a collaborative, patient-centered communication style and motivational skills to use while applying health behavior change theory. Communication skills involve using motivational interviewing, compassionate communication and goal setting to evoke change. [GE]

Clinical Dental Hygiene Techniques V
DH 412  8 Credits/Units
16 hours of lab
Admission into the program required for enrollment. Introduction to development level of advanced instrumentation and patient treatment techniques. [GE]

Clinical Dental Hygiene Techniques VI
DH 413  8 Credits/Units
16 hours of lab
Admission into the program required for enrollment. Developmental level of advanced instrumentation and patient treatment techniques. [GE]

Clinical Dental Hygiene Techniques VII
DH 414  8 Credits/Units
16 hours of lab
Admission into the program required for enrollment. Demonstration and integration of advanced skills and knowledge with an emphasis on preparation for the practice of dental hygiene. [GE]

Clinical Dental Hygiene Techniques V Lab
DH 422  1 Credit/Unit
2 hours of lab
Admission into the program required for enrollment. Clinical practice at a developmental level, evaluating the potential treatment needs of a diverse community including reviewing medical histories, current medications, and general oral and systemic health assessments. [GE]

Clinical Dental Hygiene Techniques VI Lab
DH 423  1 Credit/Unit
2 hours of lab
Admission into the program required for enrollment. Clinical practice at a developmental to DISK level, evaluating the potential treatment needs of a diverse community including reviewing medical histories, current medications, and general oral and systemic health assessments. [GE]
Dental Hygiene Senior Clinic Seminar
DH 463 1 Credit/Unit
2 hours of lab
Admission into the program required for enrollment. Emphasis on the principles of instrumentation, patient management, ethical problem solving, and interprofessional collaboration to prepare senior dental hygiene students for the challenges they may encounter in their professional careers. Cannot receive credit for both DH 463 & DH 452.

Nitrous Oxide Sedation
DH 471 1 Credit/Unit
1 hours of lecture
Admission into the program required for enrollment. Exploration of nitrous oxide sedation as it applies to the practice of dentistry and dental hygiene. Emphasis on patient evaluation, pharmacodynamics, and administration methods and safety issues. Minimum of three clinical patient inductions and recoveries required. Meets multi state licensure requirements for the provisions of nitrous oxide and includes 10 hours of lecture, 3 clinical, and 1 hour written final for a total of 14 hours. [GE] [PNP]

Periodontics II
DH 472 2 Credits/Units
2 hours of lecture
Admission into the program required for enrollment. Etiological factors in the periodontal disease process including host response, contributing and risk factors, classifications of periodontal diseases, and HIV and periodontitis. Current methods used to assess and evaluate periodontal disease in a patient will be covered. [GE]

Periodontics III
DH 473 2 Credits/Units
2 hours of lecture
Admission into the program required for enrollment. Evidence-based periodontal disease treatment modalities including non-surgical procedures, modulation of the host response, antimicrobials, lasers, and reevaluation and maintenance procedures. [GE]

Selected Topics
DH 480 1-9 Credits/Units
9 hours of lecture
Admission into the program required for enrollment. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Specific topics are listed in the quarterly class schedule. Please refer to course syllabus for details. [GE]

Capstone
DH 484 3 Credits/Units
3 hours of lecture
Admission into the program required for enrollment. The capstone course is an opportunity for students to demonstrate that they have achieved the learning outcomes established by the Clark College Dental Hygiene program. Designed to assess ethical, cognitive, affective, and psychomotor learning in a learner-centered and learner-directed manner. Students will create a resume and cover letter as well as develop their interview skills. The capstone course requires an e-portfolio, which serves as an instrument of program assessment. [GE]

Special Projects
DH 490 1-9 Credits/Units
9 hours of lecture
Admission into the program required for enrollment. Opportunity to plan, organize and complete special projects approved by the department. [GE] [PNP]
# DIESEL TECHNOLOGY (DIES)

## Diesel Fundamentals

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits/Units</th>
<th>Lecture Hours</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIES 111</td>
<td>Diesel Technology (DIES)</td>
<td>5</td>
<td>5</td>
<td>Prerequisite: CAP 42 (grade of &quot;C&quot; or higher) or placement into Math level 10, and eligibility for ENGL 99. Introduction to diesel engine construction and principles of operation. Basics of physics and engineering as related to operation of diesel engines. Basic shop tools and safety. [GE]</td>
</tr>
<tr>
<td>DIES 112</td>
<td>Diesel Engine Construction</td>
<td>10</td>
<td>5 / 10</td>
<td>Prerequisite: CAP 42 (grade of &quot;C&quot; or higher) or placement into Math level 10, and eligibility for ENGL 99. Disassembly, inspection, assembly, and adjustment of various diesel engines used in highway and off-highway vehicles. [GE][PNP]</td>
</tr>
<tr>
<td>DIES 113</td>
<td>Diesel Engines/Fuel Systems</td>
<td>5</td>
<td>5</td>
<td>Prerequisite: DIES 111 and DIES 112 (grades of &quot;C&quot; or higher) Repair, adjustment and testing procedures for diesel engines, components and systems. Introduction to fuel systems used and electronic controls used on modern diesel engines. [GE]</td>
</tr>
<tr>
<td>DIES 114</td>
<td>Diesel Procedures</td>
<td>10</td>
<td>5 / 10</td>
<td>Prerequisite: DIES 111 and DIES 112 (grades of &quot;C&quot; or higher) Test, adjust, and diagnostics of engines and maintenance practices. [GE][PNP]</td>
</tr>
<tr>
<td>DIES 115</td>
<td>Drive Trains</td>
<td>5</td>
<td>5</td>
<td>Prerequisite: DIES 113 and DIES 114 (grades of &quot;C&quot; or higher) Principles of operation and basic construction of drive train components used in on- and off-highway equipment. [GE]</td>
</tr>
<tr>
<td>DIES 116</td>
<td>Diesel Procedures</td>
<td>10</td>
<td>5 / 10</td>
<td>Prerequisite: DIES 113 and DIES 114 (grades of &quot;C&quot; or higher) Disassembly, inspection, assembly, and adjustments of drive train components. [GE][PNP]</td>
</tr>
<tr>
<td>DIES 120</td>
<td>Basic Electrical</td>
<td>3</td>
<td>2 / 2</td>
<td>Prerequisite: CAP 42 (grade of &quot;C&quot; or higher) or placement into Math level 10, eligibility for ENGL 99, and concurrent enrollment in DIES 112. Introduction to basic electrical fundamentals needed by technicians to diagnose and repair vehicle electrical systems. [GE]</td>
</tr>
<tr>
<td>DIES 121</td>
<td>Electronic Engine Management</td>
<td>3</td>
<td>2 / 2</td>
<td>Prerequisite: DIES 120 (grade of &quot;C&quot; or higher), and concurrent enrollment in DIES 114 Introduction to electronic engine management systems and emission technology. [GE]</td>
</tr>
</tbody>
</table>

## Diesel Procedures

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits/Units</th>
<th>Lecture Hours</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIES 112</td>
<td>Diesel Engine Construction</td>
<td>10</td>
<td>5 / 10</td>
<td>Prerequisite: CAP 42 (grade of &quot;C&quot; or higher) or placement into Math level 10, and eligibility for ENGL 99. Disassembly, inspection, assembly, and adjustment of various diesel engines used in highway and off-highway vehicles. [GE][PNP]</td>
</tr>
<tr>
<td>DIES 221</td>
<td>Electrical/Electronic Systems</td>
<td>5</td>
<td>5</td>
<td>Prerequisite: CAP 42 (grade of &quot;C&quot; or higher) or placement into Math level 10, and eligibility for ENGL 99. Charging, starting, lighting, and control circuits and components used on heavy equipment and highway trucks. [GE]</td>
</tr>
<tr>
<td>DIES 222</td>
<td>Diesel Procedures</td>
<td>6</td>
<td>3 / 6</td>
<td>Prerequisite: DIES 221 and DIES 222 (grades of &quot;C&quot; or higher) Repair and maintenance of diesel and heavy equipment. Students will participate in customer repair projects. [GE][PNP]</td>
</tr>
<tr>
<td>DIES 223</td>
<td>Hydraulic Systems</td>
<td>5</td>
<td>5</td>
<td>Prerequisite: DIES 221 and DIES 222 (grades of &quot;C&quot; or higher) Repair and maintenance of diesel and heavy equipment. Students will participate in customer repair projects. [GE][PNP]</td>
</tr>
<tr>
<td>DIES 224</td>
<td>Drive Trains</td>
<td>5</td>
<td>5</td>
<td>Prerequisite: DIES 223 and DIES 224 (grades of &quot;C&quot; or higher) Repair and maintenance of diesel and heavy equipment. Students will participate in customer repair projects. [GE][PNP]</td>
</tr>
<tr>
<td>DIES 225</td>
<td>Brakes, Steering, and Suspension</td>
<td>5</td>
<td>5</td>
<td>Prerequisite: DIES 223 and DIES 224 (grades of &quot;C&quot; or higher) Repair and maintenance of diesel and heavy equipment. Students will participate in customer repair projects. [GE][PNP]</td>
</tr>
</tbody>
</table>

## Selected Topics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits/Units</th>
<th>Lecture Hours</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIES 280</td>
<td>Selected Topics</td>
<td>1-5</td>
<td>5</td>
<td>Prerequisite: DIES 280 (grade of &quot;C&quot; or higher) or placement into Math level 10, eligibility for ENGL 99, and concurrent enrollment in DIES 112. Selected topics in Diesel Technology. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE][PNP]</td>
</tr>
<tr>
<td>DIES 290</td>
<td>Special Projects</td>
<td>1-5</td>
<td>5</td>
<td>Prerequisite: DIES 290 (grade of &quot;C&quot; or higher) or placement into Math level 10, eligibility for ENGL 99, and concurrent enrollment in DIES 112. Opportunity to plan, organize and complete special projects approved by the department. [GE]</td>
</tr>
</tbody>
</table>
DIGITAL MEDIA ARTS (DMA)

**Photoshop**
DMA 101 4 Credits/Units
2 hours of lecture / 4 hours of lab
Fundamentals of digital imaging using Adobe Photoshop. Focus on visual problem solving and software techniques to capture, correct, create and combine images for print and digital media. Topics include image sourcing, resolution, tone and color correction, retouching, painting, image manipulation, compositing, animated graphics, design and production considerations. [GE]

**Illustrator**
DMA 102 4 Credits/Units
2 hours of lecture / 4 hours of lab
Fundamentals of vector drawing using Adobe Illustrator. Focus on visual problem solving and software techniques to draw, trace, transform and create graphics for print and digital media. Topics include drawing tools, path editing, shape manipulation, object layering, line styling, brush textures, typography, gradient shading, patterns, design and production considerations. [GE]

**Motion Graphics and Animation I**
DMA 104 4 Credits/Units
2 hours of lecture / 4 hours of lab
Introduction to motion design and 2D animation principles. Use digital tools to create visual content and messaging for digital media communications. Focus on concept ideation, narrative structure, animated storytelling, motion infographics, dynamic typography, integration of audio/visual and special effects. Includes design and production considerations. [GE]

**Professional Practices and Portfolio I**
DMA 114 4 Credits/Units
2 hours of lecture / 4 hours of lab
Department consent required for enrollment. Examination of the digital media arts industry and practical experience in creating a personalized plan and portfolio. Gain a comprehensive understanding of the creative business market, professional practices, jobs, trends, technologies and opportunities. Activities include research, guest speakers, field trips, interviews, networking, online or in-person events, mid-program assessment, action planning, presentations and portfolio review. [GE]

**Cooperative Work Experience**
DMA 199 1-4 Credits/Units
12 hours of clinical
Supervised, work-based learning experience that enables students to demonstrate specialized occupational skills and knowledge. Specific learning objectives are developed by the College and the employer. Upon completion, employer and student evaluations are discussed. [GE]

**Video and Sound Production I**
DMA 201 4 Credits/Units
2 hours of lecture / 4 hours of lab
Introduction to video and sound production for online, mobile or digital media communication. Learn all aspects of the digital video workflow from pre-production context (concept, message, storyboard, scriptwriting) to production roles, methods and styles (narrative, documentary, persuasive, experimental) to post-production practices (video editing, audio and media integration, optimization and delivery platforms). [GE]

**Motion Graphics and Animation II**
DMA 204 4 Credits/Units
2 hours of lecture / 4 hours of lab
Prerequisite: DMA 104 or CGT 104 (grade of "C" or higher)
Further study in motion design and 2D animation strategies. Develop advanced proficiency to convey message and meaning through storytelling and integrated motion media presentations. Focus on conceptual thinking, information design, professional practices and workflow, visual messaging and marketing considerations. May include client projects or team-based experience. [GE]

**Professional Practices and Portfolio II**
DMA 214 4 Credits/Units
2 hours of lecture / 4 hours of lab
Prerequisite: DMA 214 or CGT 214 (grade of "C" or higher) and Consent of Instructional Unit
Department consent required for enrollment. Continuation of professional practices and portfolio assessment. Industry research and strategic planning to develop individualized career paths or targeted higher education goals. Students learn about business considerations for freelancing or contract work, job search and employment strategies, and best practices for self-promotion and portfolio presentation. [GE]

**Professional Studio Experience**
DMA 215 4 Credits/Units
2 hours of lecture / 4 hours of lab
Department consent required for enrollment. Students gain practical experience working as freelancers or on collaborative teams to produce digital media solutions for real-world clients, such as community or campus organizations and non-profit work. Students seek out client projects, engage in critical thinking and problem-solving, present and pitch ideas, write proposals, communicate with clients, facilitate the iterative design and production process and evaluate quality and user feedback. [GE]
# DRAMA (DRMA/DRMA&)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits/Units</th>
<th>Lecture</th>
<th>Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRMA 140</td>
<td>Acting I - Drama</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Techniques and principles of acting. [GE, HB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DRMA 141</td>
<td>Acting II - Theatre</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: DRMA 140 (grade of &quot;C&quot; or higher)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DRMA 150</td>
<td>Basic Stagecraft</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Principles and techniques of scenery construction and painting. Students will also learn the use of shop tools. [GE, HB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DRMA 152</td>
<td>Stage Make-Up</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Design and application of stage make-up. Formerly THEA 152. [GE, HB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DRMA 154</td>
<td>Introduction to Cinema</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>An introductory course in film history, production techniques, aesthetics, and the social impact of the American film industry from 1900 to the present. [GE, HA, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DRMA 199</td>
<td>Cooperative Work Experience</td>
<td>1-5</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DRMA 250</td>
<td>Stage Lighting Design</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Techniques and principles of stage and TV lighting design. Use of instruments and light control systems with a special emphasis on computerized light control. [GE, HB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DRMA 254</td>
<td>Introduction to Script Analysis</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Close analysis and study of dramatic literature texts in terms of structure, genre, style, character, themes, language, and dramatic action. Plays are examined from the point of view of the actor, director, designer, producer, critic, scholar, writer, and audience. [GE, SE][PNP]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DRMA 280</td>
<td>Selected Topics</td>
<td>1-3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Selected topics in Drama. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Special Projects**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits/Units</th>
<th>Lecture</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRMA 290</td>
<td>1-5 Credits/Units</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Opportunity to plan, organize and complete special projects approved by the department in the areas of stage direction, scene lighting, costume design, make-up design, production or theatre history. [GE]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Theatre Appreciation**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits/Units</th>
<th>Lecture</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRMA&amp; 101</td>
<td>5 Credits/Units</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Survey key theories, movements, and figures in theatre history with an emphasis on Western Theatre. Focuses on plays representative of systemically nondominant populations. Emphasizes the roles of director, actor, designer, and playwright in production. [GE, HA, SE]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# EARLY CHILDHOOD EDUCATION (ECE)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits/Units</th>
<th>Hours of Lecture</th>
<th>Prerequisites/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 100</td>
<td>Child Development: Birth to Six</td>
<td>3</td>
<td>3</td>
<td>Online course in child growth and development from birth to age six years, including physical, emotional, cultural, cognitive, and creative age-related changes. Application to early childhood programs in centers and homes. [GE]</td>
</tr>
<tr>
<td>ECE 102</td>
<td>Science and Mathematics for Young Children</td>
<td>3</td>
<td>3</td>
<td>Explores the theories, issues and applications of science and math concepts in activities and environments for preschool aged children. Investigates the strategies of teaching through the discovery and use of science and math curriculums in their surroundings. [GE]</td>
</tr>
<tr>
<td>ECE 111</td>
<td>Early Childhood Education Workshops</td>
<td>1-3</td>
<td>3</td>
<td>In-service and special topic seminars for those currently working with groups of young children. Each 3-week session is offered for one credit. Students may take any or all of the sessions. A maximum of six credits of ECE 111 may be applied to major area requirements for a degree in Early Childhood Education. [GE]</td>
</tr>
<tr>
<td>ECE 116</td>
<td>Literature and Storytelling for Children</td>
<td>2</td>
<td>2</td>
<td>Introduction to the value of storytelling and the use of literature as tools in the development of children. Literature and storytelling has the ability to speak to our ‘souls’ and it is the intent of this class to reclaim for some and validate for others the value of literature as a tool with children and for ourselves. Through small and large group discussions as well as diverse experiences, co-learners will have an opportunity to develop an understanding of book selection, delivery styles, bibliotherapy, and community resources for acquiring literature and networking with professionals in the field of Early Childhood Education. [GE]</td>
</tr>
<tr>
<td>ECE 135</td>
<td>Partnerships With Families In Early Care &amp; Educ</td>
<td>3</td>
<td>3</td>
<td>Developing effective partnerships with families in early care and education programs. Topics include family-centered theories and practices related to welcoming families and building relationships, communicating, working through conflicts, honoring diversity, family involvement and support, and parent education. [GE]</td>
</tr>
<tr>
<td>ECE 199</td>
<td>Cooperative Work Experience</td>
<td>1-3</td>
<td>9</td>
<td>Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]</td>
</tr>
<tr>
<td>ECE 211</td>
<td>Learning Experiences for Young Children II</td>
<td>3</td>
<td>3</td>
<td>3 hours of lecture</td>
</tr>
<tr>
<td>ECE 212</td>
<td>Learning Experiences for Young Children II Lab</td>
<td>2</td>
<td>4</td>
<td>Prerequisite: ECED&amp; 160 (grade of &quot;C&quot; or higher), and concurrent enrollment in ECE 211 Lab experience in Early Childhood Education Laboratory School. Plan, implement and analyze plans in relation to relevant topics in ECE 211. [GE]</td>
</tr>
<tr>
<td>ECE 213</td>
<td>Learning Experiences for Young Children III</td>
<td>3</td>
<td>3</td>
<td>Prerequisite: ECED&amp; 160 (grade of &quot;C&quot; or higher), and concurrent enrollment in ECE 214 Further develop curriculum planning processes with special emphasis on emergent and integrated thematic approaches while applying knowledge of multiple intelligences. Areas of study include parent/teacher relationships, teacher development stages, staff communication and relationships. In-depth study of individual and cultural diversity as related to knowledge of child development. [GE]</td>
</tr>
<tr>
<td>ECE 222</td>
<td>Learning Experiences Lab Sec</td>
<td>1</td>
<td>2</td>
<td>Prerequisite: Concurrent enrollment in, or completion of ECE 212 (grade of &quot;C&quot; or higher) Lab experience in Early Childhood Education Laboratory School. Plan, implement and analyze plans in relation to relevant topics in ECE 211. [GE][PNP]</td>
</tr>
<tr>
<td>Learning Experience Lab</td>
<td>Section</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECE 224</td>
<td>1 Credit/Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 hours of lab</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Prerequisite:** Concurrent enrollment in, or completion of ECE 212 (grade of "C" or higher) [GE]

**Selected Topics**

<table>
<thead>
<tr>
<th>Selected Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 280</td>
</tr>
<tr>
<td>3 hours of lecture</td>
</tr>
</tbody>
</table>

Selected topics in Early Childhood Education. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE]

**Special Projects**

<table>
<thead>
<tr>
<th>Special Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 290</td>
</tr>
<tr>
<td>1-3 Credits/Units</td>
</tr>
<tr>
<td>3 hours of lecture</td>
</tr>
</tbody>
</table>

Opportunity to plan, organize and complete special projects approved by the department. [GE]
# Early Childhood Education (ECED/ECED&)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits/Units</th>
<th>Hours of Lecture</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 105</td>
<td>Introduction to Early Childhood Education</td>
<td>5</td>
<td>5</td>
<td>Concurrent enrollment in ECED&amp; 105 and ECED&amp; 120</td>
</tr>
<tr>
<td>ECED&amp; 107</td>
<td>Health/Safety/Nutrition</td>
<td>5</td>
<td>5</td>
<td>Concurrent enrollment in ECED&amp; 105 and ECED&amp; 120</td>
</tr>
<tr>
<td>ECED&amp; 120</td>
<td>Practicum-Nurturing Rel-</td>
<td>2</td>
<td>1 (lec) / 2 (lab)</td>
<td>Concurrent enrollment in ECED&amp; 105 and ECED&amp; 120</td>
</tr>
<tr>
<td>ECED&amp; 132</td>
<td>Infants/Toddler Care</td>
<td>3</td>
<td>3</td>
<td>Concurrent enrollment in ECED&amp; 105 and ECED&amp; 120</td>
</tr>
<tr>
<td>ECED&amp; 134</td>
<td>Family Care Management</td>
<td>3</td>
<td>3</td>
<td>Concurrent enrollment in ECED&amp; 105 and ECED&amp; 120</td>
</tr>
<tr>
<td>ECED&amp; 139</td>
<td>Administration of ECE</td>
<td>3</td>
<td>3</td>
<td>Concurrent enrollment in ECED&amp; 105 and ECED&amp; 120</td>
</tr>
<tr>
<td>ECED&amp; 160</td>
<td>Curriculum Development</td>
<td>5</td>
<td>5</td>
<td>Concurrent enrollment in ECED&amp; 105 and ECED&amp; 120</td>
</tr>
</tbody>
</table>

**Learning Environments**

ECED& 170

3 hours of lecture
Focuses on the adult's role in designing, evaluating, and improving indoor and outdoor environments that ensure quality learning, nurturing experiences, and optimize the development of young children. [GE]

**Language and Literacy**

ECED& 180

3 hours of lecture
Teaching strategies for language acquisition and literacy skill development examined at each developmental stage (birth-age 8) through the four interrelated areas of speaking, listening, writing, and reading. [GE]

**Observation and Assessment**

ECED& 190

3 hours of lecture
Practice collecting and presenting observation data of children, teaching practices and learning centers in an early childhood setting. [GE]
ECONOMICS (ECON/ECON&)

**Introduction to Economics**
ECON 101  3 Credits/Units
3 hours of lecture
Survey of economics. Key topics include current economic issues and processes related to ways individuals, groups, and whole societies produce, distribute, and utilize economic resources. This course is good preparation for the advanced Microeconomics and Macroeconomics courses. [GE, SE, SS][PNP]

**Introduction to The Global Economy**
ECON 110  5 Credits/Units
5 hours of lecture
Introduction to economic concepts and their use in the global economy. Topics include basic microeconomics and macroeconomics, international trade, balance of payments, exchange rates, international institutions, energy, war, and terrorism. Intended for economics and non-economics majors. This course is an alternative for Economics 101, with additional topics including in-depth study of international economic issues. [GE, SE, SS]

**International Economics**
ECON 120  3 Credits/Units
3 hours of lecture
**Prerequisite:** ECON 101 (grade of “C” or higher)
International economics, for both economics majors and non-economic majors, emphasizes the fundamental economic concepts for understanding today’s global economy. Topics include the basic concepts and tools of international economic analysis, including trade, trade policy, trading blocs, protectionism, exchange rate determination, managing currencies, multi-national corporations, labor, developing countries, and the environment. [GE, SE, SS]

**Selected Topics**
ECON 280  1-5 Credits/Units
5 hours of lecture
Selected topics Economics. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE, SE]

**Special Projects**
ECON 290  1-5 Credits/Units
5 hours of lecture
Opportunity to plan, organize and complete special projects approved by the department. [GE]

**Managerial and Global Economics**
ECON 405  5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. Reviews basic issues in microeconomics, macroeconomics, and global economics. Topics include allocation of resources, economic systems, economic institutions and incentives, market structures and prices, and productivity. Also included are issues related to the global marketplace, aggregate supply and demand, and governmental policy towards business. [GE, SE, SS]

**Micro Economics**
ECON& 201  5 Credits/Units
5 hours of lecture
**Prerequisite:** ECON 101, ECON 110, ECON 120, or MATH 96 (grade of “C” or higher) or placement into Math level 45.
Essential market processes, structures, issues, and variables governing how individuals, firms and governmental entities allocate resources, produce and distribute goods and services, determine prices, evaluate trade-offs and effectively compete and grow. [GE, SE, SS]

**Macro Economics**
ECON& 202  5 Credits/Units
5 hours of lecture
**Prerequisite:** ECON 101, ECON 110, ECON 120, or MATH 96 (grade of “C” or higher) or placement into Math level 45.
Broad economic principles, issues, structures, processes, and variables governing the dynamics of the United States and global economies. Problems of economic organization, market processes, role of government in the economy and society, money and banking processes and issues, measurement and determination of economic aggregates, fiscal and monetary policies, economic growth and development and international trade. [GE, SE, SS]
## EDUCATION (EDUC/EDUC&)


### Child Development

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits/Units</th>
<th>Hours of Lecture</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC&amp; 115</td>
<td>Child Development</td>
<td>5</td>
<td>5</td>
<td>Build foundation for explaining how children develop in all domains, conception through early adolescence. Explore various developmental theories, methods for documenting growth, and impact of brain development. Topics addressed stress, trauma, culture, race, gender identity, socioeconomic status, family status, language, and health issues. [SE]</td>
</tr>
</tbody>
</table>

### Guiding Behavior

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits/Units</th>
<th>Hours of Lecture</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC&amp; 130</td>
<td>Guiding Behavior</td>
<td>3</td>
<td>3</td>
<td>Examine the principles and theories promoting social competence in young children and creating safe learning environments. Develop skills promoting effective interactions, providing positive individual guidance, and enhancing group experiences. [GE]</td>
</tr>
</tbody>
</table>

### School Age Care

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits/Units</th>
<th>Hours of Lecture</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC&amp; 136</td>
<td>School Age Care</td>
<td>3</td>
<td>3</td>
<td>Develop skills to provide developmentally appropriate and culturally relevant activities/care for children ages 5-12 in a variety of settings. Topics include: implementation of curriculum, preparation of environments, building relationships, guiding cognitive and social emotional development, and community outreach. [GE]</td>
</tr>
</tbody>
</table>

### Child, Family, Community

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits/Units</th>
<th>Hours of Lecture</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC&amp; 150</td>
<td>Child, Family, Community</td>
<td>3</td>
<td>3</td>
<td>Integrate the family and community contexts in which a child develops. Explore cultures and demographics of families in society, community resources, strategies for involving families in the education of their child, and tools for effective communication. [GE, HR, SE]</td>
</tr>
</tbody>
</table>

### Inclusive Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits/Units</th>
<th>Hours of Lecture</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC&amp; 204</td>
<td>Inclusive Education</td>
<td>5</td>
<td>5</td>
<td>Introductory course in recognition and identification of exceptionality in children from birth through high school. Includes policies and regulations concerning state and federal provisions of special education and related services, as well as adaptations for serving students with special needs in general education classrooms. [GE]</td>
</tr>
</tbody>
</table>

### Diversity in Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits/Units</th>
<th>Hours of Lecture</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC&amp; 240</td>
<td>Diversity in Education</td>
<td>5</td>
<td>5</td>
<td>Students will explore diversity and social justice issues influencing educational settings. Students will examine in depth the historical and current impact of children's, teachers', and families' cultural, social and political context in schools. [GE, PPI, SE]</td>
</tr>
</tbody>
</table>
Emergency Medical Technician (EMT)

EMT 103 12 Credits/Units
7 hours of lecture / 10 hours of lab
Training in pre-hospital emergency care with clinical education experience. An accelerated EMT program that provides for supervised practice of skills taught in each lesson. As required by Washington State Department of Health, this course is under the supervision of a Medical Program Director and Senior EMS Instructor. Meets the requirements of NREMT certification. [GE]

Selected Topics
EMT 280 1-12 Credits/Units
Selected topics in Emergency Medical Technician. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules.

Special Projects
EMT 290 1-4 Credits/Units
4 hours of lecture
Opportunity to plan, organize and complete special projects approved by the department. [GE]
ENGR 115
Geometric Dimensioning and Tolerancing
1 hour of lecture / 2 hours of lab
Prerequisite: College Trigonometry (MATH 102 or MATH 103) grade of "C" or higher and concurrent enrollment in, or completion of College Algebra (MATH 110 or MATH 111) grade of "C" or higher
Introduction to the fundamentals of the flight of air and space craft. Topics include review of basic fluid flow and aerodynamics, circulation theory of lift, finite wings, aerodynamic performance, stability and control, propulsion, and space flight. The course includes a team design project. [GE, SE]

ENGR 120
Intro to Electrical/Computer Sci & Engineering
4 hours of lecture / 3 hours of lab
Prerequisite: College Trigonometry (MATH 102 or MATH 103) grade of "C" or higher and concurrent enrollment in, or completion of College Algebra (MATH 110 or MATH 111) grade of "C" or higher
Introduction to electrical engineering, computer science and engineering processes, principles, problem-solving techniques, and contemporary tools. Application of in-class learning to hands-on projects and exploration of current industry trends and implications. [GE, SE]

ENGR 121
Field Survey I
3 hours of lecture / 4 hours of lab
Prerequisite: MATH & 151 (grade of "C" or higher) or placement into Math Level 90
Basic theory of surveying, measurement and calculation. Topics include: measurement and determination of boundaries, areas, and shapes; location through traversing techniques; error theory; compass adjustments; public land system; use of programmable calculators; and principles of measurements of distances, elevation and angles. [GE, SE]

ENGR 140
Basic Autocad
2 hours of lecture / 5 hours of lab
Prerequisite: CADD 140 or ENGR 140 and ENGR 113 (grades of "C" or higher)
Introduction to the engineering profession: its branches, principles, and practices. Engineering problem-solving, methods of analysis and design, and an introduction to engineering fundamentals. [GE, SE]

ENGR 143
Civil 3D
3 hours of lecture / 4 hours of lab
Prerequisite: (CADD 140 or ENGR 140) and ENGR 113 (grades of "C" or higher)
Foundations of civil drafting concepts and practices. Terminology, symbols, multiple use blocks and details, origins and uses of survey data, contours, alignments, and profiles to describe/define project objects. Topics will include basic site considerations and basic construction. [GE, SE]

ENGR 145
Basic Solidworks
4 hours of lecture / 5 hours of lab
Prerequisite: ENGR 140 and (CADD 150 or ENGR 150) (grades of "C" or higher)
Parametric solids modeling with SolidWorks, covering the breadth of the software at a basic level. Create part, assembly, and drawing files, including design tables and multiple configurations. [GE, SE]

ENGR 199
Cooperative Work Experience
1.5 hours of clinical
Prerequisite: ENGR 208
Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]

ENGR 208
Fundamentals of Flight
3 Credits/Units
2 hours of lecture / 2 hours of lab
Prerequisite: ENGR 107 and MATH & 151 and (CADD 150 or ENGR 150) (grades of "C" or higher)
Introduction to the fundamentals of the flight of air and space craft. Topics include review of basic fluid flow and aerodynamics, circulation theory of lift, finite wings, aerodynamic performance, stability and control, propulsion, and space flight. The course includes a team design project. [GE, SE]
Introduction to Gas Dynamics
ENGR 209 3 Credits/Units
2 hours of lecture / 2 hours of lab
Prerequisite: Concurrent enrollment in, or completion of ENGR 208 and MATH& 152 (grades of "C" or higher).
Introduction to compressible flow as applied to aerodynamics of aerospace systems. Topics include review of foundational principles, control volume analysis, compressible flow, normal and oblique shocks, Prandtl-Meyer flow, and overview of Fanno and Rayleigh flow. The course includes a team design project. [GE, SE]

Integrated Computational Design
ENGR 216 3 Credits/Units
1 hours of lecture / 4 hours of lab
Prerequisite: Concurrent enrollment in, or completion of ENGR 150 and ENGR& 214 (grades of "C" or higher)
Use computational SolidWorks Simulation CADD applications in the design and analysis of engineering problems. Also, integrated surface/solid modeling techniques, motion analysis, and use of CADD in documentation of designs and analyses. [GE]

Materials Science
ENGR 221 5 Credits/Units
5 hours of lecture
Prerequisite: CHEM& 142 (grade of "C" or higher)
Basic structure and properties of materials. Phase equilibrium and transformations. Mechanical properties, electronic structure, thermal, electrical, and magnetic properties. [GE, SE]

Civil/Construction Materials
ENGR 226 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: ENGR 109 (grade of "C" or higher).
Introduction to materials used in Civil Engineering and Construction. Theory to construction materials such as concrete, steel, wood, masonry, and composites. Properties of materials with fundamental principles governing the use of construction materials and their behavior. Understanding of how materials contribute to the structural integrity of buildings and infrastructure. Construction methods, techniques, and applications. [GE]

Manufacturing Processes
ENGR 239 5 Credits/Units
3 hours of lecture / 4 hours of lab
Introduction to manufacturing processes, emphasizing methods and practices used when machining, welding, and fabricating metals and related materials. [GE, SE]

Digital Logic Design
ENGR 250 5 Credits/Units
4 hours of lecture / 3 hours of lab
Prerequisite: ENGR 120 or CSE 120 (grade of "C" or higher)
Digital logic design, testing and implementation, including Boolean Algebra, Karnaugh map and design of logic circuits to solve practical problems using sequential/combinational/synchronous/asynchronous circuits, application of standard SSI/MSI/LSI logic systems, design/test/implement development cycle and Hardware Description Language (HDL). [GE]

Electrical Circuits and Signals
ENGR 252 5 Credits/Units
4 hours of lecture / 3 hours of lab
Prerequisite: ENGR& 204 (grade of "C" or higher)
Continuation of Electrical Circuits. Analysis and design of RLC circuits in sinusoidal steady state, complex-frequency domain of linear and lumped parameter circuits, active/passive filter circuits, poly phase and two-port circuits. Application of Fourier series, Fourier transforms and computer tools in circuit analysis. [GE, SE]

Signals and Systems
ENGR 253 5 Credits/Units
4 hours of lecture / 3 hours of lab
Prerequisite: ENGR 252 (grade of "C" or higher)
Concepts and applications in signal processing and linear system theory. Utilization of Fourier Analysis in both continuous and discrete time signals and systems. Role of sampling and the process of reconstructing a continuous-time signal from its samples and basics of communication systems. Application of Laplace transform and Z-transform. [GE, SE]

Digital Systems and Microprocessors
ENGR 270 5 Credits/Units
4 hours of lecture / 3 hours of lab
Prerequisite: ENGR 250 and CSE 121 (grades of "C" or higher)
Continuation of the Digital Design sequence. Covering synchronous/asynchronous state machines, shift registers, arithmetic circuits and devices, microprocessor internal and system architecture, design and subsystem interfacing, assembly language, and programmable logic devices, design for test, documentation standards, and use of computer-based tools. [GE, SE]

Selected Topics
ENGR 280 1-5 Credits/Units
5 hours of lecture
Selected topics in Engineering. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE, SE]

Special Projects
ENGR 290 1-6 Credits/Units
6 hours of lecture
Opportunity to plan, organize and complete special projects approved by the department. [GE]

Introduction to Design
ENGR& 104 5 Credits/Units
4 hours of lecture / 3 hours of lab
Introduction to the engineering method of problem solving through guided Engineering design projects. Focus on developing group skills, understanding the effects of different learning styles, producing strategies for innovation, and fostering creativity in problem solving. [GE, NS, NS-LAB, SE]

Electrical Circuits
ENGR& 204 5 Credits/Units
4 hours of lecture / 3 hours of lab
Prerequisite: MATH& 152 (grade of "C" or higher) or placement into Math Level 100
Basic concepts of AC and DC electrical circuits. Analyze and design voltage and current relationships for series and parallel RLC circuit. Use of Kirchhoff’s laws, Thvenin/Norton theorems, Operational Amplifier circuits, and Step/Natural/Steady-State circuit response. Use of test and measurement equipment in a laboratory setting. [GE, SE]
Statics
ENGR& 214
5 Credits/Units
5 hours of lecture
**Prerequisite:** MATH& 152 (grade of "C" or higher) or placement into Math Level 100
Solution of two and three dimensional vector systems using vector algebra notation and free-body diagrams. Friction, centroids, moment of inertia, radius of gyration, and loads involved in structures, machines, and trusses. [GE, SE]

Dynamics
ENGR& 215
5 Credits/Units
5 hours of lecture
**Prerequisite:** ENGR& 214 and MATH& 152 (grades of "C" or higher)
Kinematics and kinetics of particles, systems of particles and rigid bodies. Force/acceleration, work/energy and impulse/momentum problem solving techniques will be applied to two and three dimensional systems. [GE, SE]

Thermodynamics
ENGR& 224
5 Credits/Units
5 hours of lecture
**Prerequisite:** MATH& 152 and PHYS& 241 (grades of "C" or higher)
Explores the fundamentals of thermodynamics. Investigates the thermodynamic properties of matter with emphasis on ideal and real gases and introduces the concepts of heat and work. Defines the first and second laws of thermodynamics and explores their impact with examples. Uses thermodynamic cycles to apply the concepts of learned and relates the principles to applications. [GE, SE]

Mechanics of Materials
ENGR& 225
5 Credits/Units
5 hours of lecture
**Prerequisite:** ENGR& 214 and MATH& 152 (grades of "C" or higher)
Concepts of stress and strain for deformable objects. Axial, torsional and bending loading, combined loadings. Column loading and stability with other applied topics. [GE, SE]

Engineering Computations
ENGR& 240
5 Credits/Units
4 hours of lecture / 2 hours of lab
**Prerequisite:** MATH& 153 and (ENGR 109 or ENGR 120) (grades of "C" or higher) and completion of or concurrent enrollment in MATH 215.
Introduction to the use of computers to solve engineering and other applied mathematics problems. After an introduction to the target programming language, the course will focus on computational approaches to solving systems of linear equations, curve fitting problems, ordinary differential equations, sequential decision making, and other topics specified in the schedule. Limitations of various computational algorithms will also be discussed. Cannot receive credit for both ENGR& 240 and ENGR 240. [GE]
ENGLISH (ENGL/ENGL&)

Intro to College Writing and Critical Reading
ENGL 90 6 Credits/Units
5 hours of lecture
Prerequisite: Eligibility for ENGL 90 (CAP 64, CAP 70, or CAP 74 (grade of "C" or higher), recommending score on placement test, or qualifying HS GPA).
Integrated approach to reading, critical thinking, and writing in academic settings. Topics include reading and writing as processes; thinking critically; summarizing, analyzing, and responding to texts; editing for clarity and coherence; and practicing metacognition and Productive Persistence.

College Writing and Critical Reading Seminar
ENGL 99 1 Credit/Unit
Prerequisite: Eligible for ENGL& 101 Plus 99
Corequisite instruction in college-level writing, critical thinking, and critical reading to support achievement of ENGL 101 student learning outcomes as well as support success in other 100-level courses, using Productive Persistence and collaborative learning strategies. Course emphasis will be targeted to the requirements of each group of students. [CA]

Ethics and Policy in Healthcare I
ENGL 112 2 Credits/Units
2 hours of lecture
Prerequisite: Acceptance into the clinical portion of the program, and concurrent enrollment in NURS 110, NURS 111, ENGL 112, NURS 113, NURS 114 and NURS 115. These classes are linked: failure in one requires repeat of all concurrent classes.
Admission into the program required for enrollment. ENGL 112 explores values, ethics, and legal decision-making frameworks and policies used to support the well-being of people and groups within the context of the healthcare professions. Foundational concepts are introduced and discussed in the context of a first year nursing student. [GE, HA, SE]

Introduction to Creative Writing
ENGL 121 5 Credits/Units
5 hours of lecture
Introduction to and practice at least two of the following genres: fiction, creative nonfiction, scriptwriting, and poetry. Develop polished pieces of original work, read and analyze of diverse examples of the genres, participate in class discussion and written critiques of student and published writing, and undertake writing exercises to develop key elements of craft, strategies for editing and revision. [GE, HB, SE]

Fiction Writing
ENGL 125 5 Credits/Units
5 hours of lecture
Exploration of fiction writing, with an emphasis on literary short fiction. Development of polished pieces of short fiction, reading and analysis of diverse examples of the genre; class discussion and written critiques of student and published writing; writing exercises to develop key elements of craft; strategies for editing and revision. [GE, HB, SE]

Poetry Writing
ENGL 126 5 Credits/Units
5 hours of lecture
Exploration of poetry writing, focusing on using literary devices to craft and revise original work through discussion of diverse examples of the genre and through written critiques of student and published writing. [GE, HB, SE]

Creative Nonfiction Writing
ENGL 127 5 Credits/Units
5 hours of lecture
Exploration of creative nonfiction writing, with an emphasis on writing from personal experience. Development of polished pieces of nonfiction; reading and analysis of diverse examples of the genre; class discussion and written critiques of student and published writing; writing exercises to develop key elements of craft; strategies for editing and revision. [GE, HB, SE][PNP]

Graphic Fiction Writing
ENGL 128 5 Credits/Units
5 hours of lecture
Exploration of comic writing, with an emphasis on scripting conventions. Development of polished pieces of original fiction for visual rendering; reading and analysis of diverse examples of the medium; class discussion and written critiques of student and published writing; writing exercises to develop key elements of craft; strategies for editing and revision. [GE, HB, SE][PNP]

Introduction to Short Fiction
ENGL 133 5 Credits/Units
5 hours of lecture
Study of short fiction, including classic and contemporary examples, with an emphasis on developing critical reading skills as well as how short fiction represents diverse cultural perspectives. Introduction to the language and principles of literary analysis. [GE, HA, SE][PNP]

Science Fiction and Fantasy
ENGL 143 5 Credits/Units
5 hours of lecture
Study of speculative fiction from fantasy to hard science with attempts to define its particular qualities and place in modern literature. Emphasizes developing critical reading skills as well how science fiction and fantasy reflect issues in contemporary culture such as xenophobia, apocalyptic fear, definitions of humanity, politics, religion, and power, and late capitalism. Introduction to the language and principles of literary analysis. [GE, HA, SE][PNP]

Detective Fiction
ENGL 145 5 Credits/Units
5 hours of lecture
Introduction to detective fiction, its typical styles and techniques, its interactive nature, and its capacity for social critique, with an emphasis on developing critical reading skills. Study of the ways in which detective fiction represents diverse culture perspectives, covering topics including early detective authors and the evolution of the popular image of the detective in American and British cultures. Introduction to the language and principles of literary analysis. [GE, HA, SE][PNP]

Introduction to Mythology
ENGL 150 5 Credits/Units
5 hours of lecture
Study of significant world myths, including their sources and literary expressions. Introduces methods and vocabulary of mythological analysis to build close reading skills. [GE, HA, SE][PNP]
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisite</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 156</td>
<td>Introduction to the Novel</td>
<td>5</td>
<td>ENGL 101 (grade of &quot;C&quot; or higher) or eligibility for ENGL 102</td>
<td>Exploration of how the novel as a genre reflects cultures and societies. Emphasis on developing close reading skills and textual analysis of novels of varying lengths and types that present a diverse range of perspectives. [GE, HA, SE][PNP]</td>
</tr>
<tr>
<td>ENGL 173</td>
<td>Popular Culture</td>
<td>5</td>
<td>ENGL 101 (grade of &quot;C&quot; or higher) or eligibility for ENGL 102</td>
<td>Introduction to American Popular Culture using methodology and theory from various disciplines: graphic arts, design, social media, music, television and cinema studies, advertising, communication studies, literature, and history. Central questions will focus on the ways popular culture serves not simply as a reflection of a culture's beliefs and values, but also as a site of conversation between the various sub-groups that thrive in America. [GE, HA, SE]</td>
</tr>
<tr>
<td>ENGL 175</td>
<td>Introduction to LGBTQ Studies</td>
<td>5</td>
<td>ENGL 101 (grade of &quot;C&quot; or higher) or eligibility for ENGL 102</td>
<td>An interdisciplinary survey of lesbian, gay, bisexual, and trans issues in the sciences, social science, and humanities with an emphasis on the period from 1900 to the present in the United States. Introduction to the most compelling aspects of modern cultural representation of and discourse on sexual and gender identity. [GE, HA, SE, SS]</td>
</tr>
<tr>
<td>ENGL 176</td>
<td>Nature and the Humanities</td>
<td>5</td>
<td>ENGL 101 (grade of &quot;C&quot; or higher) or eligibility for ENGL 102</td>
<td>Interdisciplinary study of historical and current ways of 'constructing' and relating to nature in the Humanities. Topics include how cultures value nature, derive ethics and aesthetics from it, and interact with it in the creation of literature, art, architecture, social environments, social commentary, and legislation. Emphasis on 19th and 20th Century American cultures, with background in Asian, European, and Early American perspectives on nature. Can be linked with specific courses in the following departments for an integrated learning project: ART, BIOL, ENGL, ENVS, GEOL, MUSC, and PE. [GE, HA, PPI, SE]</td>
</tr>
<tr>
<td>ENGL 199</td>
<td>Cooperative Work Experience</td>
<td>1-5</td>
<td>ENGL 101 (grade of &quot;C&quot; or higher) or eligibility for ENGL 102</td>
<td>For students interested in careers that emphasize writing, co-op work experience offers credit for supervised work in writing-related jobs. [GE]</td>
</tr>
<tr>
<td>ENGL 240</td>
<td>Literature By Women</td>
<td>5</td>
<td>ENGL 101 (grade of &quot;C&quot; or higher) or eligibility for ENGL 102</td>
<td>Literature survey class that studies diverse fiction, nonfiction, drama, poetry, and relevant secondary theory by women authors reflecting a range of women's narratives. Focus on written interpretation and essay-length analysis using concepts of power, privilege, and inequity. [GE, HA, PPI, SE][PNP]</td>
</tr>
<tr>
<td>ENGL 242</td>
<td>Native American Literature</td>
<td>5</td>
<td>ENGL 101 (grade of &quot;C&quot; or higher) or eligibility for ENGL 102</td>
<td>An introductory survey of literature relevant to the gay, lesbian, bisexual, and trans communities and their historical predecessors from 1800 to the present. Emphasis on critical reading skills, analysis of power, privilege, and inequity, and written interpretation employing the principles and vocabulary of literary analysis. [GE, HA, SE][PNP]</td>
</tr>
<tr>
<td>ENGL 267</td>
<td>American Multiethnic Literature</td>
<td>5</td>
<td>ENGL 101 (grade of &quot;C&quot; or higher) or eligibility for ENGL 102</td>
<td>Survey of American multiethnic writing from Civil Rights era to the present. Emphasis on writings as 'windows' to American ethnic experiences, cultures, and histories within larger American historical contexts. By building close reading, literary analysis, and writing skills, encourages students to develop understanding of political, social, and historic climate as it helps shape and is shaped by literature. [GE, HA, PPI, SE][PNP]</td>
</tr>
<tr>
<td>ENGL 271</td>
<td>Pacific Northwest Literature</td>
<td>5</td>
<td>ENGL 101 (grade of &quot;C&quot; or higher) or eligibility for ENGL 102</td>
<td>Focus on reading and writing about literature from the Pacific Northwest to explore how the region is defined, imagined, and represented in literature through an emphasis on close reading and literary analysis. Explores the development of regionalism, national and regional histories and other identity-producing media in diverse cultural contexts. [GE, HA, SE][PNP]</td>
</tr>
<tr>
<td>ENGL 272</td>
<td>Shakespeare</td>
<td>5</td>
<td>ENGL 101 (grade of &quot;C&quot; or higher) or eligibility for ENGL 102</td>
<td>Readings of Shakespeare's works including (but not limited to) selected tragedies, comedies, and historical plays. Shakespeare's works are read within their historical and cultural settings. Students will also learn methods of literary analysis and apply them in written papers. [GE, HA, SE]</td>
</tr>
</tbody>
</table>
Ethics and Policy in Healthcare II
ENGL 273  3 Credits/Units
5 hours of lecture
Prerequisite: Concurrent enrollment in ENGL 273, NURS 261, NURS 262, and NURS 264. Classes are linked: failure in one class requires repeat of all concurrent enrollment classes.

Admission into the program required for enrollment. Explores values, ethics and legal decision-making frameworks and policies used to support the well-being of people and groups within the context of the healthcare professions including nurse practice acts, and state and federal laws. The role of the professional nurse is examined in relation to policy and ethics with analysis of case studies allowing for application of concepts in the health care setting. [GE, HA, SE]

Advanced Fiction Writing
ENGL 275  5 Credits/Units
5 hours of lecture
Prerequisite: ENGL 121, ENGL 125, or ENGL 127 (grade of "C" or higher)
Continuation of introductory creative writing courses, with an emphasis on writing short fiction and advancing fundamental fiction writing skills. Further development of reading and analysis of diverse examples of fiction, class discussion and written critiques of student and published writing; writing exercises to continue to develop key elements of craft; strategies for editing and revision; participation in the larger literary world through an introduction to publication, literary readings, and other appropriate literary events. [GE, HB, SE]

Literary Publication
ENGL 277  5 hours of lecture
Prerequisite: Eligibility for ENGL 101 (CAP 90, ENGL 90, or IELP 90 (grade of "B" or higher) or eligibility through multiple measures placement.)
Exploration of poetry writing and publication strategies, focusing on using literary devices to craft and revise original work through discussion of diverse examples of the genre, and through written critiques of student and published poetry. [GE, HB, SE]

Advanced Poetry Writing
ENGL 276  5 hours of lecture
Prerequisite: ENGL 121 or ENGL 126 (grade of "C" or higher)
Continuation of introductory creative writing courses, with an emphasis on writing short fiction and advancing fundamental fiction writing skills. Further development of reading and analysis of diverse examples of fiction, class discussion and written critiques of student and published writing; writing exercises to continue to develop key elements of craft; strategies for editing and revision; participation in the larger literary world through an introduction to publication, literary readings, and other appropriate literary events. [GE, HB, SE]

English Composition I
ENGL& 101  5 Credits/Units
5 hours of lecture
Prerequisite: Eligibility for ENGL 101 (CAP 90, ENGL 90, or IELP 90 (grade of "B" or higher) or eligibility through multiple measures placement.)
Integrated college reading and writing, emphasizing deep comprehension, critical thinking in response to texts from various genres, and writing for a variety of purposes and audiences in a range of modalities. Strengthens skills through rhetorical awareness, application of genre knowledge, and reflection on past and future writing tasks to enable skill transfer to new situations in college, workplaces, and communities. Reading and writing processes emphasized. [CA, CT, GE, SE, WC]

Intro to Poetry
ENGL& 113  5 Credits/Units
5 hours of lecture
Study of poetry and poetic forms, including classic and contemporary examples, with an emphasis on developing critical reading skills as well how poetry represents diverse cultural perspectives. Introduction to the language and principles of literary analysis. [GE, HA, SE][PNP]

Intro to Drama
ENGL& 114  5 Credits/Units
5 hours of lecture
Revised course description: Study of drama as both literature and theater, from historical, philosophical, and artistic perspectives. Introduces methods and vocabulary of literary analysis to build close reading skills. [GE, HA, SE][PNP]

British Literature I
ENGL& 226  5 hours of lecture
Prerequisite: ENGL 101 (grade of "C" or higher) or eligibility for ENGL 102
Classics of British literature from the eighth to the seventeenth century. Literature is read within its historical and cultural settings. Students will also learn methods of literary analysis and apply them in written essays. [GE, HA, SE][PNP]

British Literature II
ENGL& 227  5 hours of lecture
Prerequisite: ENGL 101 (grade of "C" or higher) or eligibility for ENGL 102
Classics of British literature from the seventeenth to the nineteenth century. Literature is read within its historical and cultural setting with an emphasis on written interpretation employing the principles and vocabulary of literary analysis. [GE, HA, SE][PNP]
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 228</td>
<td>British Literature III</td>
<td>5</td>
<td>ENGL 101 (grade of &quot;C&quot; or higher) or eligibility for ENGL 102</td>
<td>Classics of British literature from the nineteenth century to the present. Literature is read within its historical and cultural settings. Students will also learn methods of literary analysis and apply them in written essays. [GE, HA, SE][PNP]</td>
</tr>
<tr>
<td>ENGL 235</td>
<td>Technical Writing</td>
<td>5</td>
<td>ENGL 101, ENGL 135 or PTWR 135 (grade of &quot;C&quot; or higher)</td>
<td>Study of advanced writing skills for typical work-world documents in a business/technical environment, with emphasis on document format, audience analysis, correspondence, formal and informal reports, research, and documentation. [CA, CT, GE, SE, WC][PNP]</td>
</tr>
<tr>
<td>ENGL&amp; 244</td>
<td>American Literature I</td>
<td>5</td>
<td>ENGL 101 (grade of &quot;C&quot; or higher) or eligibility for ENGL 102</td>
<td>Survey of American writing from the beginnings to 1865. Literature of all genres is read within historical and cultural settings. Students develop critical reading skills, identify diverse cultural perspectives, and make use of the language and principles of literary analysis to respond in writing to both canonical and non-canonical texts. [GE, HA, SE][PNP]</td>
</tr>
<tr>
<td>ENGL&amp; 245</td>
<td>American Literature II</td>
<td>5</td>
<td>ENGL 101 (grade of &quot;C&quot; or higher) or eligibility for ENGL 102</td>
<td>Survey of American writing from the Civil War through World War I. Literature of all genres is read within historical and cultural settings. Students develop critical reading skills, identify diverse cultural perspectives, and make use of the language and principles of literary analysis to respond in writing to both canonical and non-canonical texts. [GE, HA, SE][PNP]</td>
</tr>
<tr>
<td>ENGL&amp; 246</td>
<td>American Literature III</td>
<td>5</td>
<td>ENGL 101 (grade of &quot;C&quot; or higher) or eligibility for ENGL 102</td>
<td>Survey of American writing World War I through the present. Literature of all genres is read within historical and cultural settings. Students develop critical reading skills, identify diverse cultural perspectives and make use of the language and principles of literary analysis to respond in writing to both canonical and non-canonical texts. [GE, HA, SE][PNP]</td>
</tr>
<tr>
<td>ENGL&amp; 255</td>
<td>World Literature II</td>
<td>5</td>
<td>ENGL 101 (grade of &quot;C&quot; or higher) or eligibility for ENGL 102</td>
<td>Surveys the literary, cultural, and human significance of influential works of international Western and non-Western literary traditions from the 11th to the 18th centuries. Approaches cultural diversity through a critical study of selected world masterpieces and their historical, social, political and philosophical frameworks through reading, reflection, and literary analysis. Interprets world literature in relation to global contexts. [GE, HA, SE][PNP]</td>
</tr>
<tr>
<td>ENGL&amp; 256</td>
<td>World Literature III</td>
<td>5</td>
<td>ENGL 101 (grade of &quot;C&quot; or higher) or eligibility for ENGL 102</td>
<td>Surveys the literary, cultural, and human significance of influential works of international Western and non-Western literary traditions from the 19th to the 20th centuries. Approaches cultural diversity through a critical study of selected world masterpieces and their historical, social, political and philosophical frameworks through reading, reflection, and literary analysis. Evaluates in writing world literature in relation to global contexts. [GE, HA, SE][PNP]</td>
</tr>
</tbody>
</table>
ENGLISH AS A SECOND LANGUAGE (ESL)


ESL Educational Interviewing Levels 4-6
2 hours of lecture
For new ESL students only; assessing new students in basic skills and learning styles; identifying barriers to their student success; helping students understand Clark College and Basic Education.

ESL I-DEA
ESL 10 1-18 Credits/Units
18 hours of lecture
This class will help you to improve your English skills in listening, speaking, reading, and writing. You will learn new skills to help you in your everyday life. You will learn about technology by using a computer to do some of your schoolwork. I-DEA is a blended course; half of your class time will be face-to-face (in the classroom with teacher and students), and half will be online (on the computer). Your teachers can help you with online work during lab time, after the face-to-face class time.

Beginning Oral Communication Level 1
ESL 11 6 Credits/Units
6 hours of lecture
Develop low-beginning English skills in listening and speaking. Learn basic English vocabulary and grammar to help you at work, in the community and with your family. Current CASAS scores required for enrollment.

Beginning Written Communication Level 1
ESL 12 6 Credits/Units
6 hours of lecture
Develop low-beginning English skills in reading and writing. Learn basic English vocabulary and grammar to help you at work, in the community and with your family. Current CASAS scores required for enrollment.

Foundations Oral Communication Levels 2-3
ESL 13 6 Credits/Units
6 hours of lecture
Develop high-beginning English skills in listening and speaking. Learn English vocabulary and grammar to help you at work, in the community and with your family. Current CASAS scores required for enrollment.

Foundations Written Communication Levels 2-3
ESL 15 6 Credits/Units
6 hours of lecture
Develop high-beginning English skills in reading and writing. Learn English vocabulary and grammar to help you at work, in the community and with your family. Current CASAS scores required for enrollment.

Pronunciation Essentials
ESL 18 2 Credits/Units
2 hours of lecture
Introduction of key features of English pronunciation in the context of structured situations in school and work. Learn to recognize, understand and pronounce consonant sounds, vowel sounds, stress, intonation, rhythm, and reduced speech.

Intensive Explorations: Study Skills
ESL 45 2 Credits/Units
2 hours of lecture
Introduction and development of study skills plus reflection on various strategies of successful college students. Upon successful completion of Intensive Explorations, students will have gained the technology (especially computer) and study skills as well as the oral and written communication skills to transition into Fast Track one.

Intensive Explorations: Oral Communication/Tech
ESL 46 6 Credits/Units
6 hours of lecture
Introduction and development of technology (especially computer) skills to support oral communication. Development and practice of speaking and listening communication skills appropriate to ESL L4 (Intermediate ESL) and sufficient to prepare students for Fast Track 1. Upon successful completion of Explorations: Oral Communication/Tech., students will have gained the technology (especially compute) and study skills as well as the oral communication skills to transition into Fast Track 1.

Intensive Explorations: WrittenCommunication/Tech
ESL 47 7 Credits/Units
7 hours of lecture
Introduction and development of technology (especially computer) skills to support oral communication. Development and practice of speaking and listening communication skills appropriate to Intermediate ESL, and sufficient to prepare students for Fast Track 1. Upon successful completion of Intensive Explorations: Written Communication/Tech., students will have gained the technology (especially computer) and study skills as well as the oral and written communication skills to transition into Fast Track 1.

Intensive Explorations: Written Communication/Tech
ESL 48 6 Credits/Units
6 hours of lecture
Introduction and development of technology (especially computer) skills to support written communication. Development and practice of reading and writing communication skills appropriate to Intermediate ESL and sufficient to prepare students for Fast Track One. Upon successful completion of Intensive Explorations, students will have gained the technology (especially computer) and the oral and written communication skills to transition into Fast Track One.

Intensive Explorations: Written Communication/Tech
ESL 49 7 Credits/Units
7 hours of lecture
Introduction and development of technology (especially computer) skills to support oral communication. Development and practice of reading and written communication skills appropriate to Intermediate ESL, and sufficient to prepare students for Fast Track One. Upon successful completion of Foundations Plus, students will gain the technology (especially computer) and study skills as well as the oral and written communication skills to transition into Fast Track One.
English for Life and Work Levels 1-3
ESL 71 1-12 Credits/Units
12 hours of lecture
Improve listening, speaking, reading and writing skills to help you in daily life and at work. Learn basic English grammar and vocabulary in weekly topics such as letters and numbers, personal information and family, money and US customary units, shopping, home and housing, community, health and emergencies, and work. Current CASAS scores required for enrollment.

English for Life and Work Levels 4-6
ESL 74 1-12 Credits/Units
12 hours of lecture
Improve listening, speaking, reading and writing skills to help you in daily life and at work. Learn intermediate grammar and vocabulary in weekly topics such as career exploration, job application, workplace rules and safety, employee benefits and rights, teamwork, work performance, healthy living and safe driving, US educational system, and US culture. Current CASAS scores required for enrollment.

ESL Selected Topics
ESL 80 1-12 Credits/Units
12 hours of lecture
Course will focus on selected ESL topics. Course theme and content will change to reflect the new topic. Because of the variations, this course is repeatable for credit for different topics.

ESL Literacy Support
ESL 90 1-2 Credits/Units
2 hours of lecture
Learn how and/or improve ability to read with understanding and convey ideas in writing. Upon successful completion of ESL Literacy Support, students will have gained skills to improve performance on ESL reading/writing assessments.

ESL Math for Transition
ESL 93 1-2 Credits/Units
2 hours of lecture
Math such as fractions, decimals, operations, will be contextualized in real-life contexts, so students can transfer the skills outside of the classroom while they are preparing to transition to CAP Math. [PNP]

Reading, Speaking and US Citizenship
ESL 95 3 Credits/Units
3 hours of lecture
Learn reading, writing and oral communication strategies including critical thinking to actively participate in various aspects of Civics including basic knowledge of US history and government, and incorporation of on-line resources for effective US Citizenship interview preparation and engaged citizenship.
ENVIRONMENTAL SCIENCE
(ENVS/ENVS&)

Integrated Environmental Science
ENVS 109 5 Credits/Units
3 hours of lecture / 4 hours of lab
Introduction to scientific inquiry using the foundations of physical, earth and life sciences. Focus on developing the skills to answer basic questions about scientific phenomena through scientific investigations and the ability to assist and guide others through this process. Outdoor field activities are included. Designed for non-science majors and addressing the curriculum needs of early childhood educators. [GE, NS, NS-LAB, SE]

Global Climate Change
ENVS 200 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: CAP 42 (grade of "C" or higher) or placement into Math level 10
An introduction to climate change for non-science majors. Learn what climate means, what makes it change and the techniques scientists use to study it. Use data collection and measurements to see for yourself! Investigate how we can slow climate change, consider how we can live in this new climate and learn to better communicate to others what climate change means. Credit cannot be granted for both METR 201 and ENVS 200. [GE, NS, NS-LAB, SE]

Introduction to Soils: A Living System
ENVS 201 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: CAP 42 (grade of "C" or higher) or placement into Math level 10
An introduction to soils, including biological, chemical and physical properties. Examine the fundamentals of soil ecology, including soil-plant-water interactions, soil fertility, and soil formation. Topics will integrate the study of physical, chemical, geologic, atmospheric and biological systems. Human-soil interactions will be explored in the context of agricultural and ecological systems. [GE, NS, NS-LAB, SE]

Native Plant Propagation: Principles & Practice
ENVS 202 3 Credits/Units
3 hours of lecture
Prerequisite: Completion of a 100- or 200-level BIOL, BIOL& ENVS, ENVS&, GEOL or GEOL& course (grade of "C" or higher)
Plant propagation techniques, emphasizing native plants, propagation for restoration projects, and unique problems associated with providing appropriate plant material for restoration or conservation purposes. Emphasizes greenhouse and fieldwork, and includes lectures, field trips, and a class project. [GE, NS, SE]

Field Studies in Environmental Science
ENVS 208 1-8 Credits/Units
2 hours of lecture / 12 hours of lab
Prerequisite: Completion of a 100- or 200-level BIOL, BIOL& ENVS, ENVS&, GEOL or GEOL& course (grade of "C" or higher)
Experiential hands-on learning focusing on ecological relationships and environmental quality of the locations visited. Gain valuable and exciting first-hand experience using scientific and field equipment to take measurements and collect field data. Engage in a current issue pertaining to the area and participate in mock town hall meeting to learn about stakeholders and perspectives. Learn about various state and federal agencies and their approach to land management. Check the schedule to see which locations will be visited and the format for the exploration i.e. extended camping trip, day trips etc. Check schedule to see additional fees that cover food, lodging and transportation. [GE, NS, NS-LAB, SE]

Introduction to Ecological Restoration
ENVS 218 5 Credits/Units
3 hours of lecture / 4 hours of lab
Learning field techniques required for ecological restoration, interacting with agency personnel and others working in the field of restoration. Participating in the collection, analysis and interpretation of data pertaining to ecological health of various habitats. Projects vary depending upon field locations and agency partnerships. [GE, NS, NS-LAB, SE]

Sustainability & Environmental Practices
ENVS 430 5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. Examines the relationship between industrial civilization and the natural environment by exploring underlying ecological philosophies and the economic and political processes by which environmental decisions are made. Emphasis on critical thinking and evaluating alternative points of view. Credit not allowed for both ENVS 231 and POLS 231. [GE, SE, SS]

Global Change
ENVS 200 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: CAP 42 (grade of "C" or higher) or placement into Math level 10
An introduction to climate change for non-science majors. Learn what climate means, what makes it change and the techniques scientists use to study it. Use data collection and measurements to see for yourself! Investigate how we can slow climate change, consider how we can live in this new climate and learn to better communicate to others what climate change means. Credit cannot be granted for both METR 201 and ENVS 200. [GE, NS, NS-LAB, SE]

Sustainability Science for Teachers
ENVS 300 5 Credits/Units
3 hours of lecture / 4 hours of lab
Admission into the program required for enrollment. A survey of earth, physical, and life sciences for early childhood teachers. Exploration of scientific phenomena and engineering design using inquiry-based learning. [GE]

Sustainability and Environmental Practices
ENVS 430 5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. A survey of earth, physical, and life sciences for early childhood teachers. Exploration of scientific phenomena and engineering design using inquiry-based learning. [GE]

Sustainability Science for Teachers
ENVS 300 5 Credits/Units
3 hours of lecture / 4 hours of lab
Admission into the program required for enrollment. A survey of earth, physical, and life sciences for early childhood teachers. Exploration of scientific phenomena and engineering design using inquiry-based learning. [GE]
Introduction to Environmental Science
ENVS& 101 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: MATH 92 or PTCS 110 (grade of “C” or higher) or placement into Math level 30

Introduction to current topics in environmental science and fundamental principles of ecology. Topics include human population growth, natural resource use, biodiversity, climate change, species interactions, habitat alteration and fragmentation, ecosystem services, carrying capacity and sustainability. Labs will be hands-on investigations of the local environment where students will get an opportunity to collect samples and analyze the environmental quality through the study of soils, biodiversity and water. Many of the labs will be conducted in the field. This course is primarily intended for students majoring or minoring in environmental science or environmental studies. [GE, NS, NS-LAB, SE]
### GEOGRAPHY (GEOG/GEOG&)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits/Units</th>
<th>Hours of Lecture</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 205</td>
<td>Geography</td>
<td>5</td>
<td>5</td>
<td>A study of the Earth and the processes that create and shape its physical features and landforms. Topics examined include Earth dimensions and motions, seasons, weather and climate, tectonic and surface process, landforms, map reading, and tools used by geographers. Emphasis is placed on recognizing, describing, and interpreting the spatial distribution of Earth features and their relationship to humanity through the lens of power, privilege and inequity. [GE, NS, PPI, SE, SS]</td>
</tr>
<tr>
<td>GEOG 220</td>
<td>The Geopolitics of the Middle East</td>
<td>5</td>
<td>5</td>
<td>Geo-political survey of the Middle East, including interrelationships between the physical, economic and political geography of this region, the impact of geography on politics and political issues within the nations of this region, the corresponding impact of politics and political issues on geography and on the lives of the people living in this region, as well as the resulting diversity of cultures, beliefs, perceptions, challenges and issues among the people of this region. This course will also examine the importance and impact of the Middle East on the rest of the world, as well as the impact and influence of the rest of the world on the Middle East. Credit not allowed for both GEOG 220 and POLS 220. [GE, SE, SS]</td>
</tr>
<tr>
<td>GEOG 221</td>
<td>The Geopolitics of Africa</td>
<td>5</td>
<td>5</td>
<td>Geo-political survey of Africa, including interrelationships between the physical, economic and political geography of this region, the impact of geography on politics and political issues within the nations of this region, the corresponding impact of politics and political issues on geography and on the lives of the people living in this region, as well as the resulting diversity of cultures, beliefs, perceptions, challenges and issues among the people of this region. This course will also examine the importance and impact of Africa on the rest of the world, as well as examine the impact and influence of the rest of the world on Africa. Credit not allowed for both GEOG 221 and POLS 221. [GE, SE, SS]</td>
</tr>
<tr>
<td>GEOG 222</td>
<td>The Geopolitics of Asia and Oceania</td>
<td>5</td>
<td>5</td>
<td>Geo-political survey of Asia and Oceania, including interrelationships between the physical, economic and political geography of this region, the impact of geography on politics and political issues within the nations of this region, the corresponding impact of politics and political issues on geography and on the lives of the people living in this region, as well as the resulting diversity of cultures, beliefs, perceptions, challenges and issues among the people of this region. This course will also examine the importance and impact of Asia and Oceania on the rest of the world, as well as examine the impact and influence of the rest of the world on this region. Credit not allowed for both GEOG 222 and POLS 222. [GE, SE, SS]</td>
</tr>
<tr>
<td>GEOG 223</td>
<td>Geopolitics of Eurasia</td>
<td>5</td>
<td>5</td>
<td>Geo-political survey of Europe, Russia and Central Asia, including interrelationships between the physical, economic and political geography of this region, the impact of geography on politics and political issues within the nations of this region, the corresponding impact of politics and political issues on geography and on the lives of the people living in this region, as well as the resulting diversity of cultures, beliefs, perceptions, challenges and issues among the people of this region. Examines the importance and impact of Eurasia on the rest of the world, as well as examine the impact and influence of the rest of the world on Eurasia. Credit not allowed for both GEOG 223 and POLS 223. [GE, SE, SS]</td>
</tr>
<tr>
<td>GEOG 224</td>
<td>Geopolitics of Latin America and Caribbean</td>
<td>5</td>
<td>5</td>
<td>Geo-political survey of Latin America and the Caribbean, including interrelationships between the physical, economic and political geography of this region, the impact of geography on politics and political issues within the nations of this region, the corresponding impact of politics and political issues on geography and on the lives of the people living in this region, as well as the resulting diversity of cultures, beliefs, perceptions, challenges and issues among the people of this region. Examines the importance and impact of Latin America and the Caribbean on the rest of the world, as well as examine the impact and influence of the rest of the world on the countries in this region. Credit not allowed for both GEOG 224 and POLS 224. [GE, SE, SS]</td>
</tr>
<tr>
<td>GEOG 280</td>
<td>Selected Topics</td>
<td>1-5</td>
<td>5</td>
<td>Selected topics in Geography. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE, SE]</td>
</tr>
<tr>
<td>GEOG 290</td>
<td>Special Projects</td>
<td>1-5</td>
<td>5</td>
<td>Opportunity to plan, organize and complete special projects approved by the department. [GE]</td>
</tr>
<tr>
<td>GEOG&amp; 100</td>
<td>Introduction to Geography</td>
<td>5</td>
<td>5</td>
<td>Survey of our natural environment, earth-sun-moon relationships, cartography, weather and climate, landforms, soils, oceans, and water and biotic resources. Survey of the countries and major features of the world as well as geographic aspects of culture, including the past and present social, political and economic factors that are related to human perception, organization and use of the environment. [GE, SE, SS]</td>
</tr>
<tr>
<td>GEOG&amp; 102</td>
<td>World Regional Geography</td>
<td>5</td>
<td>5</td>
<td>Fundamental geographic concepts and examination of different world regions and the various physical, social, cultural, and political processes that create, shape, and affect them. Survey of several different world regions, such as Sub-Saharan Africa, Europe, the Middle East, Latin American and Southeast Asia, by examination of the environmental, cultural, historical, and economic processes that make each region unique, as well as its connections and commonalities with other world regions. [GE, SE, SS]</td>
</tr>
</tbody>
</table>
Human Geography
GEOG& 200 5 Credits/Units
5 hours of lecture
The course provides a foundation for the understanding of fundamental concepts and current ideas in Human Geography. The purpose of the course is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth’s surface. Students will gain a broad understanding of the development of cultural, social, political and economic spaces at a variety of scales and the interaction of human societies with the biophysical environment. The significance of spatial and temporal scales will be introduced, and a consideration of ethics and values developed. [GE, SE, SS]

Economic Geography
GEOG& 207 5 Credits/Units
5 hours of lecture
Broad patterns, courses, and consequences of interrelationships between economic and geographic forces, processes, and resources. Location of economic activity, population dynamics, strategic resources, global economic flashpoints, patterns/consequences of regional integration. [GE, SE, SS][PNP]
### GEOLOGY (GEOL/GEOL&)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits/Units</th>
<th>Lectures</th>
<th>Lab</th>
<th>Prerequisite/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 102</td>
<td>Intro to Geology II</td>
<td>5</td>
<td>3 hours</td>
<td>4 hours</td>
<td>Plate tectonics and the origin of ocean basins and continents. Mass wasting, glaciation, streams, groundwater, deserts, shorelines and deep sea sediments. One day field trip required. [GE, NS, NS-LAB, SE]</td>
</tr>
<tr>
<td>GEOL 109</td>
<td>Northwest Geology</td>
<td>5</td>
<td>5</td>
<td></td>
<td>Geologic evolution of the Pacific Northwest emphasizing the development of the Cascades, Columbia River Plateau, Coast Ranges, Puget-Willamette Lowlands, San Juan Islands, High Lava Plains and the Okanogan Highlands. Field trips required. This class is a non-lab science. [GE, NS, SE]</td>
</tr>
<tr>
<td>GEOL 199</td>
<td>Cooperative Work Experience</td>
<td>1-3</td>
<td>9</td>
<td></td>
<td>Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]</td>
</tr>
<tr>
<td>GEOL 218</td>
<td>Field Studies in Geology</td>
<td>1-6</td>
<td>2</td>
<td>8 hours</td>
<td>Prerequisite: 10 units in Geology (GEOL, GEOL&amp;) grades of &quot;C&quot; or higher. Field trip program to study the geologic evolution of an area. Emphasis on interpretation of rocks and their structure. Duration, scope and field trip locations will vary. Food and personal gear provided by student. Maxivans provided for travel. Day hikes may be required. [GE, NS, NS-LAB, SE]</td>
</tr>
<tr>
<td>GEOL 290</td>
<td>Special Projects</td>
<td>1-5</td>
<td>5</td>
<td></td>
<td>Opportunity to plan, organize and complete special projects approved by the department. [GE]</td>
</tr>
<tr>
<td>GEOL&amp; 101</td>
<td>Introduction to Physical Geology</td>
<td>5</td>
<td>3</td>
<td>4 hours</td>
<td>A dynamic earth, geologic time, origin and identification of minerals and rocks. Volcanoes, earthquakes and the structure of earth in light of plate tectonic theory. One day field trip required. [GE, NS, NS-LAB, SE]</td>
</tr>
<tr>
<td>GEOL&amp; 103</td>
<td>Historical Geology: The Earth Through Time</td>
<td>5</td>
<td>3</td>
<td>4 hours</td>
<td>Physical, chemical, and biological evolution of the earth as determined from the rock record. Interpretation of ancient environments through stratigraphy and biostratigraphy. Plate tectonics, earth history, and fossil identification. Field trips required. [GE, NS, NS-LAB, SE]</td>
</tr>
</tbody>
</table>
# HEALTH & PHYSICAL EDUCATION (HPE)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits/Units</th>
<th>Hours</th>
<th>Description</th>
</tr>
</thead>
</table>
| HPE 220       | Occupational Wellness          | 3 Credits/Units|       | 2 hours of lecture / 2 hours of lab  
Study of wellness and work-life balance. Focusing on developing personalized behavior change strategies aimed at making progress toward optimal wellness in any occupation. Content includes time management, coping with workplace stress, building relationships with coworkers, wellness on a budget, disease prevention and injury prevention. Participating in physical activities is required. In addition to activities that improve strength, flexibility and cardiovascular fitness, other activities may include breathing, stress management, corrective exercise and lifting techniques. Fulfills the Health and Physical Education general education requirement. [GE, HPE, SE] |
| HPE 258       | Fitness-Wellness               | 3 Credits/Units|       | 2 hours of lecture / 2 hours of lab  
Exploration of the connection between fitness and health. Focusing on nutrition, stress, and developing a personalized health plan for lifelong physical activity. Participating in physical activity is required. Activities focus on improving flexibility, strength and cardiovascular fitness. [GE, HPE, SE] |
| HPE 266       | Mind Body Health               | 3 Credits/Units|       | 2 hours of lecture / 2 hours of lab  
Exploration of the mind/body connection. Focusing on health, illness, healing, and developing personalized behavior change strategies to advanced health. Participating in movement activities is required. Activities may include mediation, yoga, tai chi and breathing techniques in addition to activities that improve strength and cardiovascular fitness. [GE, HPE, SE][PNP] |
| HPE 280       | Selected Topics                | 1-5 Credits/Units|      | 5 hours of lecture  
Selected topics in Health & Physical Education. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE, SE] |
| HPE 290       | Special Projects               | 1-5 Credits/Units|      | 5 hours of lecture  
Opportunity to plan, organize and complete special projects approved by the department. [GE] |
# Health (HLTH)

## Food and Your Health
- **HLTH 100**
  - 2 Credits/Units
  - 2 hours of lecture
  - Exploration of the connection between food choices and health with an emphasis on whole foods. Focus on developing personalized healthy strategies to advance health. [GE, HE, SE][PNP]

## Health for Adult Living
- **HLTH 101**
  - 3 Credits/Units
  - 3 hours of lecture
  - Exploration of the connection between personal choices and health across multiple dimensions of wellness. Focus on developing personalized behavior change strategies to advance health. [GE, HE, SE]

## Environmental Health
- **HLTH 103**
  - 2 Credits/Units
  - 2 hours of lecture
  - Exploration of the connection between personal choices, human health, and the environment. Focus on developing personalized behavior change strategies to advance health. [GE, HE, SE]

## Happiness and Your Health
- **HLTH 108**
  - 2 Credits/Units
  - 2 hours of lecture
  - Exploration of the connection between happiness and your health. Focuses on science-based strategies to increase happiness, including gratitude, social connections, mindfulness, and stress management. Students will develop personalized behavior change strategies to advance well-being. [GE, HE, SE]

## Adult CPR and First Aid
- **HLTH 120**
  - 1 Credit/Unit
  - 1 hours of lecture
  - Introduction to adult CPR and general first aid skills that will prepare the student to recognize emergencies, make first aid decisions, and provide care. Upon successful completion of the course, students will receive Adult CPR and Standard First Aid certification. [GE]

## Pediatric First Aid & CPR
- **HLTH 123**
  - 1 Credit/Unit
  - 1 hours of lecture
  - First aid preparation to prevent injuries and respond to emergencies involving children and infants. Skills include child and infant CPR, use of an AED, first aid, and injury prevention. Successful completion of the course includes certification for first aid, child and infant CPR and AED. [GE]

## Healthcare Provider CPR and First Aid
- **HLTH 124**
  - 1 Credit/Unit
  - 1 hours of lecture
  - Cardiopulmonary resuscitation and first aid and for health care providers as required by the Washington Occupation and Health Act. Designed specifically for health care providers. Upon successful completion of the course, students will receive Basic Life Support for the Healthcare Provider and First Aid Certifications from the American Heart Association. Students are required to purchase the required text and workbook (available at Clark College Bookstore) and bring to class. [GE][PNP]

## Cooperative Work Experience
- **HLTH 199**
  - 1-3 Credits/Units
  - 9 hours of clinical
  - Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]

## Human Sexuality
- **HLTH 206**
  - 2 Credits/Units
  - 2 hours of lecture
  - Exploration the connection between personal choices and sexual health through the life cycle. Using multiple perspectives, focuses on social, cultural, and historical influences on human sexuality. Topics include sexual biology, gender identity, gender expression, and physical and emotional attraction as well as the development of personalized behavior change strategies to promote safety and advance sexual health. [GE, HE, SE]

## Women's Health
- **HLTH 207**
  - 3 Credits/Units
  - 3 hours of lecture
  - Exploration of women-specific health issues across the lifespan using a multidimensional approach. Students will evaluate the impact of individual, institutional, and cultural influences on women's health in the United States. Personalized behavior change strategies to advance health will be developed. [GE, HE, PPI, SE]

## Environmental Health
- **HLTH 210**
  - 3 Credits/Units
  - 3 hours of lecture
  - Exploration of the complex interactions between race, culture, ethnicity, religion, gender, socioeconomic status, sexual orientation, age, social class, and ability as they relate to health behavior, healthcare, and health outcomes. Development of personalized behavior change strategies to advance health. [GE, HE, PPI, SE]

## Cannabis and Your Health
- **HLTH 212**
  - 2 Credits/Units
  - 2 hours of lecture
  - Explores the connection between cannabis and health with a focus on comparing marijuana and hemp, examining scholarly peer-reviewed research findings for medicinal and recreational use, discussing local legalization issues and developing behavior change strategies to advance health. [GE, HE, SE]

## Selected Topics
- **HLTH 280**
  - 1-3 Credits/Units
  - 3 hours of lecture
  - Selected topics in Health. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE,SE]

## Special Projects
- **HLTH 290**
  - 1-5 Credits/Units
  - 5 hours of lecture
  - Opportunity to plan, organize and complete special projects approved by the department. [GE]
HEALTH INFORMATION MANAGEMENT (HIM)

Legal & Ethical Aspects of Healthcare
HIM 101 3 Credits/Units
3 hours of lecture
Prerequisite: Concurrent enrollment in, or completion of HIM 114 (grade of "C" or higher). Credit cannot be earned for this course and BMED 140. Introduction to legal and ethical concepts with particular focus on health information management. General overview of US legal system as it pertains to healthcare. Highlighted information on HIPAA, ARRA, HITECH, and Federal Trade Commission's Red Flag Rule. Topics include liability of hospital and providers of care as well as current pertinent legislation, legal status of medical staff, access to health information, laws relating to ethical issues, and court orders. [GE]

Introduction to Pathophysiology
HIM 112 3 Credits/Units
3 hours of lecture
Prerequisite: AH 100, AH 104, and AH 110 (grades of "C" or higher)
Introduction to the general mechanisms of systemic disease including etiology, physical signs and symptoms. Etiology focus will include infectious mechanisms, hereditary contributions, external physical agents and autoimmune conditions. Discussions of differences between disease and illness to include basic principles of pharmacology laboratory and diagnostic tests, overview of common therapies, prognosis and public health issues. [GE]

Pharmacology
HIM 113 3 Credits/Units
3 hours of lecture
Prerequisite: AH 110 (grade of "C" or higher).
Introduction to the basics of medication administration including trade and generic names of prescription and over-the-counter medications commonly prescribed, medication classifications, routes of administration, dosages, effects and implications and appropriate methods of documentation. [GE]

Medical Office Administrative Procedures
HIM 114 4 Credits/Units
2 hours of lecture / 4 hours of lab
Prerequisite: AH 100, AH 104, and AH 110 (grades of "C" or higher)
Introduction to medical office administrative positions. Gain introductory administrative competencies compliant with health information management standards. The lab portion includes medical office competencies and relevant electronic medical records software. [GE]

Medical Coding I
HIM 130 4 Credits/Units
4 hours of lecture
Prerequisite: AH 100 and AH 110 (grades of "C" or higher)

Revenue Cycle Management
HIM 131 4 Credits/Units
4 hours of lecture
Prerequisite: AH 100 and AH 110 (grades of "C" or higher)
A comprehensive study of the revenue cycle management, health insurance terminology, insurance plans, health insurance claim forms, and reimbursement methodologies for outpatient and inpatient healthcare services. Topics include, introducing how medical coding is part of the reimbursement cycle, HIPAA compliance issues, fraud and abuse. Step by step guidance for proper completion of billing forms by means of homework exercises and case studies. [GE]

Health Information Governance
HIM 201 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: HIM 114 and HIM 232 (grades of "C" or higher)
Introduction to foundational concepts of health information management and data content structures & standards. Topics include: clinical vocabularies & classification system; health record documentation requirements; data accuracy & integrity; data integration & interoperability; and the needs for data, information standards and data management policies & procedures. [GE]

Health Care Quality
HIM 202 3 Credits/Units
3 hours of lecture
Prerequisite: HIM 201 (grade of "C" or higher).
Introduction to the principles, processes and procedures associated with measuring, managing and improving quality in the delivery of health care, health services and health care management. Presenting various national efforts, systems and tools used in quality assessment, performance, improvement and measurement. [GE]

Medical Office Practicum
HIM 206 3 Credits/Units
1 hours of lecture / 6 hours of clinical
Prerequisite: HIM 101, HIM 130, HIM 131, and HIM 232 (grades of "C" or higher).
Practicum experience in medical office administrative and/or revenue cycle management functions utilizing medical record technologies in a classroom simulation and/or under the direct supervision of facility personnel in local health care facilities. [GE]

Health Informatics, Analytics, and Data Use
HIM 211 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: BUS 169, HIM 201 and MATH& 146 (grades of "C" or higher).
Introduction to health informatics, the application of computers, communication and information technologies combined with systems used in problem solving, decision making to improve health and health care. Topics include a survey of history, basic knowledge of health informatics, data management, standards and tools used in the support of health care delivery. Emphasis on impact of information technology on the health care industry and vice versa. Intended as a survey of the emerging field of health informatics to learn its significance, its breadth, and its opportunities. Group activities around data mining and analyzing. [GE]
Health Organization, Management & Leadership
HIM 215  3 Credits/Units
3 hours of lecture
Prerequisite: HIM 211 (grade of "C" or higher).
Introduction to managerial skills and behaviors applied to components of health care organizations at several levels including: individual, interpersonal, group, intergroup, system, and inter-organization; managerial challenges faced by health care managers and skills essential for successfully planning, organizing, directing, and controlling. Topics include strategic and operational planning, human resource management, motivation, communication, conflict resolution, organizational structures, health care budgeting and finance. [GE]

Professional Practice Experience
HIM 226  3 Credits/Units
1 hour of lecture / 6 hours of clinical
Prerequisite: HIM 201, HIM 202, and HIM 211 (grades of "C" or higher).
Practicum experience in health information management functions utilizing medical record technologies in a classroom simulation and/or under the direct supervision of facility personnel in local health care facilities. [GE]

Medical Coding II
HIM 232  5 Credits/Units
5 hours of lecture
Prerequisite: HIM 112 and HIM 130 (grades of "C" or higher).
Intermediate application of diagnostic and procedural coding systems ICD, CPT, and HCPCS. Continuation of concepts covered in Medical Coding I, HIM 130. Topics include content and structure of diagnostic and procedural coding systems, steps for abstracting information from health records, coding problem solving, and compliance with national coding guidelines. [GE]

Medical Coding III & Coding Exam Prep
HIM 233  5 Credits/Units
5 hours of lecture
Prerequisite: HIM 113 and HIM 232 (grades of "C" or higher).
Advanced application of diagnostic and procedural coding systems. In depth application of ICD, CPT, HCPCS, and PCS. Topics include medical coding problem solving and measures for data quality and compliance, diagnostic related groups (DRGs), and other prospective payment systems. Credentialing exam prep is integrated throughout the course with emphasis on body systems, pathophysiology and pharmacology. [GE]

Selected Topics
HIM 280  1-4 Credits/Units
4 hours of lecture
Selected topics in Health Information Management. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE]
Cooperative Work Experience
HIST 199 1-3 Credits/Units
9 hours of clinical
Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]

East Asian History
HIST 221 5 Credits/Units
5 hours of lecture
Survey of Far Eastern history from 1800 to the present. Primary emphasis will be placed on Far East - United States diplomacy and the emergence of the Far East in the modern world. [GE, SE]

History of Genocide
HIST 231 5 Credits/Units
5 hours of lecture
Examination of several incidences of genocide beginning with the extermination of the Herero of Namibia in the late 19th century. Topics include: the definition of genocide developed by Raphael Lemkin and adopted by the United Nations; when and where genocide has occurred, based on reading and lectures; recognizing a genocide in the making; actions for extending the lessons of the course. Culmination is a research project focusing on a particular incidence of genocide chosen from a list provided. [GE, SE, SS]

Women In World History I
HIST 251 5 Credits/Units
5 hours of lecture
Exploring the role of women in world history from pre-historical times up to the pre-Industrial Age. Included within these parameters is the role of women in the family, economy, culture, religion and political structures of their given societies. Topics include: the development of patriarchy and misogyny; women's contributions to Eastern, Middle Eastern and Judeo/Christian religious experiences; and women's roles in Africa and South America. [GE, SE, SS]

Women In World History II
HIST 252 5 Credits/Units
5 hours of lecture
Exploring the role of women in World History from the pre-Industrial Age to modern times. Included within these parameters is the role of women in the family, economy, culture, religion and political structures of their given societies. Topics include: the role of women in an industrial society and their influence in major movements such as the Scientific Revolution and the Enlightenment; origins of feminism; and the equal rights movement as it applies to voting, property ownership and areas of marriage and divorce. [GE, SE, SS]

American Diplomatic History
HIST 255 5 Credits/Units
5 hours of lecture
The development of America's relationship with other governments and the global community from WWI to the First Gulf War, looking for specific patterns of behavior, such as isolationism, neutral rights, market expansion, brinkmanship and foreign intervention to explain how America's role and image in the world has changed over time. Topics include: World War I, The Good Neighbor Policy, World War II, The Cold War, The Vietnam War, Detente, and The First Gulf War. [GE, SE]

African History
HIST 260 5 Credits/Units
5 hours of lecture
Survey of the period from gathering/hunting societies through African independence, with focus on major events from an African perspective, including Africa's discovery of Europe, and resistance to colonialism. [GE, SE][PNP]

African-American History
HIST 275 5 Credits/Units
5 hours of lecture
Survey of the history of the African-American experience from 1619 to the present. [GE, SE][PNP]

Selected Topics
HIST 280 1-5 Credits/Units
5 hours of lecture
Selected topics in History. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE, SE]

History of Latin America
HIST 285 5 Credits/Units
5 hours of lecture
Survey of Latin American history, examining social, economic, political, cultural and intellectual trends and developments from ancient civilizations to the present Latin America in transition. [GE, SE]

Special Projects
HIST 290 1-5 Credits/Units
5 hours of lecture
Opportunity to plan, organize and complete special projects approved by the department. [GE]

World Civilizations I
HIST & 126 5 Credits/Units
5 hours of lecture
The beginnings of civilization, c. 3500 BCE to the High Middle Ages, c. 950 CE. Areas to be covered include the ancient Near East, Egypt, India, China, Greece, Rome, and early medieval Europe. [GE, SE, SS]

World Civilizations II
HIST & 127 5 Credits/Units
5 hours of lecture
The High Middle Ages through the Late Middle Ages, the Renaissance and Reformation eras, the emergence of early modern society, witchcraft, the Enlightenment, the formation of nation-states and continued historical development in Europe, China, India, Africa, the Near East, plus Central and South America. [GE, SE, SS]

World Civilizations III
HIST & 128 5 Credits/Units
5 hours of lecture
The French Revolution through modern times. Incorporated into this framework are the political, military, economic, social, cultural and religious manifestations throughout the various regions of the world. [GE, SE, SS]

US History I
HIST & 146 5 Credits/Units
5 hours of lecture
Pre-Columbian era, colonial settlements and foundations of American institutions, seeds of revolution, Confederation and Constitution, federalism and states’ rights, Jacksonian era. [GE, SE, SS]
US History II
HIST& 147 5 Credits/Units
5 hours of lecture
Antebellum reform, Manifest Destiny, roots of Southern secession, Civil War and Reconstruction, rise of big business and organized labor, immigration and assimilation, American Imperialism, Progressive reform movement and World War I. [GE, SE, SS]

US History III
HIST& 148 5 Credits/Units
5 hours of lecture
The Twenties, the Great Depression and the New Deal, World War II, the Cold War consensus, Vietnam and the Watergate era, globalization and the 21st century. [GE, SE, SS]

Pacific NW History
HIST& 214 5 Credits/Units
5 hours of lecture
Survey of the political, cultural, economic and social development of the Pacific Northwest with special emphasis on Washington State history. [GE, SE][PNP]

Women in US History
HIST& 215 5 Credits/Units
5 hours of lecture
The role of women in America from the Native American women up to today. Included within these parameters will be women’s contributions and status within the family, the economy, the religious communities, the legal and political systems, and the culture. [GE, SE, SS][PNP]

Native American History
HIST& 219 5 Credits/Units
5 hours of lecture
A survey of Native American history from the pre-Columbian era to the Twentieth century. Topics include Indian cultures, treaty making and breaking, Indian patriots, and law and Indian rights. [GE, SE, SS]
HONORS (HONS)

Selected Topics
HONS 280 1-5 Credits/Units
5 hours of lecture
The study of a single theme from a multi-disciplinary perspective.
Students should come to understand the interdisciplinary nature of education, and the relevance of education to contemporary issues.
The goal of the seminar is to provide students with information, methodologies, and experience beyond their major field of study.
Admission to the Honors Program required. [GE, SE]

Special Projects
HONS 290 1-6 Credits/Units
6 hours of lecture
Opportunity to plan, organize and complete special projects approved by the department. [GE]
**HUMAN SERVICES SUBSTANCE ABUSE (HSSA&)**

<table>
<thead>
<tr>
<th>Introduction to Addictive Drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSSA&amp; 101</td>
</tr>
<tr>
<td>5 Credits/Units</td>
</tr>
</tbody>
</table>

5 hours of lecture

Basic theories course: effects on the body, diagnosis, treatment, and prevention of substance abuse. Emphasis on alcohol abuse and related problems in individuals and society. [GE]
### INTERVENTIONS ENGLISH LANGUAGE PROGRAM (IELP)

<table>
<thead>
<tr>
<th>Essential</th>
<th>Written Communication Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>IELP 11</td>
<td>2 Credits/Units</td>
</tr>
</tbody>
</table>

6 hours of lecture

For learners of English language at the beginning to low-intermediate level of academic English. Designed for students who have had some prior English study, rather than true beginners. Development of the ability to listen actively, speak so others can understand, read with understanding, and convey ideas in writing while developing a career portfolio.

<table>
<thead>
<tr>
<th>Essential</th>
<th>Oral Communication Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>IELP 13</td>
<td>3 Credits/Units</td>
</tr>
</tbody>
</table>

3 hours of lecture

For learners of English language who need to develop oral communication skills at the beginning to low-intermediate level of academic English. Designed for students who have had some prior English study, rather than true beginners. Development of skills and strategies to listen actively and speak so others can understand in the context of college and career. Includes tasks such as one-one conversations, small group/class discussion and a group presentation.

<table>
<thead>
<tr>
<th>Essential</th>
<th>Technology Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>IELP 14</td>
<td>3 Credits/Units</td>
</tr>
</tbody>
</table>

3 hours of lecture

For learners of English language at the beginning to low-intermediate level of academic English. Designed for students who have had some prior English study, rather than true beginners. Development of technology skills in the context of college and career.

<table>
<thead>
<tr>
<th>Essential</th>
<th>Study Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>IELP 15</td>
<td>2 Credits/Units</td>
</tr>
</tbody>
</table>

2 hours of lecture

For learners of English language at the beginning to low-intermediate level of academic English. Designed for students who have had some prior English study, rather than true beginners. Strengthen study skills and reflect on various strategies and characteristics of successful college students.

<table>
<thead>
<tr>
<th>Essential</th>
<th>Pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>IELP 19</td>
<td>2 Credits/Units</td>
</tr>
</tbody>
</table>

2 hours of lecture

For learners of English language who need to develop oral communication skills at the beginning to low-intermediate level of academic English. Designed for students who have had some prior English instruction, rather than true beginners. Introduction and development of key features of English pronunciation, focusing on common problems non-native speakers of English experience in understanding and producing consonant sounds, vowel sounds, stress, intonation, rhythm, and reduced speech in the context of college and career.

<table>
<thead>
<tr>
<th>Intermediate</th>
<th>Written Communication Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>IELP 31</td>
<td>6 Credits/Units</td>
</tr>
</tbody>
</table>

6 hours of lecture

For learners of English language who need to improve writing skills at the intermediate level of academic English. Development of writing skills for academic purposes that focuses on college readiness. Students will improve written fluency as well as accuracy in writing, grammar, and vocabulary use.

<table>
<thead>
<tr>
<th>Intermediate</th>
<th>Oral Communication Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>IELP 32</td>
<td>6 Credits/Units</td>
</tr>
</tbody>
</table>

6 hours of lecture

For learners of English language who need to improve oral communication skills at the intermediate level of academic English. Focus on college readiness. Students will improve listening comprehension as well as fluency and accuracy in speaking.

<table>
<thead>
<tr>
<th>Intermediate</th>
<th>English &amp; Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>IELP 33</td>
<td>6 Credits/Units</td>
</tr>
</tbody>
</table>

6 hours of lecture

For learners of English language who need to improve writing skills at the intermediate level of academic English. Development of writing skills for academic purposes that focuses on college readiness in the context of health (health assessment, improvement plans, body functions, nutrition and healthy life practices).

<table>
<thead>
<tr>
<th>Advanced</th>
<th>English &amp; US History/Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>IELP 51</td>
<td>7 Credits/Units</td>
</tr>
</tbody>
</table>

7 hours of lecture

For learners of English language who need to improve writing skills at the advanced level of academic English. Development of writing skills for academic purposes. Critical reading and writing skills are taught in the context of US history and government.

<table>
<thead>
<tr>
<th>Advanced</th>
<th>English &amp; Science/CWP</th>
</tr>
</thead>
<tbody>
<tr>
<td>IELP 52</td>
<td>7 Credits/Units</td>
</tr>
</tbody>
</table>

7 hours of lecture

For learners of English language who need to improve writing skills at the advanced level of academic English. Development of writing skills for academic purposes. Critical reading and writing skills are taught in the context of Science and Contemporary World Problems.

<table>
<thead>
<tr>
<th>Advanced</th>
<th>Academic Grammar</th>
</tr>
</thead>
<tbody>
<tr>
<td>IELP 53</td>
<td>4 Credits/Units</td>
</tr>
</tbody>
</table>

4 hours of lecture

For learners of English language who need to improve accuracy in their writing at the advanced level of academic English. Development of writing skills for academic purposes that will emphasize concepts such as sentence types, sentence structure, clauses, phrases and verb tenses. Students will apply academic English conventions to their own writing.

<table>
<thead>
<tr>
<th>Upper Advanced</th>
<th>English/Contemporary World Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>IELP 90</td>
<td>7 Credits/Units</td>
</tr>
</tbody>
</table>

7 hours of lecture

For learners of English language who need to improve writing skills at the upper advanced level of academic English. Development of writing skills for academic purposes that will emphasize college-level reading and writing skills for direct transition into college-level English composition. Students will improve written fluency as well as accuracy in writing, grammar and vocabulary as they gain a deeper understanding of the systems of power, privilege, and inequity and how they relate to current world problems.
Selected Topics

IELP 99 1-8 Credits/Units

8 hours of lecture
Various topics, themes, content in intensive English language studies. Because the content varies, this course is repeatable for credit for different topics. [PNP]
Japanese Culture and Society
JAPN 171  5 Credits/Units
5 hours of lecture
Introductory study of Japanese culture and society with various topics, including education, gender roles, and family structure. Emphasis on traditional elements that have shaped Japanese values such as history, religion, and art, as well as social changes and current social issues. Hands-on study is included such as Japanese etiquette, tea ceremony, and calligraphy. [GE, SE]

Cooperative Work Experience
JAPN 199  1-8 Credits/Units
24 hours of clinical
Summer cooperative work experience in Japan. Requires use of Japanese language. Enroll in this course Spring quarter prior to participation abroad. [GE, SE]

Selected Topics
JAPN 280  1-5 Credits/Units
5 hours of lecture
Selected topics in Japanese. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE, SE]

Special Projects
JAPN 290  1-5 Credits/Units
5 hours of lecture
Opportunity to plan, organize and complete special projects approved by the department. [GE]

Japanese I
JAPN& 121  5 Credits/Units
5 hours of lecture
Primary emphasis on oral communication with additional practice in basic reading and writing. Not open to native speakers except with instructor’s permission. [GE, HA, SE]

Japanese II
JAPN& 122  5 Credits/Units
5 hours of lecture
Prerequisite: JAPN& 121 (grade of "C" or higher)
Continuation of JAPN& 121. Not open to native speakers except with instructor’s permission. [GE, HA, SE]

Japanese III
JAPN& 123  5 Credits/Units
5 hours of lecture
Prerequisite: JAPN& 122 (grade of "C" or higher)
Continuation of JAPN& 122. Not open to native speakers except with instructor’s permission. [GE, HA, SE]

Japanese IV
JAPN& 221  5 Credits/Units
5 hours of lecture
Prerequisite: JAPN& 123 (grade of "C" or higher)
Continuation of First-Year Japanese: speaking, reading and writing with primary emphasis on oral communication. [GE, HA, SE]
JOURNALISM (JOUR)

Introduction to Journalism
JOUR 101 5 Credits/Units
5 hours of lecture
Prerequisite: Eligibility for ENGL 101 (CAP 90, ENGL 90, or IELP 90 (grade of "B" or higher) or eligibility through multiple measures placement.)

Introduction to skills fundamental to journalism and newswriting, as well as an understanding of the role and significance of journalists and their work. Topics include the evolution in media and news today, ethical challenges, shifts in audience involvement and technological advances. Writing-intensive activities to master a clear, concise, accurate style. [GE, HA, SE]

College News Production
JOUR 110 1-3 Credits/Units
6 hours of lab
Prerequisite: JOUR 101 (grade of "C" or higher)
Apply and expand upon the skills and lessons acquired in JOUR 101 to produce the Clark College newspaper, 'The Independent.' Develop new expertise and insight in multimedia reporting and editing; photojournalism; digital production and delivery of news; workplace professionalism; ethics; teamwork; advanced reporting, writing and story development; critique; alternative story forms; and project and time management. Besides lectures and lessons, the format includes field work (research) and writing, collaborative problem-solving, exercises, quizzes and production of the final news product. [GE, SE]

Digital News
JOUR 111 5 Credits/Units
5 hours of lecture
Prerequisite: JOUR 101 (grade of "C" or higher)
Writing-intensive instruction and training in digital news, including an introduction to and practice in online news delivery tools, including audio and video reporting and editing, social media, data visualization, blogs and others. Emphasis on ethical issues. Considerable hands-on work requiring high motivation to work independently as well as collaboratively with classmates and instructor. [GE, HA, SE]

College News Production
JOUR 120 1-3 Credits/Units
6 hours of lab
Prerequisite: JOUR 110 (grade of "C" or higher)
Apply and expand upon the skills and lessons acquired in JOUR 101 to produce the Clark College newspaper, 'The Independent.' Develop new expertise and insight in multimedia reporting and editing; photojournalism; digital production and delivery of news; workplace professionalism; ethics; teamwork; advanced reporting, writing and story development; critique; alternative story forms; and project and time management. Besides lectures and lessons, the format includes field work (research) and writing, collaborative problem-solving, exercises, quizzes and production of the final news product. [GE, SE]

Cooperative Work Experience
JOUR 199 1-5 Credits/Units
15 hours of clinical
Supervised work experience in newspaper or other journalism position. Completion of specific learning objectives and employer evaluation. [GE]

Advanced Newswriting
JOUR 201 3 Credits/Units
3 hours of lecture
Prerequisite: JOUR 101 (grade of "C" or higher)
Continuation of JOUR 101. Focus on longer, more complex stories, including features and opinion writing. Students will complete a short research project. [GE]

College News Production
JOUR 210 1-3 Credits/Units
6 hours of lab
Prerequisite: JOUR 130 (grade of "C" or higher)
Apply and expand upon the skills and lessons acquired in JOUR 101 to produce the Clark College newspaper, 'The Independent.' Develop new expertise and insight in multimedia reporting and editing; photojournalism; digital production and delivery of news; workplace professionalism; ethics; teamwork; advanced reporting, writing and story development; critique; alternative story forms; and project and time management. Besides lectures and lessons, the format includes field work (research) and writing, collaborative problem-solving, exercises, quizzes and production of the final news product. [GE, SE]

College News Production
JOUR 220 1-3 Credits/Units
6 hours of lab
Prerequisite: JOUR 210 (grades of "C" or higher)
Apply and expand upon the skills and lessons acquired in JOUR 101 to produce the Clark College newspaper, 'The Independent.' Develop new expertise and insight in multimedia reporting and editing; photojournalism; digital production and delivery of news; workplace professionalism; ethics; teamwork; advanced reporting, writing and story development; critique; alternative story forms; and project and time management. Besides lectures and lessons, the format includes field work (research) and writing, collaborative problem-solving, exercises, quizzes and production of the final news product. [GE, SE]
College News Production

JOUR 230 1-3 Credits/Units

6 hours of lab

Prerequisite: JOUR 220 (grade of "C" or higher)

Apply and expand upon the skills and lessons acquired in JOUR 101 to produce the Clark College newspaper, 'The Independent.' Develop new expertise and insight in multimedia reporting and editing; photojournalism; digital production and delivery of news; workplace professionalism; ethics; teamwork; advanced reporting, writing and story development; critique; alternative story forms; and project and time management. Besides lectures and lessons, the format includes field work (research) and writing, collaborative problem-solving, exercises, quizzes and production of the final news product. [GE, SE]

Selected Topics

JOUR 280 1-3 Credits/Units

3 hours of lecture

Selected topics in Journalism. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE]

Special Projects

JOUR 290 1-5 Credits/Units

5 hours of lecture

Opportunity to plan, organize, and complete special projects approved by the department. [GE]
**MANAGEMENT (MGMT)**

**Principles of Management**
MGMT 101 3 Credits/Units
3 hours of lecture
Introduction to management theory, functions, and topics to include diversity, leading change, decision making, and team work. Focus on practical applications, useful to both new and experienced managers. [GE, HR]

**Applied Management Skills**
MGMT 103 3 Credits/Units
3 hours of lecture
Developing concepts and skills in employee motivation, communication, and supervisory leadership. Promoting effective relations and performance in the work group. Case discussions and role situations develop understanding of individual and group problems encountered by the supervisor. [GE]

**Motivation and Performance**
MGMT 106 3 Credits/Units
3 hours of lecture
Review of motivational factors of human relations used to enhance motivation and interpersonal communications; focus on the ways motivation impacts the success or failure of organizations. [GE, HR]

**Supervisory Communication I, Written**
MGMT 107 3 Credits/Units
3 hours of lecture
Review of writing mechanics covering grammar, punctuation, and sentence and paragraph structure. Students practice writing effective business letters, documentation, supervisory reports, office memoranda, and bulletins. [CA, GE]

**Creative Problem Solving**
MGMT 110 3 Credits/Units
3 hours of lecture
Review of the creative and analytical thinking necessary for effective problem-solving in the workplace. Concepts include left/right brain thinking, stages in the creative process, habits that hinder thinking and producing ideas, the role of criticism, and effective communication of solutions. [GE, HR]

**Conflict Management**
MGMT 112 2 Credits/Units
2 hours of lecture
Study of the factors causing conflicts and ways to resolve them. Conflict with individuals and groups, conflict management styles, and win-win situations. [GE, HR][PNP]

**Supervisor As A Trainer Coach**
MGMT 120 3 Credits/Units
3 hours of lecture
Study of the supervisor's role in the training and professional development of employees. Topics include identifying training needs, selecting the appropriate type of training, distinguishing between training and coaching situations, and supporting employees to improve performance. Activities include practical training and coaching techniques. [GE, HR]

**Introduction to Project Management**
MGMT 126 4 Credits/Units
4 hours of lecture
Introduction to current practices in successful project management and in creating a quality project plan. Case examples provide the opportunity for first-hand practice in developing the individual steps of a project cycle, using current software in project management. [GE]

**Human Resources Management**
MGMT 128 3 Credits/Units
3 hours of lecture
Developing an understanding of the functions and skills needed by supervisors concerning employment recruitment, selection and placement, staff planning and development, job descriptions and analysis, promotions, transfers, separations, wage and salary administration, and EEO requirements. [GE, HR]

**Legal Issues In Employee Relations**
MGMT 132 3 Credits/Units
3 hours of lecture
Study of human resource topics such as employment law, hiring, discrimination, employment-at-will, drug testing, health insurance, unemployment, worker's compensation, wages and hours; and civil rights. Focus on due process for both public and private employees, including labor relations and collective bargaining. [GE, HR]

**Production and Operations Management**
MGMT 133 3 Credits/Units
3 hours of lecture
Techniques for improving productivity and quality and reducing waste. Topics include measuring quality and productivity, process definition and control, problem-solving, continuous improvement, and personal productivity for the production and service environment. [GE]

**Introduction to Hospitality Systems**
MGMT 240 5 Credits/Units
5 hours of lecture
Management functions relating to the planning and operational policies of various hotel and restaurant departments. [SE]

**Selected Topics**
MGMT 280 1-5 Credits/Units
5 hours of lecture
Selected topics in supervisory management. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE]

**Special Projects**
MGMT 290 1-5 Credits/Units
5 hours of lecture
Opportunity to plan, organize and complete special projects approved by the department. [GE]
## MATHEMATICS (MATH/MATH&)

### Support for Finite Math

<table>
<thead>
<tr>
<th>Course</th>
<th>Type</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 4</td>
<td>3 Credits/Units</td>
<td></td>
</tr>
</tbody>
</table>

3 hours of lecture

Designed to help successfully learn the course material in Finite Math with Support (MATH 104). Includes prerequisite topics, success skills, and course content support. Meets for three hours a week. Must be enrolled with the linked section of Finite Math with Support (MATH 104) to take this course.

### Support for Introduction to Statistics

<table>
<thead>
<tr>
<th>Course</th>
<th>Type</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 6</td>
<td>2 Credits/Units</td>
<td></td>
</tr>
</tbody>
</table>

2 hours of lecture

Prerequisite: MATH 92 or PTCS 110 (grade of "C" or higher) or placement into Math level 30

Develops vocabulary and numeration skills to support student success in MATH 146. College success strategies are integrated throughout the course. Students must be enrolled with the linked section of Introduction to Statistics (MATH 146) in order to take this course.

### Support for Math in Society

<table>
<thead>
<tr>
<th>Course</th>
<th>Type</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 7</td>
<td>2 Credits/Units</td>
<td></td>
</tr>
</tbody>
</table>

2 hours of lecture

Prerequisite: MATH 92 or PTCS 110 (grade of "C" or higher) or placement into Math level 30

Develops numeration and algebra skills to support student success in MATH 107. College success strategies are integrated throughout the course. Students must be enrolled with the linked section of Math in Society (MATH 107) in order to take this course.

### Support for College Algebra

<table>
<thead>
<tr>
<th>Course</th>
<th>Type</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 10</td>
<td>3 Credits/Units</td>
<td></td>
</tr>
</tbody>
</table>

3 hours of lecture

Prerequisite: MATH 92 or PTCS 110 (grade of "C" or higher) or placement into Math level 30

Designed to help successfully learn the course material in College Algebra with Support (MATH 110). Includes prerequisite topics, success skills, and course content support. Meets for three hours a week. Must be enrolled with the linked section of College Algebra with Support (MATH 110) to take this course.

### Elementary Algebra

<table>
<thead>
<tr>
<th>Course</th>
<th>Type</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 90</td>
<td>5 Credits/Units</td>
<td></td>
</tr>
</tbody>
</table>

5 hours of lecture

Prerequisite: CAP 42 (grade of "C" or higher), or placement into Math level 20.

Primarily intended for STEM and Business programs requiring college-level coursework such as College Algebra, College Trigonometry, or Finite Mathematics. Also suitable as a program prerequisite. Provides a foundation in elementary algebra skills and preparation for Intermediate Algebra (MATH 95). Topics include: numeric and algebraic expressions, linear equations and inequalities in one variable, the coordinate plane, lines, systems of linear equations in two variables, functions, integer exponents, polynomials.

### Intermediate Algebra

<table>
<thead>
<tr>
<th>Course</th>
<th>Type</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 95</td>
<td>5 Credits/Units</td>
<td></td>
</tr>
</tbody>
</table>

5 hours of lecture

Prerequisite: MATH 92 or PTCS 110 (grade of "C" or higher) or placement into Math level 40.

A continuation of Math 090. Primarily intended for STEM and Business programs that require college-level coursework such as College Algebra, College Trigonometry, or Finite Mathematics. Also suitable as a program prerequisite. Provides a foundation in intermediate algebra skills and preparation for college-level coursework. Topics include: Factoring, rational expressions, radical expressions, rational exponents, quadratic equations, exponential and logarithmic functions.

### Applied Elementary Algebra

<table>
<thead>
<tr>
<th>Course</th>
<th>Type</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 92</td>
<td>5 Credits/Units</td>
<td></td>
</tr>
</tbody>
</table>

5 hours of lecture

Prerequisite: MATH 096 or placement into Math level 20.

Primarily intended for programs that require college-level coursework such as Math in Society, Statistics, or Mathematics for Elementary Teachers. Also suitable as a program prerequisite. Provides a foundation in elementary algebra skills & applications and preparation for Applied Intermediate Algebra (MATH 096). Topics include: numericacy; mathematical thinking; proportional reasoning; algebraic expressions; linear equations and inequalities in one variable; the coordinate plane; linear equations in two variables and graphing; systems of linear equations; and dimensional analysis. College success strategies are integrated throughout the course. [CP]

### Applied Intermediate Algebra

<table>
<thead>
<tr>
<th>Course</th>
<th>Type</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 95</td>
<td>5 Credits/Units</td>
<td></td>
</tr>
</tbody>
</table>

5 hours of lecture

Prerequisite: MATH 92 or PTCS 110 (grade of "C" or higher) or placement into Math level 30

A continuation of Math 092. Primarily intended for STEM and Business programs that require college-level coursework such as College Algebra, College Trigonometry, or Finite Mathematics. Also suitable as a program prerequisite. Covers intermediate algebra skills & applications and prepares students for college-level mathematics. Topics include: functions; exponent rules; polynomial operations and basic factoring; defining and solving quadratic; rational and radical equations; and basic exponential and logarithmic equations and functions. Applications of these techniques to modeling and solving real-world problems are emphasized. College success strategies are integrated throughout the course. [CP]

### College Trigonometry

<table>
<thead>
<tr>
<th>Course</th>
<th>Type</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 103</td>
<td>5 Credits/Units</td>
<td></td>
</tr>
</tbody>
</table>

5 hours of lecture

Prerequisite: MATH 95 or placement into Math level 60.

Trigonometric ratios, right angle trigonometry, law of sines, law of cosines, radian measure, trigonometric identities, inverse trigonometric functions, trigonometric equations, graphs of trigonometric functions, polar coordinates, and two-dimensional vectors. This is a challenging and technical course primarily intended for those majoring in Mathematics, Physical Science or Engineering. It is a preparatory class for the four-term Calculus series. The Mathematics Division highly recommends that students who need BOTH College Algebra (MATH 111 or MATH 110) AND College Trigonometry (MATH 103) complete College Algebra first. [CP, GE, Q, SE]
Finite Math with Support
MATH 104 5 Credits/Units
5 hours of lecture
Prerequisite: MATH 96 (grade of "C" or higher) or placement into Math level 50 and concurrent enrollment in MATH 4.
Covers the same topics as Finite Mathematics (MATH 105), paired with a linked support course (MATH 4). This course allows students who are placed near but not at college readiness to take Finite Math, and provides support for students who complete MATH 96 and choose to change majors. Topics include: lines; linear systems; matrices; linear programming using geometric and simplex methods; mathematics of finance; polynomial, rational, exponential and logarithmic functions and models. [CP, GE, Q, SE]

Finite Mathematics
MATH 105 5 Credits/Units
5 hours of lecture
Prerequisite: MATH 95 (grade of "C" or higher) or placement into Math level 60.
Lines; linear systems; matrices; linear programming using geometric and simplex methods; mathematics of finance; polynomial, rational, exponential and logarithmic functions and models. [CP, GE, Q, SE]

College Algebra With Support
MATH 110 5 Credits/Units
5 hours of lecture
Prerequisite: MATH 96 (grade of "C" or higher) or placement into Math level 50.
Covers the same topics as college algebra (MATH 111), paired with a linked course (MATH 10). This allows students who are placed near but not at college readiness to take College Algebra, and provides support for students who complete MATH 96 and choose to change majors. An introduction to functions from symbolic, numerical, and graphical points of view. Topics include linear, polynomial, rational, radical, logarithmic, and exponential functions, systems of equations, conic sections, and mathematical modeling. This is a challenging and technical course primarily intended for those majoring in Mathematics, Physical Science or Engineering. It is a preparatory class for the four-term Calculus series. [CP, GE, Q, SE]

College Algebra
MATH 111 5 Credits/Units
5 hours of lecture
Prerequisite: MATH 95 (grade of "C" or higher) or placement into Math level 60.
An introduction to functions from symbolic, numerical, and graphical points of view. Topics include polynomial; logarithmic, and exponential functions; inequalities, absolute value equations and inequalities, systems of equations, conic sections, and mathematical modeling. This is a challenging and technical course primarily intended for those majoring in Mathematics, Physical Science or Engineering. It is a preparatory class for the four-term Calculus series. The Mathematics Division highly recommends that students who need BOTH College Algebra (MATH 111 or MATH 110) AND College Trigonometry (MATH 103) complete College Algebra first. [CP, GE, Q, SE]

Math for Elementary Teachers
MATH 122 5 Credits/Units
5 hours of lecture
Prerequisite: MATH 96 (grade of "C" or higher) or placement into Math level 50.
The first of a three-term sequence of courses designed for prospective elementary school teachers. Focus on problem solving, set theory, numeration systems, whole number arithmetic, and fractions. [CP, GE, Q, SE]

Math for Elementary Teachers
MATH 123 5 Credits/Units
5 hours of lecture
Prerequisite: MATH 122 (grade of "C" or higher)
The second of a three-term sequence of courses designed for prospective elementary school teachers. Focus on geometric shapes, measurement, triangle congruence and similarity, coordinate geometry, transformations, trigonometry and geometric problem solving. May be taken concurrently with MATH 124, the third course in the sequence. [CP, GE, Q, SE]

Calculus for Life Sciences
MATH 140 6 Credits/Units
6 hours of lecture
Prerequisite: MATH 110 or MATH 111 and MATH 103 (grades of "C" or higher) or placement into Math level 80.
Survey of differentiation and integration with applications to problems in Biology and Environmental Science. [CP, GE, Q, SE]

Statistics II
MATH 147 3 Credits/Units
3 hours of lecture
Prerequisite: MATH& 146 (grade of "C" or higher)
Inference techniques involving two or more populations; regression inference, analysis of variance (ANOVA), and Chi-square tests are included among other statistical topics with applications to fields of nursing, science, engineering, and social science. [CP, GE, Q, SE]

Cooperative Work Experience
MATH 199 1.5 Credits/Units
15 hours of clinical Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]

Linear Algebra
MATH 215 5 Credits/Units
5 hours of lecture
Prerequisite: MATH& 152 (grade of "C" or higher) or placement into Math Level 100
An introduction to Linear Algebra. This course is intended primarily for students of Mathematics, the Physical Sciences, or Engineering. Topics include systems of linear equations, matrices, linear transformations, vectors, vector spaces, eigenvalues, and orthogonality. Applications will also be explored. [CP, GE, Q, SE]
Differential Equations
MATH 221 5 Credits/Units
5 hours of lecture
Prerequisite: Concurrent enrollment in, or completion of MATH& 254 (grade of "C" or higher)
Elementary theory and applications of ordinary differential equations. Linear equations, linear systems, Laplace transforms, boundary value problems, series and iterative methods. [CP, GE, Q, SE]

Selected Topics
MATH 280 1-5 Credits/Units
5 hours of lecture
Selected topics in mathematics. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE, SE]

Special Projects
MATH 290 1-5 Credits/Units
5 hours of lecture
Opportunity to plan, organize and complete special projects approved by the department. [GE]

Math in Society
MATH& 107 5 Credits/Units
5 hours of lecture
Prerequisite: CAP 46 or MATH 96 (grade of "C" or higher), placement into Math level 45, or concurrent enrollment in MATH 7
A study of a variety of mathematical topics including mathematical models, finance, statistics, and probability. Additional topics may include number theory, geometry, voting theory, networks, apportionment and other topics. For students who do not plan to take additional mathematics. [CP, GE, Q, SE]

Introduction to Statistics
MATH& 146 5 Credits/Units
5 hours of lecture
Prerequisite: MATH 96 (grade of "C" or higher), placement into Math level 45, or concurrent enrollment in MATH 6.
Descriptive statistical methods, probability, binomial and normal probability distributions, estimation of parameters, tests of hypotheses, and regression analysis are included among other statistical topics with applications to fields of nursing, science, engineering, and social science. [CP, GE, Q, SE]

Business Calculus
MATH& 148 5 Credits/Units
5 hours of lecture
Prerequisite: MATH 104, MATH 105, MATH 110, or MATH 111 (grade of "C" or higher) or placement into Math level 70.
Introductory calculus with applications for business, life sciences, and social sciences. Differential, integral, and elementary multivariate calculus. [CP, GE, Q, SE]

Calculus I
MATH& 151 5 Credits/Units
5 hours of lecture
Prerequisite: MATH 110 or MATH 111 and MATH 103 (grades of "C" or higher) or placement into Math level 80.
First course in the four term calculus sequence intended primarily for students of mathematics, the physical sciences, or engineering. Covers the foundations of calculus of a single variable. Topics include limits, differentiation, applications of differentiation to properties of functions and their graphs, solving real-world problems, and the basics of integration. [CP, GE, Q, SE]

Calculus II
MATH& 152 5 Credits/Units
5 hours of lecture
Prerequisite: MATH& 151 (grade of "C" or higher) or placement into Math Level 90
Second course in the four term calculus sequence intended primarily for students of mathematics, the physical sciences, or engineering. Topics include techniques of integration, applications of integration, conics, parametric equations, polar coordinates, and polar equations. [CP, GE, Q, SE]

Calculus III
MATH& 153 5 Credits/Units
5 hours of lecture
Prerequisite: MATH& 152 (grade of "C" or higher) or placement into Math Level 100
Third course in the four term calculus sequence intended for students of mathematics, the physical sciences, or engineering. Topics include sequences and series, three-dimensional vectors and lines, planes, cylindrical and spherical coordinates; and vector valued functions and their derivatives, integrals, and applications. [CP, GE, Q, SE]

Calculus IV
MATH& 254 5 Credits/Units
5 hours of lecture
Prerequisite: MATH& 153 (grade of "C" or higher) or placement into Math Level 110
Fourth course in the four term calculus sequence intended primarily for students of mathematics, the physical sciences, or engineering. Covers the calculus of functions of several variables. Topics include limits; partial derivatives, iterated integrals, and their applications, vector fields; gradient; divergence and curl; line and surface integrals; and classic vector calculus theorems. [CP, GE, Q, SE]
MECHATRONICS (MTX)

Industrial Safety
MTX 100 1 Credit/Unit
1 hours of lecture
Introduction to the general safety practices and information needed while working in a manufacturing setting. Material will include federal safety regulations, safe operations and practices in the technical crafts of the industry. [GE]

DC Fundamentals
MTX 101 3 Credits/Units
1 hours of lecture / 4 hours of lab
Prerequisite: MTX 100 and MTX 103 (grades of "C" or higher) and (PTCS 110 (grade of "C" or higher) or Placement into Math Level 30). Fundamentals of DC circuits with emphasis on algebraic analysis of resistive networks. Includes hands-on experience in DC circuit construction, measurement, and troubleshooting. [GE]

AC Fundamentals
MTX 102 4 Credits/Units
2 hours of lecture / 4 hours of lab
Prerequisite: MTX 101, MTX 106, and MTX 180 (grades of "C" or higher) and (PTCS 110 (grade of "C" or higher) or Placement into Math Level 30). Fundamentals of AC resistive, capacitive and inductive networks with emphasis placed on methods of analysis and circuit characteristics. Includes hands-on experience in AC circuit construction, measurement, and troubleshooting. [GE]

Basic Measurement Tools
MTX 103 2 Credits/Units
1 hours of lecture / 2 hours of lab
Fundamentals of measurement tools. Topics include basic measurement, S.I. and U.S. customary measurement, precision measurement tools and dimensional gauging. [GE]

Fluid Power Systems
MTX 106 4 Credits/Units
2 hours of lecture / 4 hours of lab
Prerequisite: MTX 100 and MTX 103 (grades of "C" or higher) and (PTCS 110 (grade of "C" or higher) or Placement into Math Level 30). Explore the fundamentals of fluid power systems, both compressible and non-compressible fluid types. Engage in various hands-on activities to solidify their understanding of fluid power concepts, components and circuit configuration and design. [GE]

Electric Motor Control
MTX 110 4 Credits/Units
2 hours of lecture / 4 hours of lab
Prerequisite: MTX 102, MTX 130, and MTX 132 (grades of "C" or higher). Fundamentals of electric motor control. Topics include electrical safety, control transformers, overload protection, ladder logic, control relays, electronic sensors, and other topics related to the fundamental operation of electronic motor control. [GE]

Semiconductors
MTX 121 3 Credits/Units
1 hours of lecture / 4 hours of lab
Prerequisite: MTX 110 and MTX 140 (grades of "C" or higher). Fundamentals and applications of diodes, transistors and special-purpose semiconductor devices. Includes hands-on experience in semiconductor circuit construction, measurement and troubleshooting. [GE]

Programmable Logic Controllers
MTX 130 4 Credits/Units
2 hours of lecture / 4 hours of lab
Prerequisite: MTX 101, MTX 106, and MTX 180 (grades of "C" or higher) and (PTCS 110 (grade of "C" or higher) or Placement into Math Level 30). Introduction to programmable logic controllers. Topics include basic programming of PLCs, PLC motor control methods, discrete I/O interfacing, event sequencing, timers, counters and program control instructions. [GE]

Siemens PLC Lvl I
MTX 132 4 Credits/Units
2 hours of lecture / 4 hours of lab
Prerequisite: MTX 101, MTX 106, and MTX 180 (grades of "C" or higher) and (PTCS 110 (grade of "C" or higher) or Placement into Math Level 30). Introduction to Siemens programmable logic controllers. Topics include basic programming of PLCs, PLC motor control methods, discrete I/O interfacing, event sequencing, timers, counters and program control instructions. Exposure to the Sieman STEP 7 programming. May prepare them for Siemens PLC Level 1 certification. [GE]

Robotic Systems
MTX 140 4 Credits/Units
2 hours of lecture / 4 hours of lab
Prerequisite: MTX 102, MTX 130, and MTX 132 (grades of "C" or higher). Fundamentals of the pick and place robots using the SMC system. Topics include pneumatic robotic systems, preventive maintenance and troubleshooting as well as pneumatic robot control. Introduction to the articulated arm servo robot using the SMC system including basic robot operation, teach point programming, PC software programming, application development, flexible manufacturing cells, quality control and production control. [GE]

Electrical Power & Distribution Systems
MTX 145 4 Credits/Units
2 hours of lecture / 4 hours of lab
Prerequisite: MTX 110 and MTX 140 (grades of "C" or higher). Fundamentals of residential, commercial, and industrial electrical wiring as it relates to mechatronics. Topics include an introduction to raceways, conduit bending, rigid conduit, flexible conduit, conductors, disconnects, overcurrent protection, conduit sizing, wire pulling techniques, electrical prints, electrical panels, wiring between panels, wire color coding, control system wiring, and wire bundling. [GE]

Mechatronics Systems Fundamentals
MTX 175 3 Credits/Units
2 hours of lecture / 2 hours of lab
Prerequisite: MTX 110 and MTX 140 (grades of "C" or higher). Fundamentals of mechatronic systems troubleshooting. Topics include mechatronics safety, automation operations, open and closed-loop control systems, system block diagrams, block diagram transfer functions, system troubleshooting using block diagrams down to component level, manual operation methods used to troubleshoot automated systems, component adjustments, applications with pneumatic and electric integrated pick and place robot systems. [GE]
Mechanical Systems
MTX 180 5 Credits/Units
2 hours of lecture / 6 hours of lab
Prerequisite: MTX 100 and MTX 103 (grades of "C" or higher) and (PTCS 110 (grade of "C" or higher) or Placement into Math Level 30). Topics include mechanical power transmission safety, machine installation, motor mounting, shaft speed measurement, torque and power measurement, v-belt, chain and spur gear drives, heavy-duty v-belts, v-belt selection and maintenance, synchronous belt drives, lubrication concepts, precision shaft alignment techniques and heavy duty chain drives, various bearing types as used in mechanical drive systems as well as advanced gear drives, plain bearings, ball bearings, roller bearings and anti-friction bearings, as well as gaskets and seals. Advantages and disadvantages of each system type will be discussed and compared. [GE]

Cooperative Work Experience
MTX 199 1-5 Credits/Units
15 hours of clinical Work-based learning experience that enables students to apply specialized occupational theory, skills and concepts. Specific objectives are developed by the College and the employer. [GE]

Mechtronics
MTX 216 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: MTX 221, MTX 224, and MTX 250 (grades of "C" or higher) Advanced concepts of manufacturing stations of the SMC system as it applies to mechatronics. Topics include flexible materials handling, robot workstations, inventory control, serial robot communications, PLC communications, barcode pallet tracking, manufacturing execution systems, manufacturing management and simulation, ethernet operation and applications. [GE]

Semiconductors
MTX 221 3 Credits/Units
1 hours of lecture / 4 hours of lab
Prerequisite: MTX 121, MTX 145, MTX 175, and MTX 230 (grades of "C" or higher). Fundamentals and system applications of integrated circuit operational amplifiers (op-amp). Op-amp fundamentals consisting of: the input differential amplifier, data sheet parameters, circuit configuration with negative feedback, impedances, troubleshooting, closed and open loop response, positive feedback and stability, op-amp compensation, with circuit applications. Op-amp inverting, non-inverting, comparator, summing amplifier, integrator, differentiator, instrumentation, trans-conductance current-to-voltage converter, trans-impedance voltage-to-current converter, peak detector, timer, voltage regulator, and active filter circuit operation and troubleshooting. [GE]

Motor Drive Systems
MTX 224 5 Credits/Units
2 hours of lecture / 6 hours of lab
Prerequisite: MTX 121, MTX 145, MTX 175, and MTX 230 (grades of "C" or higher). Introduction to DC drives and Variable Frequency AC speed control systems. Topics include DC motion control, SCR control, DC spindle drives, DC axis drives, DC pulse width modulations drives, variable frequency AC drives, VFD speed and torque, VFD acceleration, deceleration, braking, VFD fault diagnostics and troubleshooting SCR motor control systems. [GE]

Laser Alignment
MTX 230 2 Credits/Units
1 hours of lecture / 2 hours of lab
Prerequisite: MTX 110 and MTX 140 (grades of "C" or higher). Introduction to the concept and proper practices of laser alignment. Topics include laser shaft alignment, including rough and precision alignment, soft foot correction and analysis. [GE]

Digital Electronics Fundamentals
MTX 232 3 Credits/Units
1 hours of lecture / 4 hours of lab
Prerequisite: MTX 221, MTX 224, and MTX 250 (grades of "C" or higher) Fundamentals and system applications of digital integrated circuits. Digital integrated circuit fundamentals consisting of: numbering systems, number conversion and coding, digital logic gates, combinational logic, flip-flops, counters, shift registers, and memory devices, with circuit applications. Digital circuit building, operation, and troubleshooting, ending with an introduction to microprocessor architecture, instructions, and operation. [GE]

Process Control Systems
MTX 240 6 Credits/Units
3 hours of lecture / 6 hours of lab
Prerequisite: MTX 216, MTX 232, and MTX 275 (grades of "C" or higher). Process control system measurement, control and adjustment. Topics include process control concepts, safety, sight gauges, instrument tags, piping and instrumentation diagrams, loop controllers, final control elements, level management, liquid level control, methods of automatic control thermal energy, temperature control elements, and various sensors, and transmitters and their calibration including inside environment control techniques, concepts and controls. [GE]

Advanced Programmable Logic Controllers
MTX 250 4 Credits/Units
2 hours of lecture / 4 hours of lab
Prerequisite: MTX 121, MTX 145, MTX 175, and MTX 230 (grades of "C" or higher). Intermediate concepts of Programmable Logic Controls. Topics include analog input and output modules, analog scaling, network concepts, an introduction to Panelview and remote I/O concepts. [GE]

Advanced Fluid Power Systems
MTX 275 5 Credits/Units
2 hours of lecture / 6 hours of lab
Prerequisite: MTX 221, MTX 224, and MTX 250 (grades of "C" or higher) Advanced concepts of electronically controlled fluid power and vacuum systems. Topics include electrical control systems, basic control devices, power devices, control relays, sequencing, timer and pressure control and circuit applications. Advanced concepts of pneumatics and vacuum troubleshooting as they apply to industry including moving loads pneumatically, vacuum systems, air compressors, air preparation troubleshooting, troubleshooting pneumatic cylinders, motor and rotary actuator troubleshooting, vacuum system troubleshooting and other topics. [GE]

Selected Topics
MTX 280 1-5 Credits/Units
5 hours of lecture
Selected topics in mechatronics. Topics vary and course theme and content change to reflect new topics. Because the course varies in contents it is repeatable for credit. Individual topics are listed in the class schedules. [GE]
Special Projects
MTX 290 1-5 Credits/Units
5 hours of lecture
Opportunity to plan, organize, and complete special projects approved by the department. [GE]

Special Projects - Lab
MTX 291 1-5 Credits/Units
10 hours of lab
Opportunity to plan, organize, and complete special projects approved by the department. [GE]

Manufacturing System Principles
MTX 292 4 Credits/Units
3 hours of lecture / 2 hours of lab
Prerequisite: MTX 216, MTX 232, and MTX 275 (grades of "C" or higher).
Introduction to the enterprise system: topics include technology sectors, team concepts, product design and engineering impacts, business presentation and business presentation software, enterprise economics, and marketing basics. [GE]

Capstone/Final Project
MTX 296 4 Credits/Units
1 hour of lecture / 6 hours of lab
Prerequisite: MTX 216, MTX 232, and MTX 275 (grades of "C" or higher).
Department consent required for enrollment. Work as a team and create a manufacturing scenario using the SMC FMS-200 flexible manufacturing system equipment OR work independently on a final project that incorporates the prior coursework in Mechatronics Technology. [GE]
**MEDICAL ASSISTING (MA)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA 103</td>
<td>Math for Medical Assistants</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3 hours of lecture</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Prerequisite:</strong> CAP 42 (grade of &quot;C&quot; or higher) or placement into Math level 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Prepares medical assistants to understand and master the mathematics encountered in the medical assistant profession. Mathematical concepts will relate to both administrative procedures and dosage calculations for the physician's office and/or medical care facility. Cannot receive credit for both BMED 103 and MA 103. [CP, GE]</td>
<td></td>
</tr>
<tr>
<td>MA 104</td>
<td>Medical Office Administrative Procedures</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>3 hours of lecture / 6 hours of lab</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Introduction to administrative positions in the medical field. Students gain introductory administrative competencies. The lab portion of the class prepares the student in medical office competencies and relevant software. Encompasses coding, financial tasks, accounting practices, office management, and human resource duties. Strong teamwork and time management skills are necessary to be successful in this rigorous course. [GE, HR, SE]</td>
<td></td>
</tr>
<tr>
<td>MA 114</td>
<td>Medical Reimbursement</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>4 hours of lecture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Comprehensive study of the revenue cycle, health insurance terminology, insurance plans, claim forms, and reimbursement methodologies for outpatient and inpatient health care services. Topics include, study of standard industry claim forms, introduction to medical coding, HIPAA compliance, fraud and abuse issues. Step by step guidance for proper completion and processing of billing forms by means of homework exercises and case studies. [GE, HR]</td>
<td></td>
</tr>
<tr>
<td>MA 123</td>
<td>Legal Aspects of The Medical Office</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3 hours of lecture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Introduction to medical law, ethics and bioethics. Topics will include: ethics and bioethics in the practice of medicine, professional codes of ethics, an introduction to law, legal guidelines and the practice of medicine including professional liability, public duties, consents, advance directives, anatomy of a malpractice case, legal aspects of medical records, confidentiality, security of patient information and the release of patient information, patient access to their own medical records, and responding to subpoena duces tecum of medical records. [GE]</td>
<td></td>
</tr>
<tr>
<td>MA 124</td>
<td>Therapeutic Comm Skills for Health Prof</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2 hours of lecture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Identify and describe the basic components of the communication model, the various types of communication, and the role communication plays to satisfy needs. Techniques for encouraging a therapeutic and helping relationship with the patient, providers, and families. Includes an overview of the psychosocial development of a person, from birth to death. [GE]</td>
<td></td>
</tr>
<tr>
<td>MA 201</td>
<td>Introduction to Pathophysiology</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>5 hours of lecture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Introduction to the general mechanisms of systemic disease including etiology, physical signs, and symptoms. Etiology focus will include infectious mechanisms, hereditary contributions, external physical agents and autoimmune conditions. Discussions of differences between disease and illness to include basic principles of pharmacology laboratory and diagnostic tests, overview of common therapies, prognosis and public health issues. [GE]</td>
<td></td>
</tr>
<tr>
<td>MA 202</td>
<td>Medical Assistant Examination Review</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2 hours of lecture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Review of Medical Assistant administrative and clinical competencies. Cognitive knowledge review of all major concepts necessary for students in preparation to take the CMA (AAMA) examination. Discussion of studying and test taking techniques to prepare for the CMA certification. [GE]</td>
<td></td>
</tr>
<tr>
<td>MA 211</td>
<td>Medical Office Clinical Procedures</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>3 hours of lecture / 6 hours of lab</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Principles of medical office clinical procedures including preparing a patient for assisting a physician with examinations, procedures, and components of patient history. It includes patient charting, vital signs, sterile setups, universal blood precautions, methods of asepsis and sterilization, collecting blood, processing specimens, equipment preparation and operation, electrocardiography (EKG), and medication administration. Topics also include techniques in patient interviewing and education. Lab provides the opportunity for practice and to demonstrate proficiency in procedures. [GE]</td>
<td></td>
</tr>
<tr>
<td>MA 212</td>
<td>Pharmacology for Medical Assistants</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>2 hours of lecture / 2 hours of lab</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Introduction to the basics of medication administration including trade and generic names of prescription and over-the-counter medications commonly prescribed, medication classifications, routes of administration, dosages, effects and implications and appropriate methods of documentation. Cannot receive credit for both HEOC 130 and MA 212. [GE]</td>
<td></td>
</tr>
<tr>
<td>MA 221</td>
<td>Medical Office Laboratory Procedures</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>6 Credits/Units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 hours of lecture / 8 hours of lab</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Introduction to specimen collection and processing. Performing basic CLIA waived hematology, chemistry and immunology testing; microscopic urine tests including gram smears; basic culture techniques and blood typing. Equipment use and maintenance, re-agent storage and handling. Continued practice in blood specimen collection and injections. Quality control measures are taught and implemented. Lab safety emphasized. [GE]</td>
<td></td>
</tr>
<tr>
<td>MA 222</td>
<td>Medical Assistant Practicum</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>17 hours of clinical</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Supervised medical assistant experience in a health care facility. Provides students with the opportunity to apply knowledge and skill in performing administrative and clinical procedures and in developing professional attitudes for interacting with other professionals and consumers. [GE, HR]</td>
<td></td>
</tr>
</tbody>
</table>
Medical Assistant Seminar
MA 232 1 Credit/Unit
1 hours of lecture
Admission into the program required for enrollment. Develop skills that provide an edge in the health care job market and develop the soft skills - the personal qualities, habits, attitudes, and social graces necessary to be high functioning employees in various health care environments. [GE]

Medical Coding for Medical Assistants
MA 241 4 Credits/Units
4 hours of lecture
Admission into the program required for enrollment. Introduction to procedural and diagnostic coding in ambulatory settings using current diagnostic and procedural coding systems. Introduction to the symbols, terminology and methods of both diagnostic and procedural coding used by physicians and third parties and is guided step-by-step through various coding scenarios by means of workbook exercises and actual case studies. The format and guidelines of the ICD, CPT, and HCPCS code sets are reviewed to include E/M codes and modifiers. [GE]

Patient Advocacy and Care Navigation
MA 251 3 Credits/Units
3 hours of lecture
Admission into the program required for enrollment. Introduction to the knowledge, skills, and attitudes necessary to apply care navigation for the benefit of the patient. The content focuses on the healthcare systems, patient profiles and needs, communication basics, an introduction to chronic illness, and health coaching. [GE]

Statistics for Health Care Professionals
MA 261 2 Credits/Units
2 hours of lecture
Admission into the program required for enrollment. Introduction to statistical computations and analysis used in healthcare. Topics include patient census, occupancy, length of stay, mortality and morbidity statistics. Cannot receive credit for both BMED 105 and MA 261. [GE]

Selected Topics
MA 280 1-4 Credits/Units
4 hours of lecture
Admission into the program required for enrollment. Selected topics in Medical Assisting. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE]

Special Projects
MA 290 1-5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. Opportunity to plan, organize and complete special projects approved by the department. [GE]
METEOROLOGY (METR)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>METR 101</td>
<td>Atmosphere and The Environment</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>4 hours of lecture / 2 hours of lab</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fundamental theories in meteorology and current topics in the atmospheric sciences are developed conceptually for non-science students interested in the changing environment. Topics include atmospheric structure and composition, global circulation and atmospheric motions, clouds and precipitation, weather patterns and weather prediction, tornadoes, hurricanes, the greenhouse effect, atmospheric ozone, air pollution, and El Nino. [GE, NS, NS-LAB, SE]</td>
<td></td>
</tr>
</tbody>
</table>

Special Projects

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>METR 290</td>
<td>Opportunity to plan, organize and complete special projects approved by the department. [GE]</td>
<td>1-5</td>
</tr>
<tr>
<td></td>
<td>5 hours of lecture</td>
<td></td>
</tr>
</tbody>
</table>
## MUSIC (MUSC/MUSC&/MUSCA)

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course Code</th>
<th>Credits/Units</th>
<th>Hours of Lecture</th>
<th>Class Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Piano Class</td>
<td>MUSC 101</td>
<td>2</td>
<td>2</td>
<td>Beginning-level study of the piano. ([GE, HB, SE])</td>
</tr>
<tr>
<td>Beginning Guitar Class</td>
<td>MUSC 110</td>
<td>2</td>
<td>2</td>
<td>Beginning-level study of the guitar. ([GE, HB, SE])</td>
</tr>
<tr>
<td>Beginning Voice Class</td>
<td>MUSC 115</td>
<td>2</td>
<td>1 / 2</td>
<td>Basic technique and knowledge about singing. No previous experience or music study required. ([GE, HB, SE])</td>
</tr>
<tr>
<td>Music History: Middle Ages to Baroque</td>
<td>MUSC 116</td>
<td>5</td>
<td>5</td>
<td>Music of the Middle Ages, Renaissance and Baroque studied in context of its cultural and historical environment. Recordings of Gregorian chant, polyphonic music of the Renaissance (des Pres and Palestrina) and Baroque music (Bach, Frescobaldi, Corelli, Monteverdi, and Handel) listened to and studied. ([GE, HA, SE])</td>
</tr>
<tr>
<td>Music History: Classical/Romantic</td>
<td>MUSC 117</td>
<td>5</td>
<td>5</td>
<td>Music of the classical and romantic eras studied in context of its cultural and historical environment. Recordings of Haydn, Mozart, Beethoven, Schubert, Wagner, Brahms, and others listened to and studied. ([GE, HA, SE])</td>
</tr>
<tr>
<td>Music History: Twentieth Century</td>
<td>MUSC 118</td>
<td>5</td>
<td>5</td>
<td>Music of the twentieth century studied in context of its cultural and historical environment. Recordings and live performances. Debussy, Stravinsky, Schoenberg, Berg, Hindemith, Stockhausen, and others listened to and studied in context of 20th century culture. ([GE, SE, HA])</td>
</tr>
<tr>
<td>Rock Music</td>
<td>MUSC 125</td>
<td>3</td>
<td>3</td>
<td>Rhythm, melody, harmony, timbre, text uses, and form in current rock music. Problems and definitions of these elements with illustrations from various styles of rock music. ([GE, HA, SE])</td>
</tr>
<tr>
<td>World Folk Music</td>
<td>MUSC 127</td>
<td>3</td>
<td>3</td>
<td>Folk music in selected cultures beginning with the Anglo-American folk song. Music and cultural values. Role of music in folk cultures. Appreciation of differences in music styles as they relate to their social settings. ([GE, HA, SE])</td>
</tr>
<tr>
<td>Jazz Appreciation</td>
<td>MUSC 135</td>
<td>3</td>
<td>3</td>
<td>Jazz Appreciation is intended to provide students with relevant and compelling facts about jazz that illustrate its colorful history, its mixture of ethnic diversity, and the impact the music has had on American popular culture. The class utilizes multimedia presentations and music examples to guide students through an interactive process of learning how to listen to jazz, a chronology of significant jazz periods, the societal events that impact each period, and the biographies and significance of key musicians. ([GE, HA, SE])</td>
</tr>
<tr>
<td>Clark College Chorale</td>
<td>MUSC 137</td>
<td>1-2</td>
<td>1 / 2</td>
<td>Department consent required for enrollment. The Clark College Chorale performs a wide variety of choral literature including classical masterworks and non-classical genres for both male and female as well as mixed-voicing choral music. Open to all students and community members, the Chorale performs a minimum of one concert per term with possible additional performances. ([GE, HB, SE][PNP])</td>
</tr>
<tr>
<td>Orchestra</td>
<td>MUSC 150</td>
<td>1-2</td>
<td>1 / 2</td>
<td>Performance of orchestral literature from a variety of periods and styles. ([GE, HB, SE])</td>
</tr>
<tr>
<td>Orchestra</td>
<td>MUSC 151</td>
<td>1-2</td>
<td>1 / 2</td>
<td>Performance of orchestral literature from a variety of periods and styles. ([GE, HB, SE])</td>
</tr>
<tr>
<td>Orchestra</td>
<td>MUSC 152</td>
<td>1-2</td>
<td>1 / 2</td>
<td>Performance of orchestral literature from a variety of periods and styles. ([GE, HB, SE])</td>
</tr>
<tr>
<td>Treble Ensemble</td>
<td>MUSC 153</td>
<td>1-2</td>
<td>1 / 2</td>
<td>Performance of choral music from a variety of periods and styles written for women's voices. ([GE, HB, SE][PNP])</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>Credits/Units</td>
<td>Lecture/Lab Hours</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------</td>
<td>-------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>MUSC 154</td>
<td>Treble Ensemble</td>
<td>1-2</td>
<td>1 / 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department consent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>required for</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>enrollment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Performance of choral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>music from a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>variety of periods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and styles written</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>for women’s voices.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[GE, HB, SE][PNP]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 155</td>
<td>Treble Ensemble</td>
<td>1-2</td>
<td>1 / 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department consent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>required for</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>enrollment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Performance of choral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>music from a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>variety of periods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and styles written</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>for women’s voices.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[GE, HB, SE][PNP]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 170</td>
<td>Applied Voice</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department consent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>required for</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>enrollment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private voice lessons.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[GE, HB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 171</td>
<td>Applied Voice</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department consent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>required for</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>enrollment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private voice lessons.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[GE, HB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 173</td>
<td>Applied Piano</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department consent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>required for</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>enrollment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private piano lessons.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[GE, HB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 174</td>
<td>Applied Piano</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department consent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>required for</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>enrollment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private piano lessons.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[GE, HB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 170</td>
<td>Concert Band</td>
<td>1-2</td>
<td>1 / 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department consent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>required for</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>enrollment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Performance of choral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>music from a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>variety of periods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and styles written</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>for women’s voices.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[GE, HB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 171</td>
<td>Concert Band</td>
<td>1-2</td>
<td>1 / 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department consent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>required for</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>enrollment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Performance of choral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>music from a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>variety of periods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and styles written</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>for women’s voices.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[GE, HB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 173</td>
<td>Concert Choir</td>
<td>1-2</td>
<td>1 / 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department consent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>required for</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>enrollment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Performance of choral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>music from a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>variety of periods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and styles written</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>for women’s voices.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[GE, HB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 174</td>
<td>Concert Choir</td>
<td>1-2</td>
<td>1 / 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department consent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>required for</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>enrollment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Performance of choral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>music from a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>variety of periods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and styles written</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>for women’s voices.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[GE, HB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 175</td>
<td>Concert Band</td>
<td>1-2</td>
<td>1 / 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department consent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>required for</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>enrollment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Performance of choral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>music from a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>variety of periods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and styles written</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>for women’s voices.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[GE, HB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 170</td>
<td>Jazz Improvisation</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improvisation on one</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>or more of the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>traditional jazz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>band instruments or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>through vocal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>interpretation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[GE, HB, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Jazz Band
MUSC 195 1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Open to all students who perform on saxophone, trumpet, trombone, guitar, piano, bass, and drum set. Topics include performance techniques of jazz styles and repertoire and introduction to a wide variety of jazz subjects from improvisation and jazz history to understanding Latin/Afro-Cuban jazz rhythm. Additional topics include musical excellence and skills for teamwork and leadership. Jazz improvisation skills not required, but strong music reading skills are required, to be assessed at the beginning of the term. [GE, HB, SE]

Jazz Band
MUSC 196 1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Open to all students who perform on saxophone, trumpet, trombone, guitar, piano, bass, and drum set. Topics include performance techniques of jazz styles and repertoire and introduction to a wide variety of jazz subjects from improvisation and jazz history to understanding Latin/Afro-Cuban jazz rhythm. Additional topics include musical excellence and skills for teamwork and leadership. Jazz improvisation skills not required, but strong music reading skills are required, to be assessed at the beginning of the term. [GE, HB, SE]

Intermediate Piano Class
MUSC 201 2 Credits/Units
2 hours of lecture
Prerequisite: MUSC 101 (grade of "C" or higher)
Intermediate-level study of the piano. [GE, HB, SE]

Advanced Piano Class
MUSC 202 2 Credits/Units
2 hours of lecture
Prerequisite: MUSC 201 (grade of "C" or higher)
A continuation of instruction from Intermediate Piano. Baroque, classic, romantic, and contemporary repertoire, jazz stylings and fake books. [GE, HB, SE]

Intermediate Guitar Class
MUSC 210 2 Credits/Units
2 hours of lecture
Prerequisite: MUSC 110 (grade of "C" or higher)
Intermediate-level study of the guitar. [GE, HB, SE]

Clark College Chorale
MUSC 237 1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Department consent required for enrollment. The Clark College Chorale performs a wide variety of choral literature including classical masterworks and non-classical genres for both male and female as well as mixed-voicing choral music. Open to all students and community members, the Chorale performs a minimum of one concert per term with possible additional performances. [GE, HB, SE][PNP]

Clark College Chorale
MUSC 238 1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Department consent required for enrollment. The Clark College Chorale performs a wide variety of choral literature including classical masterworks and non-classical genres for both male and female as well as mixed-voicing choral music. Open to all students and community members, the Chorale performs a minimum of one concert per term with possible additional performances. [GE, HB, SE][PNP]

Orchestra
MUSC 250 1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Performance of orchestral literature from a variety of periods and styles. [GE, HB, SE]

Orchestra
MUSC 251 1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Performance of orchestral literature from a variety of periods and styles. [GE, HB, SE]

Orchestra
MUSC 252 1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Performance of orchestral literature from a variety of periods and styles. [GE, HB, SE]

Treble Ensemble
MUSC 253 1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Department consent required for enrollment. Performance of choral music from a variety of periods and styles written for women's voices. [GE, HB, SE][PNP]

Treble Ensemble
MUSC 254 1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Department consent required for enrollment. Performance of choral music from a variety of periods and styles written for women's voices. [GE, HB, SE][PNP]

Treble Ensemble
MUSC 255 1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Department consent required for enrollment. Performance of choral music from a variety of periods and styles written for women's voices. [GE, HB, SE][PNP]

Applied Voice
MUSC 270 1 Credit/Unit
1 hours of lecture
Department consent required for enrollment. Private voice lessons. [GE, HB, SE]
Applied Voice
MUSC 271 1 Credit/Unit
1 hours of lecture
Department consent required for enrollment. Private voice lessons. [GE, HB, SE]

Applied Voice
MUSC 272 1 Credit/Unit
1 hours of lecture
Department consent required for enrollment. Private voice lessons. [GE, HB, SE]

Applied Piano
MUSC 273 1 Credit/Unit
1 hours of lecture
Department consent required for enrollment. Private piano lessons. For students with some previous keyboard experience. [GE, HB, SE]

Applied Piano
MUSC 274 1 Credit/Unit
1 hours of lecture
Department consent required for enrollment. Private piano lessons. For students with some previous keyboard experience. [GE, HB, SE]

Concert Band
MUSC 280 1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Open to all students with experience performing on brass, woodwind, and percussion instruments. The Clark College Concert Band performs a wide spectrum of standard concert band and contemporary wind ensemble literature in at least one concert per term. Topics include musical excellence, and skills for teamwork and leadership. No auditions necessary to enroll but the ability to read music on your respective instrument is required. [GE, HB, SE]

Concert Band
MUSC 281 1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Open to all students with experience performing on brass, woodwind, and percussion instruments. The Clark College Concert Band performs a wide spectrum of standard concert band and contemporary wind ensemble literature in at least one concert per term. Topics include musical excellence, and skills for teamwork and leadership. No auditions necessary to enroll but the ability to read music on your respective instrument is required. [GE, HB, SE]

Concert Band
MUSC 282 1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Open to all students with experience performing on brass, woodwind, and percussion instruments. The Clark College Concert Band performs a wide spectrum of standard concert band and contemporary wind ensemble literature in at least one concert per term. Topics include musical excellence, and skills for teamwork and leadership. No auditions necessary to enroll but the ability to read music on your respective instrument is required. [GE, HB, SE]

Concert Choir
MUSC 283 1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Department consent required for enrollment. The concert choir performs a wide variety of choral music in at least one public concert per term. Music notation, vocal technique, and effective interpretation of music literature. Open to all students interested in improving their vocal skills. [GE, HB, SE]

Concert Choir
MUSC 284 1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Department consent required for enrollment. The concert choir performs a wide variety of choral music in at least one public concert per term. Music notation, vocal technique, and effective interpretation of music literature. Open to all students interested in improving their vocal skills. [GE, HB, SE]

Special Projects
MUSC 290 1-5 Credits/Units
5 hours of lecture
Opportunity to plan, organize and complete special projects approved by the department. [GE, HB, SE]

Jazz Band
MUSC 295 1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Open to all students who perform on saxophone, trumpet, trombone, guitar, piano, bass, and drum set. Topics include performance techniques of jazz styles and repertoire and introduction to a wide variety of jazz subjects from improvisation and jazz history to understanding Latin/Afro-Cuban jazz rhythm. Additional topics include musical excellence and skills for teamwork and leadership. Jazz improvisation skills not required, but strong music reading skills are required, to be assessed at the beginning of the term. [GE, HB, SE]

Jazz Band
MUSC 296 1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Open to all students who perform on saxophone, trumpet, trombone, guitar, piano, bass, and drum set. Topics include performance techniques of jazz styles and repertoire and introduction to a wide variety of jazz subjects from improvisation and jazz history to understanding Latin/Afro-Cuban jazz rhythm. Additional topics include musical excellence and skills for teamwork and leadership. Jazz improvisation skills not required, but strong music reading skills are required, to be assessed at the beginning of the term. [GE, HB, SE]
Music (MUSC/MUSC&/MUSCA)

Jazz Band
MUSC 297
1-2 Credits/Units
1 hours of lecture / 2 hours of lab
Open to all students who perform on saxophone, trumpet, trombone, guitar, piano, bass, and drum set. Topics include performance techniques of jazz styles and repertoire and introduction to a wide variety of jazz subjects from improvisation and jazz history to understanding Latin/Afro-Cuban jazz rhythm. Additional topics include musical excellence and skills for teamwork and leadership. Jazz improvisation skills not required, but strong music reading skills are required, to be assessed at the beginning of the term. [GE, HB, SE]

Music Appreciation
MUSC& 104
3 Credits/Units
3 hours of lecture
Study and understanding of music. Nonverbal explorations into the listening process, a brief look at the history of Western music, and work in formal descriptive music analysis. [GE, HA, SE]

Ear Training
MUSC& 121
1 Credit/Unit
1 hour of lecture / 2 hours of lab
Learning to write what is heard in melodic and intervallic ways. Sight singing and chord recognition. Develops rhythmic, melodic, and harmonic perception skills through dictation, sight singing and drill. [GE, HB, SE]

Ear Training
MUSC& 122
1 Credit/Unit
2 hours of lab
Prerequisite: MUSC& 121 (grade of "C" or higher)
Continuation of MUSC& 121. Learning to write what is heard in melodic and intervallic ways. Sight-singing and chord recognition. Develops rhythmic, melodic, and harmonic perception skills through dictation, sight-singing and drill. [GE, HB, SE]

Ear Training
MUSC& 123
1 Credit/Unit
2 hours of lab
Prerequisite: MUSC& 122 (grade of "C" or higher)
Continuation of MUSC& 122. Learning to write what is heard in melodic and intervallic ways. Sight-singing and chord recognition. Develops rhythmic, melodic, and harmonic perception skills through dictation, sight-singing and drill. [GE, HB, SE]

Music Theory
MUSC& 141
5 Credits/Units
5 hours of lecture
Prerequisite: Concurrent enrollment in MUSC& 121
First-year musicianship. Sound sources and nature of sound. Writing skills and use of musical symbol-notation. Basic vocabulary of music. Introduction to forms, composition, and analysis. Open to all students. [GE, HA, SE]

Music Theory
MUSC& 142
5 Credits/Units
5 hours of lecture
Prerequisite: MUSC& 141 (grade of "C" or higher), and concurrent enrollment in MUSC& 122
Continuation of MUSC& 141. Addition to the I 6-4, II, VI, III chords to harmonic tones, ear training in melodic and rhythmic concepts. Intervals and introduction to the keyboard. [GE, HA, SE]

Music Theory
MUSC& 143
5 Credits/Units
5 hours of lecture
Prerequisite: MUSC& 142 (grade of "C" or higher), and concurrent enrollment in MUSC& 123
Continuation of MUSC& 142. Chromatic chords, popular song forms and jazz-related harmonies and forms. [GE, HA, SE]

Ear Training
MUSC& 221
1 Credit/Unit
1 hour of lecture / 2 hours of lab
Prerequisite: MUSC& 123 (grade of "C" or higher)
Continuation of MUSC& 123. Trains students to write what they hear in harmonic and polyphonic textures. Examples coordinated with theory classes. [GE, HB, SE]

Ear Training
MUSC& 222
1 Credit/Unit
2 hours of lab
Prerequisite: MUSC& 221 (grade of "C" or higher)
Continuation of MUSC& 221. Learning to write what they hear in harmonic and polyphonic textures. Examples coordinated with theory classes. [GE, HB, SE]

Ear Training
MUSC& 223
1 Credit/Unit
2 hours of lab
Prerequisite: MUSC& 222 (grade of "C" or higher)
Continuation of MUSC& 222. Learning to write what they hear in harmonic and polyphonic textures. Examples coordinated with theory classes. [GE, HB, SE]

Music Theory
MUSC& 231
3 Credits/Units
3 hours of lecture
Prerequisite: MUSC& 232 (grade of "C" or higher), and concurrent enrollment in MUSC& 222
Study of altered dominants, chromatic mediants, variation form, sonata form, and rondo form. [GE, HA, SE]

Music Theory
MUSC& 232
3 Credits/Units
3 hours of lecture
Prerequisite: MUSC& 231 (grade of "C" or higher) and concurrent enrollment in MUSC& 222
Study of altered dominants, chromatic mediants, variation form, sonata form, and rondo form. [GE, HA, SE]

Music Theory
MUSC& 233
3 Credits/Units
3 hours of lecture
Prerequisite: MUSC& 232 (grade of "C" or higher) and concurrent enrollment in MUSC& 223
Extensions of harmonic language and compositional style of the 20th/21st century, including atonal forms. [GE, HA, SE]

Applied Instrument: Flute
MUSCA 101
1 Credit/Unit
1 hour of lecture
Department consent required for enrollment. Private flute lessons. [GE, HB, SE]

Applied Instrument: Violin
MUSCA 102
1 Credit/Unit
1 hour of lecture
Department consent required for enrollment. Private violin lessons. [GE, HB, SE]
<table>
<thead>
<tr>
<th>Instrument: Cello</th>
<th>Applied</th>
<th>MUSCA 103</th>
<th>1 Credit/Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private cello lessons. [GE, HB, SE]</td>
</tr>
<tr>
<td>Instrument: Viola</td>
<td>Applied</td>
<td>MUSCA 104</td>
<td>1 Credit/Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private viola lessons. [GE, HB, SE]</td>
</tr>
<tr>
<td>Instrument: Trumpet</td>
<td>Applied</td>
<td>MUSCA 105</td>
<td>1 Credit/Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private trumpet lessons. [GE, HB, SE]</td>
</tr>
<tr>
<td>Instrument: Guitar</td>
<td>Applied</td>
<td>MUSCA 106</td>
<td>1 Credit/Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private guitar lessons. [GE, HB, SE]</td>
</tr>
<tr>
<td>Instrument: Clarinet</td>
<td>Applied</td>
<td>MUSCA 107</td>
<td>1 Credit/Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private clarinet lessons. [GE, HB, SE]</td>
</tr>
<tr>
<td>Instrument: Bass</td>
<td>Applied</td>
<td>MUSCA 108</td>
<td>1 Credit/Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private bass lessons. [GE, HB, SE]</td>
</tr>
<tr>
<td>Instrument: Horn</td>
<td>Applied</td>
<td>MUSCA 109</td>
<td>1 Credit/Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private horn lessons. [GE, HB, SE]</td>
</tr>
<tr>
<td>Instrument: Bassoon</td>
<td>Applied</td>
<td>MUSCA 110</td>
<td>1 Credit/Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private bassoon lessons. [GE, HB, SE]</td>
</tr>
<tr>
<td>Instrument: Trombone</td>
<td>Applied</td>
<td>MUSCA 111</td>
<td>1 Credit/Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private trombone lessons. [GE, HB, SE]</td>
</tr>
<tr>
<td>Instrument: Sax</td>
<td>Applied</td>
<td>MUSCA 112</td>
<td>1 Credit/Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private sax lessons. [GE, HB, SE]</td>
</tr>
<tr>
<td>Instrument: Percussion</td>
<td>Applied</td>
<td>MUSCA 113</td>
<td>1 Credit/Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private percussion lessons. [GE, HB, SE]</td>
</tr>
</tbody>
</table>

<p>| Instrument: Oboe | Applied | MUSCA 114 | 1 Credit/Unit |
|                  |         | 1 hours of lecture | Department consent required for enrollment. Private oboe lessons. [GE, HB, SE] |
| Instrument: Euphonium | Applied | MUSCA 115 | 1 Credit/Unit |
|                  |         | 1 hours of lecture | Department consent required for enrollment. Private euphonium lessons. [GE, HB, SE] |
| Instrument: Tuba | Applied | MUSCA 116 | 1 Credit/Unit |
|                  |         | 1 hours of lecture | Department consent required for enrollment. Private tuba lessons. [GE, HB, SE] |
| Instrument: Flute | Applied | MUSCA 131 | 1 Credit/Unit |
|                  |         | 1 hours of lecture | Department consent required for enrollment. Private flute lessons. Continuation of MUSCA 101. [GE, HB, SE] |
| Instrument: Violin | Applied | MUSCA 132 | 1 Credit/Unit |
|                  |         | 1 hours of lecture | Department consent required for enrollment. Private violin lessons. Continuation of MUSCA 102. [GE, HB, SE] |
| Instrument: Cello | Applied | MUSCA 133 | 1 Credit/Unit |
|                  |         | 1 hours of lecture | Department consent required for enrollment. Private cello lessons. Continuation of MUSCA 103. [GE, HB, SE] |
| Instrument: Viola | Applied | MUSCA 134 | 1 Credit/Unit |
|                  |         | 1 hours of lecture | Department consent required for enrollment. Private viola lessons. Continuation of MUSCA 104. [GE, HB, SE] |
| Instrument: Trumpet | Applied | MUSCA 135 | 1 Credit/Unit |
|                  |         | 1 hours of lecture | Department consent required for enrollment. Private trumpet lessons. Continuation of MUSCA 105. [GE, HB, SE] |
| Instrument: Guitar | Applied | MUSCA 136 | 1 Credit/Unit |
|                  |         | 1 hours of lecture | Department consent required for enrollment. Private guitar lessons. Continuation of MUSCA 106. [GE, HB, SE] |
| Instrument: Clarinet | Applied | MUSCA 137 | 1 Credit/Unit |
|                  |         | 1 hours of lecture | Department consent required for enrollment. Private clarinet lessons. Continuation of MUSCA 107. [GE, HB, SE] |
| Instrument: Bass | Applied | MUSCA 138 | 1 Credit/Unit |
|                  |         | 1 hours of lecture | Department consent required for enrollment. Private bass lessons. Continuation of MUSCA 108. [GE, HB, SE] |</p>
<table>
<thead>
<tr>
<th>Applied Instrument</th>
<th>Course Code</th>
<th>Credit/Unit</th>
<th>Hours of Lecture</th>
<th>Department Consent Required</th>
<th>Enrollment Requirements</th>
<th>Continuation Code</th>
<th>GE, HB, SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horn</td>
<td>MUSCA 139</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private horn lessons.</td>
<td>Continuation of MUSCA 109. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bassoon</td>
<td>MUSCA 140</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private bassoon lessons.</td>
<td>Continuation of MUSCA 110. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trombone</td>
<td>MUSCA 141</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private trombone lessons.</td>
<td>Continuation of MUSCA 111. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sax</td>
<td>MUSCA 142</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private sax lessons.</td>
<td>Continuation of MUSCA 112. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percussion</td>
<td>MUSCA 143</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private percussion lessons.</td>
<td>Continuation of MUSCA 113. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oboe</td>
<td>MUSCA 144</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private oboe lessons.</td>
<td>Continuation of MUSCA 114. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Euphonium</td>
<td>MUSCA 145</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private euphonium lessons.</td>
<td>Continuation of MUSCA 115. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuba</td>
<td>MUSCA 146</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private tuba lessons.</td>
<td>Continuation of MUSCA 116. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flute</td>
<td>MUSCA 171</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private flute lessons.</td>
<td>Continuation of MUSCA 131. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violin</td>
<td>MUSCA 172</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private violin lessons.</td>
<td>Continuation of MUSCA 132. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cello</td>
<td>MUSCA 173</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private cello lessons.</td>
<td>Continuation of MUSCA 133. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viola</td>
<td>MUSCA 174</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private viola lessons.</td>
<td>Continuation of MUSCA 134. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trumpet</td>
<td>MUSCA 175</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private trumpet lessons.</td>
<td>Continuation of MUSCA 135. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guitar</td>
<td>MUSCA 176</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private guitar lessons.</td>
<td>Continuation of MUSCA 136. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clarinet</td>
<td>MUSCA 177</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private clarinet lessons.</td>
<td>Continuation of MUSCA 137. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bass</td>
<td>MUSCA 178</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private bass lessons.</td>
<td>Continuation of MUSCA 138. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horn</td>
<td>MUSCA 179</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private horn lessons.</td>
<td>Continuation of MUSCA 139. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bassoon</td>
<td>MUSCA 180</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private bassoon lessons.</td>
<td>Continuation of MUSCA 140. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trombone</td>
<td>MUSCA 181</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private trombone lessons.</td>
<td>Continuation of MUSCA 141. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sax</td>
<td>MUSCA 182</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private sax lessons.</td>
<td>Continuation of MUSCA 142. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percussion</td>
<td>MUSCA 183</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private percussion lessons.</td>
<td>Continuation of MUSCA 143. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oboe</td>
<td>MUSCA 184</td>
<td>1</td>
<td>1</td>
<td>Department consent required for enrollment. Private oboe lessons.</td>
<td>Continuation of MUSCA 144. [GE, HB, SE]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Applied Instrument: Euphonium  
MUSCA 185  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private euphonium lessons.  
Continuation of MUSCA 145. [GE, HB, SE]

Applied Instrument: Tuba  
MUSCA 186  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private tuba lessons.  
Continuation of MUSCA 146. [GE, HB, SE]

Applied Instrument: Flute  
MUSCA 201  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private flute lessons.  
Continuation of MUSCA 171. [GE, HB, SE]

Applied Instrument: Violin  
MUSCA 202  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private violin lessons.  
Continuation of MUSCA 172. [GE, HB, SE]

Applied Instrument: Cello  
MUSCA 203  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private cello lessons.  
Continuation of MUSCA 173. [GE, HB, SE]

Applied Instrument: Viola  
MUSCA 204  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private viola lessons.  
Continuation of MUSCA 174. [GE, HB, SE]

Applied Instrument: Trumpet  
MUSCA 205  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private trumpet lessons.  
Continuation of MUSCA 175. [GE, HB, SE]

Applied Instrument: Guitar  
MUSCA 206  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private guitar lessons.  
Continuation of MUSCA 176. [GE, HB, SE]

Applied Instrument: Clarinet  
MUSCA 207  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private clarinet lessons.  
Continuation of MUSCA 177. [GE, HB, SE]

Applied Instrument: Bass  
MUSCA 208  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private bass lessons.  
Continuation of MUSCA 178. [GE, HB, SE]

Applied Instrument: Horn  
MUSCA 209  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private horn lessons.  
Continuation of MUSCA 179. [GE, HB, SE]

Applied Instrument: Bassoon  
MUSCA 210  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private bassoon lessons.  
Continuation of MUSCA 180. [GE, HB, SE]

Applied Instrument: Trombone  
MUSCA 211  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private trombone lessons.  
Continuation of MUSCA 181. [GE, HB, SE]

Applied Instrument: Sax  
MUSCA 212  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private sax lessons.  
Continuation of MUSCA 182. [GE, HB, SE]

Applied Instrument: Percussion  
MUSCA 213  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private percussion lessons.  
Continuation of MUSCA 183. [GE, HB, SE]

Applied Instrument: Oboe  
MUSCA 214  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private oboe lessons.  
Continuation of MUSCA 184. [GE, HB, SE]

Applied Instrument: Euphonium  
MUSCA 215  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private euphonium lessons.  
Continuation of MUSCA 185. [GE, HB, SE]

Applied Instrument: Tuba  
MUSCA 216  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private tuba lessons.  
Continuation of MUSCA 186. [GE, HB, SE]

Applied Instrument: Flute  
MUSCA 231  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private flute lessons.  
Continuation of MUSCA 201. [GE, HB, SE]

Applied Instrument: Violin  
MUSCA 232  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private violin lessons.  
Continuation of MUSCA 202. [GE, HB, SE]

Applied Instrument: Cello  
MUSCA 233  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private cello lessons.  
Continuation of MUSCA 203. [GE, HB, SE]

Applied Instrument: Viola  
MUSCA 234  
1 Credit/Unit  
1 hours of lecture  
Department consent required for enrollment. Private viola lessons.  
Continuation of MUSCA 204. [GE, HB, SE]
<table>
<thead>
<tr>
<th>Applied Instrument: Trumpet</th>
<th>MUSC 235</th>
<th>1 Credit/Unit</th>
<th>1 hours of lecture</th>
<th>Department consent required for enrollment. Private trumpet lessons. Continuation of MUSCA 205. [GE, HB, SE]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Instrument: Guitar</td>
<td>MUSC 236</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private guitar lessons. Continuation of MUSCA 206. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Clarinet</td>
<td>MUSC 237</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private clarinet lessons. Continuation of MUSCA 207. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Bass</td>
<td>MUSC 238</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private bass lessons. Continuation of MUSCA 208. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Horn</td>
<td>MUSC 239</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private horn lessons. Continuation of MUSCA 209. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Bassoon</td>
<td>MUSC 240</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private bassoon lessons. Continuation of MUSCA 210. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Trombone</td>
<td>MUSC 241</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private trombone lessons. Continuation of MUSCA 211. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Sax</td>
<td>MUSC 242</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private sax lessons. Continuation of MUSCA 212. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Percussion</td>
<td>MUSC 243</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private percussion lessons. Continuation of MUSCA 213. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Oboe</td>
<td>MUSC 244</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private oboe lessons. Continuation of MUSCA 214. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Euphonium</td>
<td>MUSC 245</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private euphonium lessons. Continuation of MUSCA 215. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Tuba</td>
<td>MUSC 246</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private tuba lessons. Continuation of MUSCA 216. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Flute</td>
<td>MUSC 271</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private flute lessons. Continuation of MUSCA 231. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Violin</td>
<td>MUSC 272</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private Violin lessons. Continuation of MUSCA 232. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Cello</td>
<td>MUSC 273</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private cello lessons. Continuation of MUSCA 233. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Viola</td>
<td>MUSC 274</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private viola lessons. Continuation of MUSCA 234. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Trumpet</td>
<td>MUSC 275</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private trumpet lessons. Continuation of MUSCA 235. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Guitar</td>
<td>MUSC 276</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private guitar lessons. Continuation of MUSCA 236. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Clarinet</td>
<td>MUSC 277</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private clarinet lessons. Continuation of MUSCA 237. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Bass</td>
<td>MUSC 278</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private bass lessons. Continuation of MUSCA 238. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Horn</td>
<td>MUSC 279</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private horn lessons. Continuation of MUSCA 239. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument: Bassoon</td>
<td>MUSC 280</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private bassoon lessons. Continuation of MUSCA 240. [GE, HB, SE]</td>
</tr>
<tr>
<td>Applied Instrument</td>
<td>Course Code</td>
<td>1 Credit/Unit</td>
<td>1 hours of lecture</td>
<td>Department consent required for enrollment. Private lessons.</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------</td>
<td>---------------</td>
<td>--------------------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>Trombone</td>
<td>MUSCA 281</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sax</td>
<td>MUSCA 282</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percussion</td>
<td>MUSCA 283</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oboe</td>
<td>MUSCA 284</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Euphonium</td>
<td>MUSCA 285</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuba</td>
<td>MUSCA 286</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Network Technology (NTEC)

## IP Subnetting

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTEC 103</td>
<td>Covers the Internet Protocol (IP) numbering systems IPv4 and IPv6. Includes the following concepts: calculation and converting numbers between DECimal, BINary, and HEXadecimal number systems; understanding the meaning of IP numbers, the purpose/role of the various parts of the number, types/classes of numbers; understanding how to subnet these number ranges using both traditional and VLSM approaches; create supernets, summary routes, and hierarchical addressing schemes.</td>
<td>3</td>
<td>Requires CAP 42 (grade of &quot;C&quot; or higher) or placement into Math level 10</td>
</tr>
<tr>
<td>NTEC 125</td>
<td>Builds an understanding of network security topics including how hacker attacks are carried out and how to select the right security solutions for each type of risk. Students learn to create clear and enforceable security policies and to keep them up to date; to establish reliable processes for responding to security advisories; to use encryption effectively and recognize its limitations; to secure networks with firewalls, routers, and other devices; and to prevent attacks aimed at wireless networks.</td>
<td>3</td>
<td>Requires Concurrent enrollment in, or completion of NTEC 103 (grade of &quot;C&quot; or higher)</td>
</tr>
</tbody>
</table>

## Cloud Computing Fundamentals

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTEC 142</td>
<td>Helps students prepare for the CompTIA Cloud Essentials certification by building an understanding of the following Cloud Computing topics: technical understanding of the foundations of Cloud Computing as compared to traditional IT; integrating Cloud Computing into IT infrastructure; creating economic value by implementing Cloud innovations; and integrating Cloud Computing into an organization's existing compliance, risk and regulatory framework.</td>
<td>3</td>
<td>Requires Concurrent enrollment in, or completion of NTEC 103 (grade of &quot;C&quot; or higher)</td>
</tr>
<tr>
<td>NTEC 151</td>
<td>Explores the basics of Linux, the world's most popular operating system. Includes system administration skills (using the command line, how to configure a computer running Linux, and basic networking), basic open source concepts. This course may help students prepare for attaining the LPI (Linux Professional Institute) Linux Essentials industry certification.</td>
<td>3</td>
<td>Requires CAP 42 (grade of &quot;C&quot; or higher) or placement into Math level 10</td>
</tr>
<tr>
<td>NTEC 161</td>
<td>Learn how to configure and troubleshoot routers and switches for advanced functionality, to configure and troubleshoot routers and switches and resolve common issues in both IPv4 and IPv6 networks. Develop the knowledge and skills needed to manage a complex network. Part three of a three-course sequence to prepare for the Cisco CCNA Routing Switching industry certification.</td>
<td>5</td>
<td>Requires NTEC 151 and NTEC 221 (grades of &quot;C&quot; or higher).</td>
</tr>
</tbody>
</table>

## Introduction to Cybersecurity

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTEC 220</td>
<td>Knowledge and skills for using LINUX Server OS to setup LAN/WAN connections and authentication; and to explore features of the network operating systems, such as FTP, email, web server, file server, print server, remote desktop, DNS, DHCP, and users and groups.</td>
<td>5</td>
<td>Requires Concurrent enrollment in, or completion of NTEC 103 (grade of &quot;C&quot; or higher)</td>
</tr>
</tbody>
</table>

## Introduction to Networks

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTEC 221</td>
<td>Introduction to Networks</td>
<td>5</td>
<td>Requires Concurrent enrollment in, or completion of NTEC 103 (grade of &quot;C&quot; or higher)</td>
</tr>
</tbody>
</table>

## Introduction to the Architecture, Structure, Functions, Components, and Models of the Internet, and Other Computer Networks

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTEC 222</td>
<td>Introduction to the architecture, structure, functions, components, and models of the Internet, and other computer networks. Fundamentals to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. Part one of a three-course sequence to prepare for the Cisco CCNA Routing and Switching industry certification.</td>
<td>5</td>
<td>Requires Concurrent enrollment in, or completion of NTEC 103 (grade of &quot;C&quot; or higher)</td>
</tr>
</tbody>
</table>

## Deploying Linux Server Services

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTEC 223</td>
<td>Learn how to configure routers and switches for advanced functionality, to configure and troubleshoot routers and switches and resolve common issues in both IPv4 and IPv6 networks. Develop the knowledge and skills needed to manage a complex network. Part three of a three-course sequence to prepare for the Cisco CCNA Routing Switching industry certification.</td>
<td>5</td>
<td>Requires Concurrent enrollment in, or completion of NTEC 103 (grade of &quot;C&quot; or higher)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTEC 225</td>
<td>5 Credits/Units</td>
</tr>
<tr>
<td>3 hours of lecture / 4 hours of lab</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite:</strong> NTEC 125 (grade of &quot;C&quot; or higher).</td>
<td></td>
</tr>
<tr>
<td>Understand and use the most recent advancements in cybersecurity technology, terms, techniques, and tools, such as: automation, zero trust, risk analysis, operational technology, and IoT. Key skills for the ever-evolving cybersecurity landscape. This course may help students prepare for the CompTIA industry certification exam Security+. [GE]</td>
<td></td>
</tr>
</tbody>
</table>

| Administering Windows Server Hybrid Core Infrastructure | |
| NTEC 234 | 5 Credits/Units |
| 3 hours of lecture / 4 hours of lab | |
| **Prerequisite:** NTEC 234 (grade of "C" or higher). | |
| Students will learn to accomplish the following technical tasks: deploy and manage Active Directory Domain Services (AD DS) in on-premises and cloud environments; manage Windows Servers and workloads in a hybrid environment; manage virtual machines and containers; implement and manage an on-premises and hybrid networking infrastructure; and manage storage and file services. This course may help students prepare for the Microsoft industry certification exam AZ-800: Administering Windows Server Hybrid Core Infrastructure. [GE] | |

| Windows Server Hybrid Advanced Services | |
| NTEC 235 | 5 Credits/Units |
| 3 hours of lecture / 4 hours of lab | |
| **Prerequisite:** NTEC 234 (grade of "C" or higher). | |
| Students will learn to accomplish the following technical tasks: secure Windows Server on-premises and hybrid infrastructures; implement and manage Windows Server high availability; implement disaster recovery; migrate servers and workloads; and monitor and troubleshoot Windows Server environments. This course may help students prepare for the Microsoft industry certification exam AZ-801: Configuring Windows Server Hybrid Advanced Services. [GE] | |

| Cybersecurity Defense Operations | |
| NTEC 236 | 5 Credits/Units |
| 3 hours of lecture / 4 hours of lab | |
| **Prerequisite:** NTEC 125, NTEC 151, and NTEC 221 (grades of "C" or higher). | |
| Student will learn day-to-day, tactical knowledge and skills that Security Operations Center (SOC) teams need to detect and respond to cybersecurity threats. The course covers knowledge and skills related to security concepts, security monitoring, host-based analysis, network intrusion analysis, and security policies and procedures. This course may help students prepare for the Cisco industry certification exam CyberOps Associate. [GE] | |

| Datcenter Virtualization Technology | |
| NTEC 242 | 5 Credits/Units |
| 3 hours of lecture / 4 hours of lab | |
| **Prerequisite:** NTEC 142 (grade of "C" or higher). | |
| Fundamentals of server and desktop virtualization. Topics include practical and conceptual skills for understanding basic virtualization concepts, comparison of physical servers and virtualized servers, skills for planning and implementing datacenter virtualization, the virtualized approach to datacenters with functions and services of their components, plus the various components, concepts and skill-sets associated with virtualization. [GE] | |

<table>
<thead>
<tr>
<th>Linux Administration</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTEC 252</td>
<td>5 Credits/Units</td>
</tr>
<tr>
<td>3 hours of lecture / 4 hours of lab</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite:</strong> NTEC 151 (grade of &quot;C&quot; or higher).</td>
<td></td>
</tr>
<tr>
<td>Builds on the skills learned in NTEC 151 - Linux Essentials course. Covers the following: system architecture, Linux installation and package management, GNU and UNIX commands, devices, Linux file systems, and file system hierarchy standards. [GE]</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Linux Administration</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTEC 253</td>
<td>5 Credits/Units</td>
</tr>
<tr>
<td>3 hours of lecture / 4 hours of lab</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite:</strong> NTEC 252 (grade of &quot;C&quot; or higher).</td>
<td></td>
</tr>
<tr>
<td>Builds on the skills learned in the NTEC 151 and NTEC 252. Covers the following: shells, scripting and data management, interfaces and desktops, administrative tasks, essential system services, networking fundamentals, and security. [GE]</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Selected Topics</th>
<th>1-6 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTEC 280</td>
<td>6 hours of lecture</td>
</tr>
<tr>
<td>Selected topics in Network Technology. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE]</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special Projects</th>
<th>1-6 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTEC 290</td>
<td>6 hours of lecture</td>
</tr>
<tr>
<td>Opportunity to plan, organize, and complete special projects approved by the department. [GE]</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capstone Experience: Network Technologies</th>
<th>3 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTEC 297</td>
<td>1 hours of lecture / 4 hours of lab</td>
</tr>
<tr>
<td>Department consent required for enrollment. This course will normally be taken during the final term of the program. Students will apply their skills on many topics covered in the other degree program courses. Students will complete a project in a team/small group setting as they create a network design proposal document, design an enterprise network to meet established user requirements, create detailed documentation plans for implementation, create a functional demo/mock-up, and make a final presentation to the class. This course will provide students a hands-on experience designing an enterprise network based on user requirements. Topics include all aspects of network planning, design, and troubleshooting. [GE]</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enterprise Networking Foundation</th>
<th>5 Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTEC 321</td>
<td>3 hours of lecture / 4 hours of lab</td>
</tr>
<tr>
<td>Admission into the program required for enrollment. Provides a wide overview of computer networking concepts with emphasis on configuring, managing and maintaining essential network devices. Offers instruction and practice in implementing network security, standards, and protocols as well as troubleshooting network problems and creating virtualized networks. May prepare students to attain the industry certification CompTIA Network+. [GE]</td>
<td></td>
</tr>
</tbody>
</table>
Cybersecurity Programming & Scripting Foundation
NTEC 361 5 Credits/Units
3 hours of lecture / 4 hours of lab
Admission into the program required for enrollment. Focuses on learning to use the Python programming language to accomplish coding tasks related to the basics of programming as well as the fundamental notions and techniques used in object-oriented programming. May prepare students to attain the industry certification PCAP (Certified Associate in Python Programming) from the Python Institute. [GE]

IoT Foundation: Connecting Things
NTEC 364 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: NTEC 361 (grade of "C" or higher)
Admission into the program required for enrollment. Explores how nearly object can be connected to the Internet, from washing machines to an airplane's jet engine, even organic items like crops and cows. Introduction to the basis of this exciting and emerging field using hands-on activities to model securely connecting sensors to cloud services over IP networks and collecting data in an end-to-end IoT (Internet of Things) system. [GE]

Big Data & Analytics Foundation
NTEC 365 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: NTEC 361 and NTEC 364 (grades of "C" or higher)
Admission into the program required for enrollment. Explores modern, real-time applications, IoT (Internet of Things) systems and the data they collect. Includes collecting, storing, and visualizing data obtained from IoT sensors and using data analytics to gain insights from the intelligence produced. [GE]

Cybersecurity Foundation
NTEC 371 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: NTEC 321 (grade of "C" or higher)
Admission into the program required for enrollment. Provides a wide overview of cybersecurity concepts and places an emphasis on mitigating specific security issues with extensive hands-on lab activities. May prepare students to attain the industry certification CompTIA Security+. [GE]

Cybersecurity Penetration Testing
NTEC 472 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: NTEC 361 and NTEC 371 (grades of "C" or higher)
Admission into the program required for enrollment. Covers the penetration testing as well as vulnerability assessment and management. Emphasizes skills necessary to determine the resiliency of a network against attacks. Includes how to customize assessment frameworks to effectively collaborate on and report findings as well as best practices to communicate recommended strategies to improve the overall state of IT security. May prepare students to attain the industry certification CompTIA Pen Test. [GE]

Cybersecurity Analyst
NTEC 473 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: NTEC 361 and NTEC 371 (grades of "C" or higher)
Admission into the program required for enrollment. Covers behavioral analytics skills to identify and combat malware and advanced persistent threats with an emphasis on performing data analysis and interpreting the results to identify vulnerabilities, threats and risks to an organization. Includes how to configure and use threat-detection tools and how to secure and protect applications and systems within an organization. May prepare students to attain the industry certification CompTIA CySA+. [GE]

Cybersecurity Operations
NTEC 475 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: NTEC 472 and NTEC 473 (grades of "C" or higher)
Admission into the program required for enrollment. Focuses on how to monitor, detect and respond to cybersecurity threats with specific instruction in cryptography, host-based security analysis, security monitoring, computer forensics, attack methods and incident reporting and handling. May prepare students to attain the industry certification Cisco CyberOps Associate. [GE]

Capstone Project
NTEC 499 5 Credits/Units
3 hours of lecture / 4 hours of lab
Prerequisite: NTEC 472 and NTEC 473 (grades of "C" or higher)
Admission into the program required for enrollment. Integrates and synthesizes competencies from across the degree program. Each project consists of a technical work proposal, the proposal's implementation, and a post-implementation report that describes the student's experience in developing and implementing the capstone project. [GE]
# NURSING (NURS)

## Foundations of Nursing Concepts

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
<th>Concurrent Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 110</td>
<td>2</td>
<td></td>
<td>(NURS 111, 112, 113, 114, 115, and ENGL 112)</td>
</tr>
</tbody>
</table>

Admission into the program required for enrollment. Introduction to professional nursing; topics include health promotion and health care delivery systems, professional roles and standards, nurse-client relationships, and theoretical basis for nursing practice. These courses are linked; failure in one course, with a grade of 'C' or lower or 'U', requires repeat of all concurrent courses. [GE]

## Clinical Nursing Concepts

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
<th>Concurrent Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 111</td>
<td>2</td>
<td></td>
<td>(NURS 110, 112, 113, 114, 115, and ENGL 112)</td>
</tr>
</tbody>
</table>

Admission into the program required for enrollment. Introduction to nursing practice in the community setting with emphasis on direct patient care of the older adult. These courses are linked; failure in one course, with a grade of 'C-' or lower or 'U', requires repeat of all concurrent courses. [GE]

## Lifespan Assessment Concepts

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
<th>Concurrent Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 113</td>
<td>3</td>
<td></td>
<td>(NURS 110, 111, 112, 113, 114, 115, and ENGL 112)</td>
</tr>
</tbody>
</table>

Admission into the program required for enrollment. Introduction to health assessment and physical examination throughout the lifespan, and an introduction to nursing skills. These courses are linked; failure in one course, with a grade of 'C-' or lower or 'U', requires repeat of all concurrent courses. [GE]

## Nursing Skills Application I

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
<th>Concurrent Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 114</td>
<td>1</td>
<td></td>
<td>(NURS 110, 111, 112, 113, 114, 115, and ENGL 112)</td>
</tr>
</tbody>
</table>

Admission into the program required for enrollment. Practice and nursing skill achievement on NURS 113 competencies. These courses are linked; failure in one course, with a grade of 'C-' or lower or 'U', requires repeat of all concurrent courses. [GE]

## Nursing Skills Lab I

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
<th>Concurrent Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 115</td>
<td>2</td>
<td></td>
<td>(NURS 110, 111, 112, 113, 114, 115, and ENGL 112)</td>
</tr>
</tbody>
</table>

Admission into the program required for enrollment. Supervised skills practice and competency achievement in the nursing skills lab. [GE]

## Family-Centered Nursing Concepts

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
<th>Concurrent Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 122</td>
<td>2</td>
<td></td>
<td>(NURS 110, 111, 112, 113, 114, 115, and ENGL 112)</td>
</tr>
</tbody>
</table>

Admission into the program required for enrollment. Application of theoretical, assessment, and practice concepts for nursing care of the family prenatally through the child years. These courses are linked; failure in one course, with a grade of 'C-' or lower or 'U', requires repeat of all concurrent courses. [GE]

## Medical-Surgical Nursing Concepts

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
<th>Concurrent Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 123</td>
<td>4</td>
<td></td>
<td>(NURS 110, 111, 112, 113, 114, 115, and ENGL 112)</td>
</tr>
</tbody>
</table>

Admission into the program required for enrollment. Application of theoretical, assessment, and practice concepts for nursing care of the family prenatally through the child years. These courses are linked; failure in one course, with a grade of 'C-' or lower or 'U', requires repeat of all concurrent courses. [GE]

## Nursing Skills Application II

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
<th>Concurrent Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 127</td>
<td>1</td>
<td></td>
<td>(NURS 110, 111, 112, 113, 114, 115, and ENGL 112)</td>
</tr>
</tbody>
</table>

Admission into the program required for enrollment. Practice and nursing skill achievement on NURS 126 competencies. These courses are linked; failure in one course, with a grade of 'C-' or lower or 'U', requires repeat of all concurrent courses. [GE]

## Nursing Skills Lab II

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
<th>Concurrent Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 128</td>
<td>2</td>
<td></td>
<td>(NURS 110, 111, 112, 113, 114, 115, and ENGL 112)</td>
</tr>
</tbody>
</table>

Admission into the program required for enrollment. Practice and nursing skill achievement on NURS 126 competencies. These courses are linked; failure in one course, with a grade of 'C-' or lower or 'U', requires repeat of all concurrent courses. [GE]

## Medical-Surgical Clinical Nursing I

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
<th>Concurrent Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 135</td>
<td>3</td>
<td></td>
<td>(NURS 110, 111, 112, 113, 114, 115, and ENGL 112)</td>
</tr>
</tbody>
</table>

Admission into the program required for enrollment. Introductory nursing management of medical-surgical health issues. Topics include but are not limited to: patient teaching/discharge planning, rehabilitation of medical-surgical patients, fluid and electrolytes, shock management, the immune response, infectious diseases, diabetes (including pediatric, adult and gestational), musculoskeletal disorders and the care of patients in the peri-operative setting. All topics address patients throughout the lifespan, and include obstetric patients in a medical-surgical setting. These courses are linked; failure in one course, with a grade of 'C-' or lower or 'U', requires repeat of all concurrent courses. [GE]

## Medical-Surgical Clinical Nursing II

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
<th>Concurrent Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 136</td>
<td>5</td>
<td></td>
<td>(NURS 110, 111, 112, 113, 114, 115, and ENGL 112)</td>
</tr>
</tbody>
</table>

Admission into the program required for enrollment. Introductory medical/surgical concepts applied to the clinical nursing management of the patient in the acute care and community setting. These courses are linked; failure in one course, with a grade of 'C-' or lower or 'U', requires repeat of all concurrent courses. [GE]

## Nursing Skills Application III

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
<th>Prerequisite</th>
<th>Concurrent Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 137</td>
<td>1</td>
<td></td>
<td>(NURS 110, 111, 112, 113, 114, 115, and ENGL 112)</td>
</tr>
</tbody>
</table>

Admission into the program required for enrollment. Practice and nursing skill related to the care of the medical-surgical patient. These courses are linked; failure in one course, with a grade of 'C-' or lower or 'U', requires repeat of all concurrent courses. [GE]
Nursing Skills Lab III
NURS 138
4 hours of lab
Concurrent enrollment in NURS 135, 136, 137 and NUTR 139.
Admission into the program required for enrollment. Practice and nursing
skill achievement of NURS 137 competencies. These courses are linked;
failure in one course, with a grade of 'C-' or lower or 'U', requires repeat of
all concurrent courses. [GE]

Cooperative Work Experience
NURS 199
15 hours of clinical
Admission into the program required for enrollment. Supervised work
experience in an approved job. Completion of specific learning objectives
and employer evaluation. [GE]

Medical-Surgical Nursing Concepts II
NURS 241
3 hours of lecture
Concurrent enrollment in NURS 242 and NUTR 240.
Admission into the program required for enrollment. Nursing
management of medical-surgical health issues involving cardiac,
respiratory, renal and gastrointestinal systems in the acute care or
community setting. Planning nursing interventions to include prevention
of disease and promotion of wellness. Emphasis on the biopsychosocial
effects of acute and chronic illness. All topics address patients
throughout the lifespan, and includes obstetric patients in a medical-
surgical setting. These courses are linked; failure in one course, with a
grade of 'C-' or lower or 'U', requires repeat of all concurrent courses. [GE]

Medical-Surgical Clinical Nursing II
NURS 242
16 hours of lab
Concurrent enrollment in NURS 241 and NUTR 240.
Admission into the program required for enrollment. Application of
advanced medical-surgical concepts with emphasis on the management
of the acutely ill client. These courses are linked; failure in one course,
with a grade of 'C-' or lower or 'U', requires repeat of all concurrent
courses. [GE]

Medical-Surgical Nursing Concepts III
NURS 251
2 hours of lecture
Concurrent enrollment in NURS 252 and PSYC 253.
Admission into the program required for enrollment. The study of
common medical-surgical issues related to hormonal control, sensory
perception, movement and coordination, and cancer. Emphasis is placed
on the nurse's role as primary caregiver, manager and educator for a
group of patients. The student will learn to plan and organize care for a
group of patients with emphasis on the nursing process, rehabilitation,
education, and the patient care delivery system. All topics address
patients throughout the lifespan, and includes obstetric patients in
a medical-surgical setting. These courses are linked; failure in one
course, with a grade of 'C-' or lower or 'U', requires repeat of all concurrent
courses. [GE]

Advanced Holistic Clinical Nursing
NURS 252
16 hours of lab
Concurrent enrollment in NURS 251 and PSYC 253.
Admission into the program required for enrollment. Emphasis is
placed on the nurse's role as caregiver, manager and educator for a
group of patients across medical-surgical and mental health settings.
In the med/surg setting, the student will plan and organize care for a
group of patients with emphasis on the nursing process, rehabilitation,
education, and the patient care delivery system. In the mental health
setting, the student will experience caring for patients in both inpatient
and outpatient environments. Patient problems relate to functional
impairment within acute and chronic phases of mental illness. These
courses are linked; failure in one course, with a grade of 'C-' or lower or 'U',
requires repeat of all concurrent courses. [GE]

Professional Leadership Transition to Practice
NURS 261
1 hours of lecture
Prerequisite: Concurrent enrollment in ENGL 273, NURS 261, NURS 262,
and NURS 264. Classes are linked: failure in one class requires repeat of
all concurrent enrollment classes.
Admission into the program required for enrollment. Explores principles
essential to the role development of the professional nurse within the
healthcare system. [GE]

Professional Leadership in Practice
NURS 262
4 Credits/Units
12 hours of clinical
Prerequisite: Concurrent enrollment in ENGL 273, NURS 261, NURS 262,
and NURS 264. Classes are linked: failure in one class requires repeat of
all concurrent enrollment classes.
Admission into the program required for enrollment. Clinical course where
students demonstrate competency of end of program student learning
outcomes in a precepted clinical learning environment as the student
prepares to enter the nursing profession. [GE]

NCLEX-RN Preparation
NURS 264
1 Credit/Unit
1 hours of lecture
Prerequisite: Concurrent enrollment in ENGL 273, NURS 261, NURS 262,
and NURS 264. Classes are linked: failure in one class requires repeat of
all concurrent enrollment classes.
Admission into the program required for enrollment. Students engage in a
systematic, focused, and comprehensive review of national prelicensure
content and test taking strategies to prepare for the NCLEX-RN exam. [GE]

Selected Topics
NURS 280
5 hours of lecture
Admission into the program required for enrollment. Selected topics in
nursing. Topics vary and course theme and content change to reflect new
topics. Because the course varies in content, it is repeatable for credit.
Specific topics are listed in the quarterly class schedule. [GE]

Special Projects
NURS 290
15 hours of lecture
Admission into the program required for enrollment. Opportunity to plan,
organize and complete special projects approved by the department. [GE]
**NUTRITION (NUTR/NUTR&)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits/Units</th>
<th>Lecture Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR 139</td>
<td>Nutrition In Healthcare I</td>
<td>1 Credit/Unit</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Examines the scientific, economic, cultural, ethnic, and psychological implications of nutrition in relation to health across the lifespan and in the context of healthcare professions. This course will cover the principles of nutrition in nursing and nutrition in health promotion from infants to older adults. [GE, NS, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUTR 240</td>
<td>Nutrition In Healthcare II</td>
<td>1 Credit/Unit</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Admission into the program required for enrollment. Builds on the concepts introduced in NUTR&amp; 101 and NUTR 139. Examines of the scientific, economic, cultural, ethnic, and psychological implications of nutrition in relation to health across the lifespan and in the context of healthcare professions. This course will cover nutrition in the nursing clinical practice including nutrition needs and limitations of patients with acute and chronic illnesses. [GE, NS, SE]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUTR&amp; 101</td>
<td>Nutrition</td>
<td>3 Credits/Units</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: CHEM&amp; 121 or higher (grade of &quot;C&quot; or higher) Examines the scientific, economic, cultural, ethnic, and psychological implications of nutrition in relation to health across the lifespan and in the context of healthcare professions. Covers principles of balance nutrition, physiology and metabolism of nutrients, and changing nutritional needs throughout the human life span. [GE, NS, SE]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
OCEANOGRAPHY (OCEA&)

Introduction to Oceanography
OCEA& 101 5 Credits/Units
3 hours of lecture / 4 hours of lab
An introduction to physical oceanography and its influence on global patterns. Topics will integrate the study of physical, chemical, geologic, atmospheric and biologic systems. Human-ocean interactions will be explored. Specific areas of study include ocean geologic structure and seawater composition, global circulation and ocean currents and their connection with atmospheric motions, hurricanes, waves, tides, tsunamis, the importance of oceans to understanding climate change, coastal processes, pollution impacts, El Nino/La Nina, and the influence of the physical environment on life. [GE, NS, NS-LAB, SE]
## PHARMACY (PHAR)

### Overview of Pharmacy

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Credits/Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 100</td>
<td>2</td>
<td>2 hours of lecture; Admission into the program required for enrollment. Overview of pharmacy with particular focus on the technician in pharmacy practice settings including job roles, resources and ethical standards of practice. [GE]</td>
</tr>
<tr>
<td>PHAR 101</td>
<td>1</td>
<td>1 hour of lecture; Admission into the program required for enrollment. A preview of the practice of pharmacy. Identifies the role of the pharmacy tech, explores various pharmacy practice settings for employment, beginning basics of the language of pharmacy, both in written and oral forms. [GE]</td>
</tr>
<tr>
<td>PHAR 105</td>
<td>4</td>
<td>4 hours of lecture; Admission into the program required for enrollment. Introduction to the role of the pharmacy technician in a variety of pharmacy practice settings including history, personnel, resources, and ethical standards of pharmacy practice. [GE]</td>
</tr>
<tr>
<td>PHAR 110</td>
<td>3</td>
<td>3 hours of lecture; Admission into the program required for enrollment. Basic math and arithmetic skills as they relate to pharmacy practice. Calculations and manipulations of metrics and related dosages. Pharmacy topics related to mathematical functions are emphasized. [GE]</td>
</tr>
<tr>
<td>PHAR 112</td>
<td>5</td>
<td>5 hours of lecture; Admission into the program required for enrollment. First of 2-term sequence in pharmacology. Topics include pharmacokinetic and pharmacodynamic principles of drug therapy, with focus on absorption, distribution, metabolism, excretion, drug classification, indication for use, dose, and side effects of the most common drugs, including antibiotics, analgesics, autonomic system, cardiovascular and respiratory drugs. [GE]</td>
</tr>
<tr>
<td>PHAR 114</td>
<td>5</td>
<td>3 hours of lecture / 4 hours of lab; Admission into the program required for enrollment. Pharmacy skills and knowledge essentials to the practice of pharmacy at the work site. Topics include correlation of terminology, computer system manipulation, use of current and emerging technology, and practical application of pharmacy dispensing activities. [GE]</td>
</tr>
<tr>
<td>PHAR 118</td>
<td>4</td>
<td>12 hours of clinical; Admission into the program required for enrollment. Practical on-the-job instruction in the knowledge base required of a pharmacy assistant (technician) in the work force. Community pharmacies/facilities will be used for this course. [GE]</td>
</tr>
</tbody>
</table>

### A Mini Dose of Pharmacy

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Credits/Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 119</td>
<td>1-2</td>
<td>1 hours of lecture; Admission into the program required for enrollment. First of 2-term sequence coordinating with PHAR 118 externship experience at work site. Topics include professionalism, productivity, handling challenging situations, and continuing education, with emphasis on success in the workplace. Group work, case study analysis, journal entries and a final written paper are required. [GE] [PNP]</td>
</tr>
<tr>
<td>PHAR 122</td>
<td>5</td>
<td>5 hours of lecture; Admission into the program required for enrollment. Second of 2-term sequence in pharmacology. Topics include pharmacokinetic and pharmacodynamic principles of drug therapy. Focus on absorption, distribution, metabolism, excretion, drug classification, indication for use, dose, and side effects of the most common drugs, including antidepressants and anti-anxiety agents, antipsychotics, anticonvulsants and other CNS disorder agents, hormone therapy, chemotherapy, antiretrovirals, as well as topicals, ophthalmics and otics. [GE]</td>
</tr>
<tr>
<td>PHAR 123</td>
<td>2</td>
<td>2 hours of lecture; Admission into the program required for enrollment. State and federal laws and regulations that pertain to the duties of pharmacy technicians. Revised Code of Washington and Washington Administrative Codes will be reviewed. [GE]</td>
</tr>
<tr>
<td>PHAR 129</td>
<td>4</td>
<td>12 hours of clinical; Admission into the program required for enrollment. Second of 2-term sequence coordinating with PHAR 128 externship experience. Topics include work ethics, interpersonal communication, problem solving, and success in the work place emphasized. Components include group work, case study analysis, journal entries and a final written and oral project. [GE]</td>
</tr>
</tbody>
</table>

### Pharmacy Calculations

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Credits/Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 128</td>
<td>4</td>
<td>12 hours of clinical; Concurrent enrollment in PHAR 119 required. Admission into the program required for enrollment. Practical on-the-job instruction in the knowledge base required of a pharmacy assistant (technician) in the work force. Community pharmacies/facilities will be used for this course. [GE]</td>
</tr>
<tr>
<td>PHAR 129</td>
<td>1-2</td>
<td>1 hours of lecture; Admission into the program required for enrollment. Overview of sterile products and aseptic technique for compounding of sterile products, intravenous (IV) drug delivery systems and equipment related to compounding and administration of IV products. Combination of lecture and lab projects. [GE]</td>
</tr>
<tr>
<td>PHAR 139</td>
<td>2</td>
<td>2 hours of lecture; Admission into the program required for enrollment. Reflect on experiences within the Pharmacy Technician Program by compiling a resume and cover letter, review and apply for the Pharmacy Technician Certification Exam (PTCE), and create a portfolio with appropriate assessments demonstrating fulfillment of program outcomes. [GE]</td>
</tr>
</tbody>
</table>
Pharmacy (PHAR)

Pharmacy Advanced Simulation Lab
PHAR 198 1 Credit/Unit
2 hours of lab
Admission into the program required for enrollment. Advanced lab concepts such as medication errors, interdisciplinary concepts, immunization practice, and a review of previous lab concepts with more in-depth practice. [C,GE,SE]

Selected Topics
PHAR 280 1-5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. Selected topics in pharmacy. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Specific topics are listed in the quarterly class schedule. [GE] [PNP]

Selected Topics - Lab
PHAR 281 1-5 Credits/Units
10 hours of lab
Admission into the program required for enrollment. Selected topics in Pharmacy. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE] [PNP]

Special Projects
PHAR 290 1-15 Credits/Units
15 hours of lecture
Admission into the program required for enrollment. Opportunity to plan, organize and complete special projects approved by the department. [GE] [PNP]
**PHILOSOPHY (PHIL/PHIL&)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits/Units</th>
<th>Hours of Lecture</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 110</td>
<td>5 Hours of lecture</td>
<td></td>
<td></td>
<td>Introduction to the fundamental theories of political and social philosophy and their practical relevance to contemporary issues. Elocution an inclusive perspective, highlights a wide array of scholarly voices, encompassing both Western and non-Western traditions. Explore topics such as the nature of justice, the impact of the economy on society, democracy and its alternatives, individual rights in the context of the state, the conceptualization of the state itself, and the profound influence of political ideologies, including conservatism, liberalism, anarchism, fascism, and communism, on social relations. [GE, HA, SE]</td>
</tr>
<tr>
<td>PHIL 215</td>
<td>5 Hours of lecture</td>
<td></td>
<td></td>
<td>Introduction to Ancient and Medieval Philosophy</td>
</tr>
<tr>
<td>PHIL 216</td>
<td>5 Hours of lecture</td>
<td></td>
<td></td>
<td>Introduction to Early Modern Philosophy</td>
</tr>
<tr>
<td>PHIL 217</td>
<td>5 Hours of lecture</td>
<td></td>
<td></td>
<td>Introduction to Late Modern Philosophy</td>
</tr>
<tr>
<td>PHIL 250</td>
<td>5 Hours of lecture</td>
<td></td>
<td></td>
<td>Ethics of Religion</td>
</tr>
<tr>
<td>PHIL 280</td>
<td>1-5 Hours of lecture</td>
<td></td>
<td></td>
<td>Selected Topics</td>
</tr>
<tr>
<td>PHIL 290</td>
<td>5 Hours of lecture</td>
<td></td>
<td></td>
<td>Special Projects</td>
</tr>
<tr>
<td>PHIL 420</td>
<td>5 Hours of lecture</td>
<td></td>
<td></td>
<td>Ethics in Management</td>
</tr>
<tr>
<td>PHIL 101</td>
<td>5 Hours of lecture</td>
<td></td>
<td></td>
<td>Introduction to Philosophy</td>
</tr>
<tr>
<td>PHIL 115</td>
<td>5 Hours of lecture</td>
<td></td>
<td></td>
<td>Critical Thinking</td>
</tr>
<tr>
<td>PHIL 120</td>
<td>5 Hours of lecture</td>
<td></td>
<td></td>
<td>Symbolic Logic</td>
</tr>
</tbody>
</table>

**Prerequisite:** MATH 96 (grade of "C" or higher) or placement into Math level 50.
PHLEBOTOMY (PHLE)

Phlebotomy Education W/Lab
PHLE 115 3 Credits/Units
2 hours of lecture / 2 hours of lab
Admission into the program required for enrollment. Training and skill development in a variety of venipuncture collection methods, skin punctures, and proper specimen handling procedures, as dictated by the Clinical and Laboratory Standards Institute (CLSI). Emphasis is placed on patient identification, specimen labeling, quality assurance, and infection prevention through use of standard precautions. [GE]

Basic Laboratory for The Phlebotomist
PHLE 116 3 Credits/Units
1 hours of lecture / 4 hours of lab
Admission into the program required for enrollment. Learn to perform basic laboratory procedures that are required during specimen processing and testing in a laboratory setting. Procedures include capillary microcollection, pipetting, creating aliquots, centrifugation, implementing infection control and quality control practices, and performing CLIA-waived laboratory tests. [GE]

Phlebotomy Clinical Experience
PHLE 197 5 Credits/Units
15 hours of clinical
Admission into the program required for enrollment. Supervised phlebotomy experience in a healthcare facility. Provides students with the opportunity to apply knowledge and skills in performing clinical laboratory procedures and to develop professional interactions with healthcare workers and patients. [GE]

Phlebotomy Clinical Seminar
PHLE 198 1 Credit/Unit
1 hours of lecture
Admission into the program required for enrollment. Develop tools and skills to aid in professionalism and future employment in the phlebotomy field. Includes resume building, interviewing skills, preparation for national phlebotomy certification exam and WA State Phlebotomy Licensure. Continuing education and research surrounding up-to-date phlebotomy practices and challenges in practice are other integral components of the course. [GE]

Selected Topics
PHLE 280 1-9 Credits/Units
9 hours of lecture
Admission into the program required for enrollment. Selected topics in Phlebotomy. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE]

Selected Topics - Lab
PHLE 281 1-9 Credits/Units
18 hours of lab
Admission into the program required for enrollment. Selected topics in Phlebotomy. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE]

Special Projects
PHLE 290 1-5 Credits/Units
5 hours of lecture
Admission into the program required for enrollment. Opportunity to plan, organize and complete special projects approved by the department. [GE]
PHYSICAL EDUCATION (PE)

Cardio Conditioning
PE 100 1 Credit/Unit
2 hours of lab
Basic group exercise to music, primarily targeting cardiovascular conditioning. [GE, PE, SE][PNP]

Introduction to Running
PE 101 1 Credit/Unit
2 hours of lab
Develop fitness through running, emphasizing various training methods, individual program development, and health benefits. [GE, PE, SE]

Fitness Walking
PE 102 1-2 Credits/Units
4 hours of lab
Emphasis on walking programs, including interval training, power walking, and race walking. Walking technique and health benefits also discussed. [GE, PE, SE][PNP]

Bench Step Aerobics
PE 103 1 Credit/Unit
2 hours of lab
Introduction to high-intensity/low impact exercise promoting overall body strength and cardiovascular fitness that involves stepping up and down on a bench step platform to music. [GE, PE, SE][PNP]

Speed, Agility, and Quickness
PE 107 1 Credit/Unit
2 hours of lab
Focuses on biomechanics of running, development of speed, agility and personal quickness. Learning of drills and enhancement of skills to improve personal performance. [GE, PE, SE][PNP]

Independent Fitness
PE 108 1-2 Credits/Units
4 hours of lab
A self-paced conditioning course for the motivated, self-directed student. Design, implement and document a goal-oriented fitness program with instructor advice and approval. Areas of concentration will be the three components of fitness: Cardiovascular endurance, muscular strength and muscular flexibility training. [GE, PE, SE][PNP]

Functional Fitness
PE 111 1 Credit/Unit
2 hours of lab
Utilizing functional movement patterns to improve core stabilization, posture, and balance. [GE, PE, SE][PNP]

Strength and Stretch
PE 112 1 Credit/Unit
2 hours of lab
Utilizing body weight and portable fitness equipment to improve muscular strength, tone, and flexibility. [GE, PE, SE][PNP]

Total Body Conditioning
PE 113 2 Credits/Units
4 hours of lab
Students will use fitness center equipment and a variety of conditioning activities to develop cardiovascular endurance, muscular strength, and flexibility. Course will emphasize how to structure an exercise plan to meet individualized goals. [GE, PE, SE][PNP]

Weight Training-Gen'l I
PE 115 1 Credit/Unit
2 hours of lab
Strength development through basic exercise and lift techniques. Beginning theories and techniques in fitness conditioning, body building, and power lifting. [GE, PE, SE]

Fitness Center
PE 116 1 Credit/Unit
2 hours of lab
Introduction to the fundamental skills necessary to implement a physical activity program in a fitness center setting. Students develop and implement an exercise program appropriate to their fitness level and individual needs using a variety of cardiovascular and resistance machines. [GE, PE, SE]

Weight Training-Power Lifting I
PE 117 2 Credits/Units
4 hours of lab
Conditioning class for students interested in strength improvement through heavy resistance training. The Olympic lifts along with numerous power/speed lifts will be performed for personal improvement in various fitness parameters. [GE, PE, SE][PNP]

Cross Training
PE 118 2 Credits/Units
4 hours of lab
Introduction to cross-training utilizing strength and conditioning principles and activities including: calisthenics, basic gymnastics, weightlifting and mobility. Cardio endurance and functional movement will also be covered and developed. [GE, PE, SE]

Cardio Kickboxing-Begin
PE 120 1 Credit/Unit
2 hours of lab
Combination of aerobic dance and martial arts, including American Kickboxing and Thai Boxing, in a format that increases cardiovascular endurance, sharpens reflexes and enhances power. [GE, PE, SE]

Yoga
PE 121 1 Credit/Unit
2 hours of lab
Introduction to hatha yoga (physical yoga) with an emphasis on postures, breathing and body-mind centering. [GE, PE, SE][PNP]

Healthy Heart-Beginning
PE 123 1 Credit/Unit
2 hours of lab
Cardiac prevention and rehabilitation exercise: designed to promote awareness and practice of exercise, nutrition, and stress. Skills in dealing with pre- and post-cardiac trauma. [GE, PE, SE][PNP]

Pilates-Beg
PE 124 1 Credit/Unit
2 hours of lab
Methods of conditioning covers the basic principles and exercise technique needed to increase core strength and stabilization, improve coordination, balance, postural awareness, and increase muscular flexibility and stamina. [GE, PE, SE]

Rock Climbing
PE 125 1 Credit/Unit
2 hours of lab
Basics of rock climbing. Focus on belay techniques and knot tying skills along with the essential styles of climbing safety and efficiently. [GE, PE, SE][PNP]
Kettlebell Conditioning
PE 126 1 Credit/Unit
2 hours of lab
Utilizing kettlebells in a variety of conditioning activities to develop muscular strength, power, cardiovascular endurance, and flexibility. Course will emphasize proper kettlebell technique and how to structure an exercise plan to meet individual goals. [GE, PE, SE]

Boot Camp-Beginning
PE 129 2 Credits/Units
4 hours of lab
Introduction to physical fitness for military purposes; emphasis on basic conditioning and discipline. This course is open to all students. [GE, PE, SE][PNP]

Archery - Beginning
PE 138 1 Credit/Unit
2 hours of lab
Introduction and experience of archery including skill development, strategies, rules, safety, and analysis of shooting techniques. [GE, PE, SE]

Basketball
PE 140 1 Credit/Unit
2 hours of lab
Ball handling, shooting, passing, offensive and defensive techniques, rules, strategy and competitive play. [GE, PE, SE][PNP]

Bowling
PE 143 1 Credit/Unit
2 hours of lab
Techniques, styles of play, rules of courtesy, scoring and competitive games. [GE, PE, SE][PNP]

Fencing-Foil
PE 147 1 Credit/Unit
2 hours of lab
Movement of fencing plus defense, offense, rules of boutsing, officiating, and competition. [GE, PE, SE][PNP]

Golf
PE 148 1 Credit/Unit
2 hours of lab
Fundamentals and practice of golf. Focuses on full-swing fundamentals, chipping, pitching, putting, golf strategies, and rules of the game. [GE, PE, SE][PNP]

Soccer
PE 150 1 Credit/Unit
2 hours of lab
Focus on individual offensive and defensive skills, game strategy, rules, and team tactics through the use of small-sided games and individual drills. [GE, PE, SE][PNP]

Softball
PE 153 1 Credit/Unit
2 hours of lab
Skills, rules and team play. [GE, PE, SE][PNP]

Tennis
PE 155 1 Credit/Unit
2 hours of lab
Basic tennis skills including grip, foot work, and strokes, such as backhand, forehand, volley and serve. The drop shot, lob, and overhead shots will be introduced, as will singles and doubles strategies, rules, scoring and court etiquette. [GE, PE, SE][PNP]

Volleyball
PE 158 1 Credit/Unit
2 hours of lab
Introduction to the fundamental skills and strategies of organized volleyball. Volleyball requires development of the following individual skills: forearm pass, set, spike, block, dig, and serve. In addition, students will gain an understanding of elementary team strategies. Students will learn to practice effective communication with teammates. [GE, PE, SE][PNP]

Pickleball - Beginning
PE 160 1 Credit/Unit
2 hours of lab
Pickleball is a game similar to tennis played on a badminton sized court. Development of eye-hand coordination along with the skills and proper techniques will be included in the active play of this popular world-wide game. [GE, PE, SE]

Ultimate Frisbee-Beginning
PE 163 1 Credit/Unit
2 hours of lab
Ultimate Frisbee fundamentals: individual skill development, rules, game play, and strategies. [GE, PE, SE][PNP]

Aqua Exercise
PE 171 1 Credit/Unit
2 hours of lab
Conditioning through water exercises for students with or without swimming ability. Increased fitness with emphasis on stretching, flexibility, and abdominal and back strength. [GE, PE, SE][PNP]

Scuba-Beginning
PE 173 2 Credits/Units
1 hours of lecture / 2 hours of lab
Classroom lectures and discussion, swimming pool practice, and diving safety. Supervised experience in open water training optional at extra cost. Successful completion qualifies student for certification card. [GE, PE, SE]

Beginning Swimming
PE 175 1 Credit/Unit
2 hours of lab
Learn and improve swimming, water survival, and safety skills. Introduction to Red Cross swimming strokes, while developing individual skill, endurance and comfort in the water. [GE, PE, SE][PNP]

Swimming-Intermediate
PE 176 1 Credit/Unit
2 hours of lab
Continuation of PE 175 for students who need additional instruction and practice to improve and increase their swimming skill and confidence. [GE, PE, SE][PNP]

Softball Conditioning-Beginning
PE 179 1 Credit/Unit
2 hours of lab
Emphasizes swimming fitness through lap swimming. Students will participate in a workout designed to address their particular fitness and skill level. [GE, PE, SE][PNP]

Hiking
PE 182 1 Credit/Unit
2 hours of lab
Experience hiking off-campus on designated trails. Course emphasizes basic safety and survival skills and practices low-impact hiking methods. [GE, PE, SE][PNP]
Rowing-Beginning
PE 183 1 Credit/Unit
2 hours of lab
Introduction to the sport of rowing. Includes basic technique and terminology, related water safety, development of strength, endurance and flexibility. Skills include rowing, strength training, cardiovascular training. See Course Information Sheet outside OSC 206 for more information. [GE, PE, SE][PNP]

Cooperative Work Experience
PE 199 1-5 Credits/Units
15 hours of clinical
Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE, PE, SE][PNP]

Cardio Conditioning-Intermediate
PE 200 1 Credit/Unit
2 hours of lab
Prerequisite: PE 100 (grade of "C" or higher)
Intermediate group exercise to music, primarily targeting cardiovascular conditioning. [GE, PE, SE][PNP]

Fitness Walking-Intermediate
PE 202 1-2 Credits/Units
4 hours of lab
Prerequisite: PE 102 (grade of "C" or higher)
Intermediate fitness walking with emphasis on walking programs and technique. [GE, PE, SE][PNP]

Bench Step Aerobics-Intermediate
PE 203 1 Credit/Unit
2 hours of lab
Prerequisite: PE 103 (grade of "C" or higher)
Intermediate high-intensity/low impact exercise program using a bench step promoting overall body strength and cardiovascular fitness. [GE, PE, SE][PNP]

Circuit Fitness - Intermediate
PE 204 1 Credit/Unit
2 hours of lab
Prerequisite: PE 104 (grade of "C" or higher)
An individualized systematic approach to cardiovascular fitness through the use of multiple weight machines and aerobic equipment. Pre and post fitness assessments conducted. [GE, PE, SE][PNP]

Speed, Agility, and Quickness
PE 207 1 Credit/Unit
2 hours of lab
Prerequisite: PE 107 (grade of "C" or higher)
Additional drills to further advance personal ability in running, quickness, speed. Includes advanced plyometric training techniques. [GE, PE, SE][PNP]

Independent Fitness - Intermediate
PE 208 1-2 Credits/Units
4 hours of lab
Prerequisite: PE 108 (grade of "C" or higher)
A continuation of the self-paced conditioning course, plus setting and implementing an additional personalized health related goal to be determined at the first individual meeting with instructor. [GE, PE, SE][PNP]

Functional Fitness
PE 211 1 Credit/Unit
2 hours of lab
Prerequisite: PE 111 (grade of "C" or higher)
Continuation of PE 111. Utilizing functional movement patterns to improve core stabilization, posture, and balance. More advanced techniques introduced. [GE, PE, SE][PNP]

Strength and Stretch-Intermediate
PE 212 1 Credit/Unit
2 hours of lab
Prerequisite: PE 112 (grade of "C" or higher)
Continuation of PE 112. Utilizing body weight and portable fitness equipment to improve muscular strength, tone, and flexibility. [GE, PE, SE][PNP]

Total Body Conditioning-Intermediate
PE 213 2 Credits/Units
4 hours of lab
Prerequisite: PE 113 (grade of "C" or higher)
Continuation of individualized conditioning program for developing the various components of fitness. Additional focus on learning principles of fitness to create personalized workouts. [GE, PE, SE][PNP]

Triathlon Training
PE 214 2 Credits/Units
4 hours of lab
Theoretical basis and competencies needed to safely and effectively train to complete a small triathlon will be explored. Activities include swimming, cycling and running along with a self-contained mini triathlon at course conclusion. Students must know how to swim and have their own bicycle. [GE, PE, SE][PNP]

Weight Training-General II
PE 215 1 Credit/Unit
2 hours of lab
Designed for the student who is interested in a more in-depth approach to advanced weight training exercises, programs, and systems. [GE, PE, SE][PNP]

Fitness Center-Intermediate
PE 216 1 Credit/Unit
2 hours of lab
Introduction to the fundamental skills necessary to implement a physical activity program in a fitness center setting. Students develop and implement an exercise program appropriate to their fitness level and individual needs using a variety of cardiovascular and resistance machines. [GE, PE, SE][PNP]

Weight Lifting II
PE 217 2 Credits/Units
4 hours of lab
Prerequisite: PE 117 (grade of "C" or higher)
Continued application of skill and conditioning level. Application of workout design and training theory will also be covered and applied. Assessment of personal fitness parameters. [GE, PE, SE][PNP]

Cardio Kickboxing-Int
PE 220 1 Credit/Unit
2 hours of lab
Prerequisite: PE 120 (grade of "C" or higher)
Continuation of PE 120. Intermediate students will demonstrate more advanced techniques and perform moves that require greater conditioning. Combines aerobic dance and martial arts, including American Kickboxing and Thai Boxing, in a format that increases cardiovascular endurance, sharpens reflexes and enhances power. [GE, PE, SE][PNP]
Yoga—Intermediate
PE 221  1 Credit/Unit
2 hours of lab
Prerequisite: PE 121 (grade of “C” or higher)
A continuation of Hatha yoga technique. Students will practice more advanced postures and a deeper exploration of body-mind centering. [GE, PE, SE][PNP]

Healthy Heart—Intermediate
PE 223  1 Credit/Unit
2 hours of lab
Prerequisite: PE 123 (grade of “C” or higher)
Continuation of exercise designed to lower risk for heart disease or to promote cardiac recovery. Study of healthy nutrition and stress reduction in the prevention of heart disease. [GE, PE, SE][PNP]

Pilates—Intermediate
PE 224  1 Credit/Unit
2 hours of lab
Prerequisite: PE 124 (grade of “C” or higher)
Continuation of Pilates method of conditioning needed to increase core strength and stabilization, improve coordination, balance, postural awareness, and increase muscular flexibility and stamina. [GE, PE, SE][PNP]

Rock Climbing—Intermediate
PE 225  1 Credit/Unit
2 hours of lab
Prerequisite: PE 125 (grade of “C” or higher)
Learn advanced rock climbing methods. Bouldering technique and Lead Climbing skills will be taught, taking the student beyond the skills learned in PE 125. [GE, PE, SE][PNP]

Boot Camp—Intermediate
PE 229  2 Credits/Units
4 hours of lab
Prerequisite: PE 129 (grade of “C” or higher)
Continuation of physical fitness for military purposes; emphasis on basic conditioning, discipline, and leadership. This course is open to all students. [GE, PE, SE][PNP]

Archery—Intermediate
PE 238  1 Credit/Unit
2 hours of lab
Prerequisite: PE 138 (grade of “C” or higher)
Introduction and experience of archery including skill development, strategies, rules, safety, and analysis of shooting techniques. Students will engage in a competitive shoot within class to evaluate their skill set. [GE, PE, SE]

Basketball—Intermediate
PE 240  1 Credit/Unit
2 hours of lab
Prerequisite: PE 140 (grade of “C” or higher)
Continuation of skills, practice, and competitive play. [GE, PE, SE][PNP]

Bowling—Intermediate
PE 243  1 Credit/Unit
2 hours of lab
Prerequisite: PE 143 (grade of “C” or higher)
Advanced instruction in all phases of bowling including league play and competition. [GE, PE, SE]

Fencing—Foil, Sabre, Epee
PE 246  1 Credit/Unit
2 hours of lab
Movements of all three weapons of fencing. Emphasizes defense, offense, rules, officiating and competition. [GE, PE, SE][PNP]

Fencing—Foil—Intermediate
PE 247  1 Credit/Unit
2 hours of lab
Prerequisite: PE 147 (grade of “C” or higher)
Skill refinement and advanced technique for experienced foil fencers. [GE, PE, SE][PNP]

Golf—Intermediate
PE 248  1 Credit/Unit
2 hours of lab
More advanced instruction on golf swing, short game, and golf strategies. [GE, PE, SE][PNP]

Soccer—Intermediate
PE 250  1 Credit/Unit
2 hours of lab
Prerequisite: PE 150 (grade of “C” or higher)
Focus on learning and applying more advanced individual skills utilizing small and large groups to demonstrate more advanced team tactics. [GE, PE, SE][PNP]

Tennis—Intermediate
PE 255  1 Credit/Unit
2 hours of lab
Prerequisite: PE 155 (grade of “C” or higher)
Refinement of tennis skills, advanced game strategies and strokes. Observe and assist 100 level students. [GE, PE, SE][PNP]

Volleyball—Intermediate
PE 258  1 Credit/Unit
2 hours of lab
Prerequisite: PE 158 (grade of “C” or higher)
Further development of individual skills, team offenses and defenses learned in the beginning level PE 158. [GE, PE, SE][PNP]

Pickleball—Intermediate
PE 260  1 Credit/Unit
2 hours of lab
Pickleball is a game similar to tennis played on a badminton sized court. Development of eye-hand coordination along with the skills and proper techniques will be included in the active play of this popular world-wide game. In this second course, competitive games and scoring strategy will be covered. [GE, PE, SE]

Ultimate Frisbee—Intermediate
PE 263  1 Credit/Unit
2 hours of lab
Prerequisite: PE 163 (grade of “C” or higher)
Continuation of individual skill development, rules, game play, and strategies for the intermediate level ultimate Frisbee player. [GE, PE, SE][PNP]

Aqua Exercise—Intermediate
PE 271  1 Credit/Unit
2 hours of lab
Prerequisite: PE 171 (grade of “C” or higher)
Continuation of water exercise conditioning through stretching, flexibility, abdominal and back strength. [GE, PE, SE][PNP]
<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Credits</th>
<th>Units</th>
<th>Hours of Lab</th>
<th>Hours of Lecture</th>
<th>Prerequisite</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swimming-Stroke Improvement</td>
<td>PE 275</td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
<td>PE 175 (grade of &quot;C&quot; or higher)</td>
<td>Review Red Cross swimming strokes, water survival and safety skills. For the swimmer who is comfortable in deep water and can swim 25 yards. [GE, PE, SE][PNP]</td>
</tr>
<tr>
<td>Swim Conditioning-Intermediate</td>
<td>PE 279</td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
<td>PE 179 (grade of &quot;C&quot; or higher)</td>
<td>Continued practice of swimming fitness through lap swimming. Students will participate in a workout designed to address their particular fitness and skill level. [GE, PE, SE][PNP]</td>
</tr>
<tr>
<td>Selected Topics</td>
<td>PE 280</td>
<td>1-5</td>
<td>Units</td>
<td>5</td>
<td></td>
<td></td>
<td>Selected topics in Physical Education. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE, PE, SE]</td>
</tr>
<tr>
<td>Hiking-Intermediate</td>
<td>PE 282</td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>Continuation of hiking skills with focus on advanced safety and survival skills. Explore local hiking options, practice low-impact hiking methods on longer, more challenging hikes, and plan a future hike. [GE, PE, SE][PNP]</td>
</tr>
<tr>
<td>Rowing-Intermediate</td>
<td>PE 283</td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
<td>PE 183 (grade of &quot;C&quot; or higher)</td>
<td>Further development of rowing technique, tactics and fitness development. [GE, PE, SE][PNP]</td>
</tr>
<tr>
<td>Special Projects</td>
<td>PE 290</td>
<td>1-5</td>
<td>Units</td>
<td>5</td>
<td></td>
<td></td>
<td>Opportunity to plan, organize and complete special projects approved by the department. [GE]</td>
</tr>
<tr>
<td>Introduction to Sports Officiating</td>
<td>PE 295</td>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>This is an introductory course to sports officiating, exploring basic officiating skills including but not limited to communication, conflict management, professionalism, and personal fitness. In addition, practical experience in sport-specific officials associations will prepare students for national and local certifications that will enhance employment opportunities. [GE]</td>
</tr>
</tbody>
</table>
Physical Education Dance (PEDNC)

Ballet-Beginning
PEDNC 130 1 Credit/Unit
2 hours of lab
Beginning ballet technique including barre and center work. [GE, PE, SE]

Ballroom Dance: Mixed
PEDNC 131 1 Credit/Unit
2 hours of lab
Fundamentals, forms and pattern of ballroom dance. Develop confidence through practice with a variety of partners in both smooth and latin style dances to include: waltz, tango, fox trot, quick step and Viennese waltz, mambo, cha cha, rhumba, samba, salsa. [GE, PE, SE]

Ballroom Dance: Smooth
PEDNC 132 1 Credit/Unit
2 hours of lab
Fundamentals, forms and pattern of ballroom dance. Develop confidence through practice with a variety of partners. Smooth style dances include waltz, tango, fox trot, quick step and Viennese waltz. [GE, PE, SE]

Ballroom Dance: Latin
PEDNC 133 1 Credit/Unit
2 hours of lab
Fundamentals, forms and pattern of ballroom dance. Develop confidence through practice with a variety of partners. Latin style dances include: mambo, cha cha, rhumba, samba, salsa. [GE, PE, SE]

Contemporary Dance
PEDNC 134 1 Credit/Unit
2 hours of lab
Fundamentals and techniques of modern dance and rhythmic self-expression. [GE, PE, SE]

Swing Dance-Beginning
PEDNC 135 1 Credit/Unit
2 hours of lab
Basic patterns and partnering skills for East Coast Swing (jive), West Coast Swing (hustle), and Lindy Hop. Course covers dance technique, partnering skills, patterns and music identification. [GE, PE, SE]

Modern Jazz
PEDNC 136 1 Credit/Unit
2 hours of lab
Beginning Modern Jazz technique. Students will study fundamental moves and learn a routine. [GE, PE, SE]

Hip-Hop Dance
PEDNC 137 1 Credit/Unit
2 hours of lab
Introduction to basic dance techniques, floor combinations, balance, and longer dance routines of hip hop dance. Develop confidence and skill through practice. [GE, PE, SE]

Tap Dance
PEDNC 138 1 Credit/Unit
2 hours of lab
Introduction to beginning tap dance. Basic fundamentals will be studied and combinations will be put to use daily. Routines will be learned. [GE, PE, SE]

Zumba
PEDNC 140 1 Credit/Unit
2 hours of lab
A fusion of Latin and international music-dance themes, featuring aerobic/fitness interval training with a combination of fast and slow rhythms that tone and sculpt the body. [GE, PE, SE]

Hula
PEDNC 141 1 Credit/Unit
2 hours of lab
Focus on Hawaiian traditional dance forms. [GE, PE, SE]

African Dance
PEDNC 142 1 Credit/Unit
2 hours of lab
Introduction to African dance, which focuses on drumming, rhythm, and music predominantly of West Africa. [GE, PE, SE]

Bollywood
PEDNC 143 1 Credit/Unit
2 hours of lab
Introduction to dances of India, sometimes referred to as Indian Fusion. Dance styles focus on semi-classical, regional, folk, bhangra, and everything in between--up to westernized contemporary bollywood dance. [GE, PE, SE]

Irish Dance
PEDNC 144 1 Credit/Unit
2 hours of lab
Introduction to Irish dance, focusing on soft shoe and Ceili (group) dances. Dances include reel, jig, and hornpipe. [GE, PE, SE]

Belly Dance
PEDNC 145 1 Credit/Unit
2 hours of lab
Gain knowledge of movement and dance steps, culture and history, various rhythms, country of origin and related movements. Egyptian music is the predominant focus. [GE, PE, SE]

Ballet-Intermediate
PEDNC 230 1 Credit/Unit
2 hours of lab
Prerequisite: PEDNC 130 (grade of "C" or higher)
Stronger techniques with more advanced steps and combinations including toe. [GE, PE, SE]

Ballroom Dance-Intermediate: Mixed
PEDNC 231 1 Credit/Unit
2 hours of lab
Prerequisite: PEDNC 131 or PEDNC 132 (grade of "C" or higher)
Fundamentals, forms and pattern of ballroom dance. Develop confidence through practice with a variety of partners. Smooth style dances include waltz, tango, fox trot, quick step and Viennese waltz, mambo, cha cha, rhumba, samba, salsa. [GE, PE, SE]
<table>
<thead>
<tr>
<th>Dance</th>
<th>Level</th>
<th>Code</th>
<th>Credits/Units</th>
<th>Lab Hours</th>
<th>Prerequisite</th>
<th>Description</th>
<th>GE, PE, SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballroom Dance-Intermediate: Latin</td>
<td>PEDNC 233</td>
<td>1 Credit/Unit</td>
<td>2 hours of lab</td>
<td>PEDNC 131 or PEDNC 132 (grade of &quot;C&quot; or higher)</td>
<td>Fundamentals, forms and pattern of ballroom dance. Develop confidence through practice with a variety of partners. Latin dance sections will include: mambo, cha cha, rhumba, samba, and salsa.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contemporary Dance-Intermediate</td>
<td>PEDNC 234</td>
<td>1 Credit/Unit</td>
<td>2 hours of lab</td>
<td>PEDNC 134 (grade of &quot;C&quot; or higher)</td>
<td>Intermediate techniques with opportunities for individual and group composition.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swing Dance-Intermediate</td>
<td>PEDNC 235</td>
<td>1 Credit/Unit</td>
<td>2 hours of lab</td>
<td>PEDNC 135 (grade of &quot;C&quot; or higher)</td>
<td>Includes partnering techniques such as leverage, posture, hovering, contrary body movement, rise and fall, and sway, and styling such as Cuban motion for Latin, spring action for East Coast Swing and heel leads for smooth. Introduction to opposite role as lead/follow.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modern Jazz-Intermediate</td>
<td>PEDNC 236</td>
<td>1 Credit/Unit</td>
<td>2 hours of lab</td>
<td>PEDNC 136 (grade of &quot;C&quot; or higher)</td>
<td>Refinement of jazz technique and skill improvement.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hip-Hop Dance-Intermediate</td>
<td>PEDNC 237</td>
<td>1 Credit/Unit</td>
<td>2 hours of lab</td>
<td>PEDNC 137 (grade of &quot;C&quot; or higher)</td>
<td>Intermediate study of dance techniques, floor combinations, balance, and longer dance routines of hip hop dance. Develop more confidence and skill through practice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tap Dance-Intermediate</td>
<td>PEDNC 238</td>
<td>1 Credit/Unit</td>
<td>2 hours of lab</td>
<td>PEDNC 138 (grade of &quot;C&quot; or higher)</td>
<td>Intermediate tap dance techniques. Going beyond the basic fundamentals, intermediate level steps and combinations will be studied and put to use daily. Routines will be learned. Student choreography may be included.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African Dance-Intermediate</td>
<td>PEDNC 242</td>
<td>1 Credit/Unit</td>
<td>2 hours of lab</td>
<td>PEDNC 142 (grade of &quot;C&quot; or higher)</td>
<td>Continuation of African dance, which focuses on drumming, rhythm, and music predominantly of West Africa.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bollywood Dance-Intermediate</td>
<td>PEDNC 243</td>
<td>1 Credit/Unit</td>
<td>2 hours of lab</td>
<td>PEDNC 143 (grade of &quot;C&quot; or higher)</td>
<td>Continuation of the dances of India, sometimes referred to as Indian Fusion. Dance styles focus on semi-classical, regional, folk, bhangra, and everything in between—up to westernized contemporary bollywood dance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hula Dance-Intermediate</td>
<td>PEDNC 241</td>
<td>1 Credit/Unit</td>
<td>2 hours of lab</td>
<td>PEDNC 145 (grade of &quot;C&quot; or higher)</td>
<td>Focus on Hawaiian traditional dance forms.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zumba</td>
<td>PEDNC 240</td>
<td>1-3 Credits/Units</td>
<td>6 hours of lab</td>
<td>PEDNC 140 (grade of &quot;C&quot; or higher)</td>
<td>A fusion of Latin and International music-dance themes, featuring aerobic/fitness interval training with a combination of fast and slow rhythms that tone and sculpt the body.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irish Dance-Intermediate</td>
<td>PEDNC 244</td>
<td>1 Credit/Unit</td>
<td>2 hours of lab</td>
<td>PEDNC 144 (grade of &quot;C&quot; or higher)</td>
<td>Intermediate Irish Dance course on more advanced soft shoe solo and Ceili (group) dances. Dances include the reel, jig, and hornpipe.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belly Dance-Intermediate</td>
<td>PEDNC 245</td>
<td>1 Credit/Unit</td>
<td>2 hours of lab</td>
<td>PEDNC 145 (grade of &quot;C&quot; or higher)</td>
<td>Continuation of the skills learned in PEDNC 145, plus new variations and intermediate study of Middle Eastern Dance techniques.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PHYSICAL EDUCATION EXCERCISE SCIENCE (PEEXS)

Care and Prevention of Athletic Injuries
PEEXS 291 3 Credits/Units
2 hours of lecture / 2 hours of lab
Prerequisite: FT 150, BIOL 164, or BIOL& 251 (grade of "C" or higher)
Injury prevention in sports through understanding of conditioning, bio-
mechanics, taping, bandaging, nutrition, immediate post-injury care, and
rehabilitation of sports injury. [GE, SE][PNP]

Mental Performance In Sports
PEEXS 293 3 Credits/Units
3 hours of lecture
Theories and strategies of mental preparation for improvement in
individual and team performances. Discussion topics include: personality,
motivational model, time management/goal setting techniques.
Coach profiles, team communication, steps to team building, stress
management and performance anxiety and imagery will also be covered.
A review of current literature and the case analysis method will provide
opportunity for individual and group application of presented materials.
[GE, SE][PNP]

Sport In Society
PEEXS 294 3 Credits/Units
3 hours of lecture
Explores the relationship which exists between the multifaceted world of
sport and society. Discussion topics include: racism, gender in equality,
aggression, deviancy, media/commercialism, as well as youth sports.
Discussion will also include the concept of play, competition and the
rapid development of youth sport programs and their impact on the
family unit. [GE, PE, SE][PNP]

Introduction to Sports Officiating
PEEXS 295 2 Credits/Units
2 hours of lecture
This is an introductory course to sports officiating, exploring basic
officiating skills including but not limited to communication, conflict
management, professionalism, and personal fitness. In addition, practical
experience in sport-specific officials associations will prepare students
for national and local certifications that will enhance employment
opportunities. [GE]
PHYSICAL EDUCATION
MARTIAL ARTS (PEMAR)

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Credit/Unit</th>
<th>Lab Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>T'ai Chi</td>
<td>PEMAR 150</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T'ai Chi</td>
<td>PEMAR 150</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>T'ai Chi is an ancient form of mental and spiritual discipline developed in China. The movements of the t'ai chi form are slow and deliberate, helping with relaxation, focus, strengthening, and balance. [GE, PE, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Martial Arts: T'ai Chi Do</td>
<td>PEMAR 151</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>T'ai Chi is an ancient form of mental and spiritual discipline developed in China. The movements of the t'ai chi form are slow and deliberate, helping with relaxation, focus, strengthening, and balance. [GE, PE, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tae Kwon Do</td>
<td>PEMAR 152</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Tae Kwon Do is a Korean martial art that predominately focuses on kicking. [GE, PE, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kung Fu</td>
<td>PEMAR 152</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Kung-Fu is a Chinese method of self-defense. Students will learn history, philosophy, basic strikes, blocks, and escapes from various attacks and grabs. [GE, PE, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Martial Arts: Kung Fu Do</td>
<td>PEMAR 153</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Brazilian Jiu-Jitsu Do</td>
<td>PEMAR 153</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Brazilian Jiu-Jitsu is a Brazilian sport/self defense that uses grappling, wrestling, and locking techniques. A uniform is required. [GE, PE, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judo</td>
<td>PEMAR 154</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Judo is a close-quarter combat martial art where students learn falling techniques, basic takedowns, escapes, and joint locks. [GE, PE, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self Defense</td>
<td>PEMAR 155</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>This course is designed to teach the student basic self-defense techniques as well as situational awareness through class participation and discussion. [GE, PE, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T'ai Chi Intermediate</td>
<td>PEMAR 250</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>T'ai Chi is an ancient form of mental and spiritual discipline developed in China. The movements of the t'ai chi form are slow and deliberate, helping with relaxation, focus, strengthening, and balance. [GE, PE, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Martial Arts-Intermediate: Tae Kwon Do</td>
<td>PEMAR 251</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Tae Kwon Do is a Korean martial art that predominately focuses on kicking. [GE, PE, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Martial Arts-Intermediate: Kung Fu Do</td>
<td>PEMAR 252</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Kung-Fu is a Chinese method of self-defense. Students will learn history, philosophy, basic strikes, blocks, and escapes from various attacks and grabs. [GE, PE, SE]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How the world around us behaves depends on the nature of matter and energy. Physical laws are presented in this course that describe the interaction of matter and energy. These laws are used to help explain experiences from daily life. For the non-science major, with little or no science background. [GE, NS, NS-LAB, SE]

A chemistry-focused physical science class, in which we will explore practical applications of chemical reactions. Different branches of chemistry such as inorganic, organic, biochemistry and green chemistry will be discussed as they pertain to the real world. For non-science majors with little or no science background. [GE, NS, NS-LAB, SE]

Introduction to basic chemical concepts using cooperative learning and the backdrop of environmental science. This course is writing-intensive, requiring weekly essays discussing select chemical applications in the world around us. Topics include: energy and nutrient flow through the ecosystem; chemical hurdles facing agriculture; chemical, physical, and nuclear reactions of energy production; ramifications of chemical pollution; green chemical solutions. Intended for non-science majors with little or no scientific background. [GE, NS, SE]

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]

Selected topics in Physical Science. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE]
PHYSICS (PHYS/PHYS&)  

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 91</td>
<td>1 Credit/Unit</td>
<td>Methods of problem-solving in physics. [PNP]</td>
</tr>
<tr>
<td>PHYS 92</td>
<td>1 Credit/Unit</td>
<td>Methods of problem-solving in physics. [PNP]</td>
</tr>
<tr>
<td>PHYS 93</td>
<td>1 Credit/Unit</td>
<td>Methods of problem-solving in physics. [PNP]</td>
</tr>
<tr>
<td>PHYS 94</td>
<td>1 Credit/Unit</td>
<td>Methods of problem-solving in physics. [PNP]</td>
</tr>
<tr>
<td>PHYS 95</td>
<td>1 Credit/Unit</td>
<td>Methods of problem-solving in physics. [PNP]</td>
</tr>
<tr>
<td>PHYS 96</td>
<td>1 Credit/Unit</td>
<td>Methods of problem-solving in physics. [PNP]</td>
</tr>
</tbody>
</table>

Physics Lab Non-Sci Majors  
PHYS& 101  
1 Credit/Unit  
3 hours of lab  
Prerequisite: Concurrent enrollment in PHYS 100.  
Laboratory study of basic physics concepts for non-science majors, technical students, or students who desire a PHYS 121 or 221 preparatory course. [GE, NS, NS-LAB, SE]  

General Physics Lab I  
PHYS 124  
1 Credit/Unit  
3 hours of lab  
Prerequisite: College Trigonometry (MATH 102 or MATH 103) grade of "C" or higher, and concurrent enrollment in PHYS 134, PHYS 124 and PHYS 91.  
Exploration of classical physics topics in mechanics through laboratory experience. [GE, NS, NS-LAB, SE]  

General Physics Lab II  
PHYS 125  
1 Credit/Unit  
3 hours of lab  
Prerequisite: College Trigonometry (MATH 102 or MATH 103) grade of "C" or higher, and concurrent enrollment in PHYS 134, PHYS 124 and PHYS 91.  
Exploration of classical physics topics in fluids, thermodynamics, and sound through laboratory experience. [GE, NS, NS-LAB, SE]  

General Physics Lab III  
PHYS 126  
1 Credit/Unit  
3 hours of lab  
Prerequisite: College Trigonometry (MATH 102 or MATH 103) grade of "C" or higher, and concurrent enrollment in PHYS 134, PHYS 126 and PHYS 93.  
Exploration of classical physics topics in electricity and magnetism, optics, and modern physics through laboratory experience. [GE, NS, NS-LAB, SE]  

Cooperative Work Experience  
PHYS 199  
1-3 Credits/Units  
9 hours of clinical  
Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]  

Special Projects  
PHYS 290  
1-5 Credits/Units  
5 hours of lecture  
Opportunity to plan, organize and complete special projects approved by the department. [GE]  

Physics Non-Sci Majors  
PHYS& 100  
4 Credits/Units  
4 hours of lecture  
Prerequisite: MATH 90 (grade of "C" or higher), or placement into Math level 40 and concurrent enrollment in PHYS& 101.  
Introduction to basic physics concepts for non-science majors, technical students, or students who desire a PHYS& 121 or 221 preparatory course. [GE, NS, SE]  

Physics Major  
PHYS& 101  
1 Credit/Unit  
3 hours of lab  
Prerequisite: Concurrent enrollment in PHYS 100.  
Laboratory study of basic physics concepts for non-science majors, technical students, or students who desire a PHYS& 121 or 221 preparatory course. [GE, NS, NS-LAB, SE]  

General Physics  
PHYS 124  
1 Credit/Unit  
3 hours of lab  
Prerequisite: College Trigonometry (MATH 102 or MATH 103) grade of "C" or higher, and concurrent enrollment in PHYS 134, PHYS 124 and PHYS 91.  
Exploration of classical physics topics in mechanics through laboratory experience. [GE, NS, NS-LAB, SE]  

General Physics  
PHYS 134  
4 Credits/Units  
4 hours of lecture  
Prerequisite: College Trigonometry (MATH 102 or MATH 103) grade of "C" or higher, and concurrent enrollment in PHYS 134, PHYS 124 and PHYS 91.  
First of a three-term sequence, offered in fall and winter quarters. Physical principles of motion, equilibrium, dynamics, gravity, work energy, momentum, and fluids. Recommended for students in medicine, dentistry, pharmacy, physical therapy, forestry and the life sciences. [GE, NS, SE]  

General Physics II  
PHYS 135  
4 Credits/Units  
4 hours of lecture  
Prerequisite: College Trigonometry (MATH 102 or MATH 103) grade of "C" or higher, and concurrent enrollment in PHYS 134, PHYS 125 and PHYS 92.  
Second of a three-term sequence beginning with PHYS 134. Fundamental physical principles of sound, fluids, heat, thermodynamics, electricity, and magnetism. [GE, NS, SE]  

General Physics III  
PHYS 136  
4 Credits/Units  
4 hours of lecture  
Prerequisite: College Trigonometry (MATH 102 or MATH 103) grade of "C" or higher, and concurrent enrollment in PHYS 134, PHYS 126 and PHYS 93.  
Third of a three-term sequence beginning with PHYS 134. Topics in electricity, magnetism, atomic and nuclear physics, and optics. [GE, NS, SE]
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Units</th>
<th>Prerequisite</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS&amp; 231</td>
<td>Physics (PHYS/PHYS&amp;) I</td>
<td>1 Credit/Unit</td>
<td>3 hours of lab</td>
<td>Concurrent enrollment in, or completion of MATH&amp; 152 (grade of &quot;C&quot; or higher) and concurrent enrollment in PHYS&amp; 231, PHYS&amp; 241 and PHYS 94.</td>
<td>Students will explore classical physics topics in mechanics through laboratory experience. [GE, NS, NS-LAB, SE]</td>
</tr>
<tr>
<td>PHYS&amp; 232</td>
<td>Physics (PHYS/PHYS&amp;) II</td>
<td>1 Credit/Unit</td>
<td>3 hours of lab</td>
<td>PHYS&amp; 241 (grade of &quot;C&quot; or higher) and concurrent enrollment in PHYS&amp; 232, PHYS&amp; 242 and PHYS 95.</td>
<td>Students will explore classical physics topics in fluids, thermodynamics, and sound through laboratory experience. [GE, NS, NS-LAB, SE]</td>
</tr>
<tr>
<td>PHYS&amp; 233</td>
<td>Physics (PHYS/PHYS&amp;) III</td>
<td>1 Credit/Unit</td>
<td>3 hours of lab</td>
<td>PHYS&amp; 242 (grade of &quot;C&quot; or higher) and concurrent enrollment in PHYS&amp; 233, PHYS&amp; 243 and PHYS 96.</td>
<td>Students will explore classical physics topics in electricity and magnetism, optics, and modern topics through laboratory experience. [GE, NS, NS-LAB, SE]</td>
</tr>
<tr>
<td>PHYS&amp; 241</td>
<td>Physics (PHYS/PHYS&amp;) I</td>
<td>4 Credits/Units</td>
<td>4 hours of lecture</td>
<td>Concurrent enrollment in, or completion of MATH&amp; 152 (grade of &quot;C&quot; or higher) and concurrent enrollment in PHYS&amp; 231, PHYS&amp; 241 and PHYS 94.</td>
<td>Classical physics topics in mechanics. For students majoring in engineering, chemistry, physics, geology, or mathematics. Beginning course of a three-term sequence offered each year starting fall and winter terms. [GE, NS, SE]</td>
</tr>
<tr>
<td>PHYS&amp; 242</td>
<td>Physics (PHYS/PHYS&amp;) II</td>
<td>4 Credits/Units</td>
<td>4 hours of lecture</td>
<td>PHYS&amp; 241 (grade of &quot;C&quot; or higher) and concurrent enrollment in PHYS&amp; 232, PHYS&amp; 242 and PHYS 95.</td>
<td>Physics topics in fluids, heat, thermodynamics, sound, electricity, and magnetism. Second term of a three-term sequence beginning with PHYS&amp; 241. [GE, NS, SE]</td>
</tr>
<tr>
<td>PHYS&amp; 243</td>
<td>Physics (PHYS/PHYS&amp;) III</td>
<td>4 Credits/Units</td>
<td>4 hours of lecture</td>
<td>PHYS&amp; 242 (grade of &quot;C&quot; or higher) and concurrent enrollment in PHYS&amp; 233, PHYS&amp; 243 and PHYS 96.</td>
<td>Topics in electricity, magnetism, atomic and nuclear physics, and optics. Third term of a three-term sequence beginning with PHYS&amp; 241. [GE, NS, SE]</td>
</tr>
</tbody>
</table>
POLITICAL SCIENCE (POLS/POLS&)

American National Government and Politics
POLS 111 5 Credits/Units
5 hours of lecture
The institutions, structures, and processes that affect the course of politics and public policy at the national level of American government. [GE, SE, SS]

State and Local Government
POLS 131 5 Credits/Units
5 hours of lecture
The institutions, structures, and political processes at the state and local levels of government in our federal system. [GE, SE, SS]

Cooperative Work Experience
POLS 199 1-3 Credits/Units
9 hours of clinical
Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]

The Geopolitics of the Middle East
POLS 220 5 Credits/Units
5 hours of lecture
Geo-political survey of the Middle East, including interrelationships between the physical, economic and political geography of this region, the impact of geography on politics and political issues within the nations of this region, the corresponding impact of politics and political issues on geography and on the lives of the people living in this region, as well as the resulting diversity of cultures, beliefs, perceptions, challenges and issues among the people of this region. This course will also examine the importance and impact of the Middle East on the rest of the world, as well as examine the impact and influence of the rest of the world on the Middle East. Credit not allowed for both GEOG 220 and POLS 220. [GE, SE, SS]

The Geopolitics of Africa
POLS 221 5 Credits/Units
5 hours of lecture
Geo-political survey of Africa, including interrelationships between the physical, economic and political geography of this region, the impact of geography on politics and political issues within the nations of this region, the corresponding impact of politics and political issues on geography and on the lives of the people living in this region, as well as the resulting diversity of cultures, beliefs, perceptions, challenges and issues among the people of this region. This course will also examine the importance and impact of Africa on the rest of the world, as well as examine the impact and influence of the rest of the world on Africa. Credit not allowed for both GEOG 221 and POLS 221. [GE, SE, SS]

The Geopolitics of Asia and Oceania
POLS 222 5 Credits/Units
5 hours of lecture
Geo-political survey of Asia and Oceania, including interrelationships between the physical, economic and political geography of this region, the impact of geography on politics and political issues within the nations of this region, the corresponding impact of politics and political issues on geography and on the lives of the people living in this region, as well as the resulting diversity of cultures, beliefs, perceptions, challenges and issues among the people of this region. This course will also examine the importance and impact of Asia and Oceania on the rest of the world, as well as examine the impact and influence of the rest of the world on this region. Credit not allowed for both GEOG 222 and POLS 222. [GE, SE, SS]

The Geopolitics of Eurasia
POLS 223 5 Credits/Units
5 hours of lecture
Geo-political survey of Europe, Russia and Central Asia, including interrelationships between the physical, economic and political geography of this region, the impact of geography on politics and political issues within the nations of this region, the corresponding impact of politics and political issues on geography and on the lives of the people living in this region, as well as the resulting diversity of cultures, beliefs, perceptions, challenges and issues among the people of this region. Examine the importance and impact of Eurasia on the rest of the world, as well as examine the impact and influence of the rest of the world on Eurasia. Credit not allowed for both GEOG 223 and POLS 223. [GE, SE, SS]

Geopolitics of Latin America and Caribbean
POLS 224 5 Credits/Units
5 hours of lecture
Geo-political survey of Latin America and the Caribbean, including interrelationships between the physical, economic and political geography of this region, the impact of geography on politics and political issues within the nations of this region, the corresponding impact of politics and political issues on geography and on the lives of the people living in this region, as well as the resulting diversity of cultures, beliefs, perceptions, challenges and issues among the people of this region. Examine the importance and impact of Latin America and the Caribbean on the rest of the world, as well as examine the impact and influence of the rest of the world on the countries in this region. Credit not allowed for both GEOG 224 and POLS 224. [GE, SE, SS]

Environmental Politics
POLS 231 5 Credits/Units
5 hours of lecture
Examines the relationship between industrial civilization and the natural environment by exploring underlying ecological philosophies and the economic and political processes by which environmental decisions are made. Emphasis on critical thinking and evaluating alternative points of view. Credit not allowed for both ENVS 231 and POLS 231. [GE, SE, SS]

Selected Topics
POLS 280 1-5 Credits/Units
5 hours of lecture
Selected topics in Political Science. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE, SE]
Special Projects

POLS 290 1-5 Credits/Units
5 hours of lecture
Opportunity to plan, organize and complete special projects approved by the department. [GE]

International Relations

POLS& 203 5 Credits/Units
5 hours of lecture
World politics, concepts and theories from the post-World War II period. Processes of power, foreign policy, development and trends in the current international scene analyzed. Conflict and conflict resolution and control. [GE, SE, SS]
PROFESSIONAL BAKING (PBAK)

Artisan Breads
PBAK 110 9 Credits/Units
2 hours of lecture / 14 hours of lab
Prerequisite: CAP 42 (grade of "C" or higher) or placement into Math level 10, eligibility for ENGL 99, and concurrent enrollment in PBAK 110 and PBAK 111.

Covers early morning product and their methods; scones, biscuits and muffins. Includes many specialty and seasonal product such as cake donuts, yeast-raised donuts, fruit pies and cream pies. Covers professionalism in the workplace, bakeshop safety and sanitation, equipment use and safety, baker's math, weights and measures. Students are required to take thorough notes on all lectures, demos and processes. [GE]

Viennoserie
PBAK 120 9 Credits/Units
2 hours of lecture / 14 hours of lab
Prerequisite: CAP 42 (grade of "C" or higher) or placement into Math level 10, eligibility for ENGL 99, and concurrent enrollment in PBAK 110 and PBAK 111.

Covers laminated doughs, brioche and sweet doughs. Students will learn various pre-ferments, mixing, fermentation, laminating techniques, make-up of product, proofing and baking. Also covered is professionalism in the workplace, safety and sanitation, equipment use and safety, baker's math, weights and measures. Students will design and create a dessert menu for the restaurant and upon approval and will make desserts for the daily lunch service. Students will be responsible for meeting with the chef of the CTO station to determine the baking/dessert needs for the restaurant each day. They will design and create a dessert menu for the restaurant and upon approval and will make desserts for the daily lunch service. They will provide a variety of breads/rolls for lunch service and will be required to generate a production schedule that includes daily mise en place, purchasing of required ingredients, inventory and maintenance of the station. Must demonstrate ability to plan and execute production for maximum efficiency and accuracy using proper sanitation practices. [GE]

Cakes, Desserts and Tortes
PBAK 130 9 Credits/Units
2 hours of lecture / 14 hours of lab
Prerequisite: CAP 42 (grade of "C" or higher) or placement into Math level 10, eligibility for ENGL 99, and concurrent enrollment in PBAK 130 and PBAK 131.

Covers the mixing methods of various types of cakes and tortes. Includes tart crusts, creams, custards, mousses, butter creams and fillings. Students will learn to assemble a variety of classic cakes, tortes and desserts as well as more modern cakes, from start to finish. Also covered is professionalism in the workplace, safety and sanitation, equipment use and safety, baker's math, weights and measures and note-taking. [GE]

Retail Operations and Barista
PBAK 131 5 Credits/Units
2 hours of lecture / 6 hours of lab
Prerequisite: CAP 42 (grade of "C" or higher) or placement into Math level 10, eligibility for ENGL 99, and concurrent enrollment in PBAK 130 and PBAK 131.

Students will learn how to set up the retail area for daily operation, how to make a variety of specialty coffees, cold drinks, Italian sodas and featured drinks. Marketing for effective sales, efficient and friendly customer service and the proper operation of POS system will also be discussed. [GE]

Applied Professional Development
PBAK 200 9 Credits/Units
1 hours of lecture / 16 hours of lab
Prerequisite: PBAK 110, PBAK 111, PBAK 120, PBAK 121, PBAK 130 and PBAK 131 (grades of "C" or higher).

Students will spend two weeks in each of four areas; Artisan bread, Viennoserie, cakes and tortes, early morning/store/retail. Utilizing acquired skills and knowledge, they will be responsible for production of all product for the retail store. They will create and follow a production schedule, inventory and store product, do mise en place for the next day and clean the station at the end of each day. [GE]

Production Baking
PBAK 210 9 Credits/Units
2 hours of lecture / 14 hours of lab
Prerequisite: PBAK 200 (grade of "C" or higher) and concurrent enrollment in PBAK 225.

Utilizing acquired skills, students will operate and manage their own production bakery. They will produce product needed for sale in the retail store from the following areas; breakfast items, Viennoserie, artisan bread, bars, cookies, cakes and dessert items. They will be responsible for planning a daily production schedule, inventory, purchase of necessary ingredients, costing and maintaining daily operation of their station. [GE]

Pastry Chef/Restaurant Baking
PBAK 220 9 Credits/Units
2 hours of lecture / 14 hours of lab
Prerequisite: PBAK 200 (grade of "C" or higher), and concurrent enrollment in PBAK 220 and PBAK 221

Students will be responsible for meeting with the chef of the CTO station to determine the baking/dessert needs for the restaurant each day. They will design and create a dessert menu for the restaurant and upon approval and will make desserts for the daily lunch service. Students will provide a variety of breads/rolls for lunch service and will be required to generate a production schedule that includes daily mise en place, purchasing of required ingredients, inventory and maintenance of the station. Must demonstrate ability to plan and execute production for maximum efficiency and accuracy using proper sanitation practices. [GE]
Retail/Merchandising, Inventory/Purchasing

**PBAK 221**
2 hours of lecture / 6 hours of lab

**Prerequisite:** PBAK 200 (grade of “C” or higher), and concurrent enrollment in PBAK 220 and PBAK 221

Students will learn how to set up the retail area for daily operation, how to make a variety of specialty coffees, cold drinks, Italian sodas and featured drinks. They will learn marketing for effective sales, efficient and friendly customer service. Students will learn proper operation of POS system as well as professionalism in the workplace, safety and sanitation, equipment use and safety. [GE]

Cake Decorating

**PBAK 225**
2 hours of lecture / 6 hours of lab

**Prerequisite:** PBAK 200 (grade of “C” or higher)

Beginning with the basics of cake decoration with progression to fondant and wedding cakes. Flower work, fondant and fondant working tools will be introduced. Additional topics: Customer service; cake planning; order taking; professionalism in the workplace; bakeshop safety and sanitation; equipment use and safety. Cannot receive credit for both PBAK 211 and PBAK 225.

Capstone Project

**PBAK 230**
1 hours of lecture / 10 hours of lab

**Prerequisite:** PBAK 200 (grade of “C” or higher), and concurrent enrollment in PBAK 230 and PBAK 231

Students will have five weeks to prepare and execute a display covering one of the following areas: Viennoiserie, Artisan breads, Viennese table, Plated Desserts or Dessert Bar. Each student will receive a complete list of requirements at the beginning of the class. The project will be presented to the faculty for judging. Instruction also covers career development. [GE]

Industry Internship

**PBAK 231**
12 hours of clinical

**Prerequisite:** PBAK 200 (grade of “C” or higher), and concurrent enrollment in PBAK 230 and PBAK 231

Students will complete a five week externship at an approved bakeshop. Prior to starting the externship, students will generate a list of learning objectives for the externship. Students are required to keep a daily journal of their experience. All paperwork must be turned in upon completion of the externship. [GE]

Selected Topics

**PBAK 280**
5 hours of lecture

Selected topics in Professional Baking. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules.

Industry Internship

**PBAK 281**
10 hours of lab

Selected topics in Professional Baking. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules.
# PROFESSIONAL TECHNICAL COMPUTATIONAL SKILLS (PTCS)

PTCS 110  
5 Credits/Units  
5 hours of lecture

**Prerequisite:** CAP 42 (grade of "C" or higher) or placement into Math level 10  

Intended for students enrolled in career technical education programs. It includes topics from algebra, geometry, statistics, and inductive reasoning with an emphasis on applications and measurement. Students will focus on career-specific applications at the end of the course. This course will satisfy the computational requirement for the Certificate of Proficiency, Associate of Applied Science and the Associate of Applied Technology. [CP, GE]

<table>
<thead>
<tr>
<th>Professional</th>
<th>Technical</th>
<th>Computational</th>
<th>Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTCS 110</td>
<td></td>
<td></td>
<td>5 Credits/Units</td>
</tr>
</tbody>
</table>
PROFESSIONAL TECHNICAL WRITING (PTWR)

Introduction to Applied Technical Writing
PTWR 135 5 Credits/Units

5 hours of lecture

Prerequisite: CAP 90 or ENGL 90 (grade of "C" or higher) or recommending placement through Multiple Measures.

Introduction to principles of effective workplace communication: focus on methods of writing clear, concise documents for technical audiences and purposes; summarizing technical information; collaborating successfully in small groups. For students of all technical fields. [CA, CT, GE]
The Process of Discovery

PSYC 102  5 Credits/Units
3 hours of lecture / 4 hours of lab
Introduction to the processes of discovery used in the natural and social sciences. Includes authentic research on factors that contribute to college student success, studied in social, psychological, and physiological contexts. Research topics include hypothesis development, experimental design, literature searches, data analysis, research ethics and human subjects research considerations. Course fulfills COLL 101: College Essentials outcomes including goal setting, personal management skills, developing an academic plan, developing cultural competence and communication skills, financial literacy, and an introduction to student resources at the college. [GE, NS, NS-LAB, SE, SS] [PNP]

Psychosocial Issues In Health Care I

PSYC 122  1 Credit/Unit
1 hours of lecture
Admission into the program required for enrollment. Examines some determinants of health and illness including social, psychological, environmental, spiritual, and cultural dimensions across the lifespan and within the context of health care. Application of concepts from previous courses in psychology and sociology to the direct care of patients/clients in various healthcare settings. Focus on women, children, and families. Taught concurrently with NURS 122. [GE, SE, SS]

Psychosocial Issues In Health Care II

PSYC 124  2 Credits/Units
2 hours of lecture
Admission into the program required for enrollment. Examines some determinants of health and illness including social, psychological, environmental, spiritual, and cultural dimensions across the lifespan and within the context of health care. Application of concepts from previous courses in psychology to the direct care of patients/clients in various healthcare settings. Focus on therapeutic communication and behavioral symptomology specific to anxiety, depression, delirium and agitation. [GE, SE, SS]

Cooperative Work Experience

PSYC 199  1-5 Credits/Units
15 hours of clinical
Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]

Social Psychology

PSYC 203  5 Credits/Units
5 hours of lecture
Effects of social environment and interpersonal processes on both individual and collective behaviors. Socialization, impression formation and management, attitude formation and change, prejudice, aggression, altruism, leadership, power, conformity, environmental psychology, and other topics. [GE, HR, SE, SS]

Psychosocial Issues In Health Care III

PSYC 253  2 Credits/Units
2 hours of lecture
Admission into the program required for enrollment. Examines some determinants of health and illness including social, psychological, environmental, spiritual, and cultural dimensions across the lifespan and within the context of health care. Application of concepts from previous courses in psychology and sociology to the direct care of patients/clients in various healthcare settings. Focus on persons with acute mental issues and/or chronic mental illnesses. [GE, SE, SS]

Selected Topics

PSYC 280  1-3 Credits/Units
3 hours of lecture
Prerequisite: PSYC& 100 (grade of "C" or higher)
Selected topics in Psychology. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE, SE]

Special Projects

PSYC 290  1-5 Credits/Units
5 hours of lecture
Opportunity to plan, organize and complete special projects approved by the department. [GE]

General Psychology

PSYC& 100  5 Credits/Units
5 hours of lecture
Prerequisite: CAP 90 or ENGL 90 (grade of "C" or higher) or recommending placement through Multiple Measures.
The scientific study of behavior and mental processes including research methods, psychobiological processes, learning, memory, psychological disorders, psychotherapy, and other topics to be determined by the instructor. [GE, HR, SE, SS] [PNP]

Life-span Psychology

PSYC& 200  5 Credits/Units
5 hours of lecture
Principles and theories of human growth and development; the interaction of psychological, biological, and social factors throughout the life span. Prior completion of PSYC& 100 or (PSYC 101) recommended. [GE, HR, SE, SS]
SOCIOLOGY (SOC/SOC&)

Race and Ethnicity In The U.S.
SOC 131 5 Credits/Units
5 hours of lecture
The sociological perspectives of race and ethnicity, including an examination of prejudice and discrimination from the interpersonal to the institutional level. Application of concepts and theories to both historical and current events in the U.S. [GE, HR, PPI, SE, SS]

World Religions
SOC 161 5 Credits/Units
5 hours of lecture
Introduction to the historical origins, central teachings, and devotional practices of the major religious traditions: Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam. Topics include religion as a way of life in a socio-cultural context and the ways religion affects the individual, family and social life. [GE, HR, SE, SS]

Cooperative Work Experience
SOC 199 1-5 Credits/Units
15 hours of clinical Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]

Domestic Violence
SOC 230 5 Credits/Units
5 hours of lecture
Prerequisite: PSYC& 100, SOC& 101 or WS 101 (grade of "C" or higher)
Introducing historical and current ideas, myths and empirical research regarding domestic partner abuse. Defining abuse and examining cultural, social, family and psychological factors associated with offenders and victims: why, how, who, and what responses have been tried. [GE, PPI, SE]

Criminology and Delinquency
SOC 240 5 Credits/Units
5 hours of lecture
Prerequisite: PSYC& 100, SOC& 101, or WS 101 (grade of "C" or higher)
An introductory examination of delinquency, crime, deviant behavior and social control among adults and legal minors in contemporary society. Historical and contemporary explanations of criminological and juvenile delinquency theory, social control, treatment of offenders and programs for prevention. [GE, PPI, SE]

The Family in Cross-Cultural Perspective
SOC 250 5 Credits/Units
5 hours of lecture
Prerequisite: ACED 201, ANTH& 206, BASHS 301, PSYC& 100, or SOC& 101 (grade of "C" or higher).
The dynamic experiences of multicultural families (including immigrants) are examined through the lens of diversity and equity in an ever-changing global world. The focus will be on the historical, racial, ethnic, cultural, political, sexual, religious, economic and geographic differences and influences. Students cannot receive credit for both SOC 121 and SOC 250. [GE, HR, SE, SS][PNP]

Selected Topics
SOC 280 1-5 Credits/Units
5 hours of lecture
Selected topics in Sociology. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE, SE]
SPANISH (SPAN/SPAN&)

Cooperative Work Experience
SPAN 199 1-10 Credits/Units
30 hours of clinical
Summer cooperative work experience in a Spanish-speaking country.
Requires use of Spanish language. Enroll in this course Spring quarter
prior to participation abroad. [GE, SE]

Selected Topics
SPAN 280 1-5 Credits/Units
5 hours of lecture
Selected topics in Spanish. Topics vary and course theme and content
change to reflect new topics. Because the course varies in content, it
is repeatable for credit. Individual topics are listed in the term class
schedules. [GE, SE]

Special Projects
SPAN 290 1-5 Credits/Units
5 hours of lecture
Opportunity to plan, organize and complete special projects approved by
the department. [GE]

Spanish I
SPAN& 121 5 Credits/Units
5 hours of lecture
Designed for beginning students, with little to no experience, who want
to learn Spanish as a second language. Emphasis on listening/speaking
skills, with additional practice in reading/writing and basic Spanish
grammar. Topics covered: greetings; regular and irregular verbs in present
tense; question and response formation; vocabulary about family, friends,
studies, hobbies and likes/dislikes. After successful completion, students
are encouraged to continue with SPAN& 122. [GE, HA, SE]

Spanish II
SPAN& 122 5 Credits/Units
5 hours of lecture
Designed for beginning students, who have successfully completed
SPAN& 121, one term of college Spanish or one recent year of high school
Spanish with a grade of "B" or higher. Emphasis on listening/speaking
skills, with additional practice in reading/writing. Students who enroll
in this class should already be able to conjugate verbs in the present
tense to describe self, likes/dislikes, family, friends, and daily activities.
After successful completion, students are encouraged to continue with
SPAN& 123. [GE, HA, SE]

Spanish III
SPAN& 123 5 Credits/Units
5 hours of lecture
Designed for beginning students who have successfully completed
SPAN& 122, two terms of college Spanish, or two years of recent high
school Spanish with a grade of "B" or higher. Emphasis on listening,
speaking, reading and writing skills. Students who enroll in this class
should already be able to converse and write using verbs in the present
and simple past tense to describe routines, likes/dislikes, and past
activities. This class focuses on how to narrate in the past tense and
introduces more complex grammar structures such as the subjunctive
mood. After successful completion, students are encouraged to continue
with SPAN& 221. [GE, HA, SE]

Spanish IV
SPAN& 221 5 Credits/Units
5 hours of lecture
First term of a three-term sequence in intermediate Spanish. Focus on
discussion of literature and culture from the Spanish-speaking world.
Intensive grammar review with conversation and composition practice.
Heritage speakers of Spanish welcome. [GE, HA, SE]

Spanish V
SPAN& 222 5 Credits/Units
5 hours of lecture
Second term of a three-term sequence in intermediate Spanish. Focus
on discussion of literature and culture from the Spanish-speaking world.
Intensive grammar review with conversation and composition practice.
Heritage speakers of Spanish welcome. [GE, HA, SE]

Spanish VI
SPAN& 223 5 Credits/Units
5 hours of lecture
Final term of a three-term sequence in intermediate Spanish. Focus on
discussion of literature and culture from the Spanish-speaking world.
Intensive grammar review with conversation and composition practice.
Heritage speakers of Spanish welcome. [GE, HA, SE]
## SURVEYING & GEOMATICS (SURV)

### Fundamentals of Survey

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV 102</td>
<td>2</td>
</tr>
</tbody>
</table>

1 hour lecture / 2 hours lab
Introduction to concepts of map reading, coordinate systems, and surveying fundamentals. [GE]

### Survey Computation

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV 104</td>
<td>5</td>
</tr>
</tbody>
</table>

5 hours lecture
Prerequisite: College Trigonometry (MATH 102 or MATH 103) grade of "C" or higher
Basic coordinate geometry, curves and solutions, conversions, statistics and error analysis, traverse calculations, inverse coordinate positions, and area calculations. [GE]

### Field Survey I

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV 121</td>
<td>5</td>
</tr>
</tbody>
</table>

3 hours lecture / 4 hours lab
Prerequisite: MATH 103 (grade of "C" or higher), or eligibility for Math Level 80
Basic theory of surveying, measurement and calculation. Topics include measurement and determination of boundaries, areas, shapes, and location through traversing techniques, error theory, compass adjustments, public land system, and use of programmable calculators. Also covers principles of measurements of distances, elevation and angles. [GE]

### Field Survey II

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV 122</td>
<td>5</td>
</tr>
</tbody>
</table>

3 hours lecture / 4 hours lab
Prerequisite: SURV 121 (grade of "C" or higher)
Theories of electronic distance measurement, instrument calibration and analysis; principles of route location and design; theories of circular, parabolic, and spiral curves; highway and railway geometric design; area and volumes of earthwork; and mass diagrams. [GE]

### Professional Ethics

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV 123</td>
<td>1</td>
</tr>
</tbody>
</table>

1 hour lecture
Prerequisite: Concurrent enrollment in, or completion of SURV 121 (grade of "C" or higher)
Survey safety, ethics, and communication. Problem solving methods, procedures, and human relations related to on-the-job work experience in field surveying. [GE][PNP]

### Introduction to GIS

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV 125</td>
<td>3</td>
</tr>
</tbody>
</table>

2 hours lecture / 2 hours lab
Prerequisite: MATH 92 or PTCS 110 (grade of "C" or higher) or placement into Math level 30
Introduction to Geographic Information Systems (GIS) methods and theory. Background and development of GIS technology. Introduction to relational and spatial databases and spatial analysis. [GE]

### Route Surveying

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV 156</td>
<td>5</td>
</tr>
</tbody>
</table>

3 hours lecture / 4 hours lab
Prerequisite: SURV 122 (grade of "C" or higher)
Introduction to elements of horizontal and vertical route alignment and layout. Use design software and a total station for the construction of a section of road. Include the construction of a topographic map, a centerline alignment, and a final plan and profile showing centerline alignment. Use of topographic data for earthwork computations for proposed route. [GE]

### Cooperative Work Experience

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV 199</td>
<td>1-5</td>
</tr>
</tbody>
</table>

15 hours of clinical
Prerequisite: SURV 121 (grade of "C" or higher)
Work-based learning experience that enables students to apply specialized learning theory, skills and concepts. Specific objectives are developed by the College and the employer. [GE]

### Boundary Surveys

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV 202</td>
<td>4</td>
</tr>
</tbody>
</table>

4 hours lecture
Prerequisite: Concurrent enrollment in, or completion of SURV 121 (grade of "C" or higher)
Principles and laws relating to boundary surveys, including their creation, ownership, and the role of the surveyor; introduction to the Public Land Survey System, including history, proportioning, subdividing and evidence analysis. Topics include boundary history and boundary surveys, rights in land, junior/senior title rights, retracement of original surveys, deed first/survey first, common and case law, ranking/prioritizing evidence, controlling monuments and corners, errors in legal descriptions and plats. [GE]

### Legal Descriptions

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV 203</td>
<td>3</td>
</tr>
</tbody>
</table>

3 hours lecture
Prerequisite: SURV 121 (grade of "C" or higher)
Research and practice pertaining to the legal aspects of writing land description documents used in real property; written research project required. [GE]

### Boundary Law I

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV 223</td>
<td>3</td>
</tr>
</tbody>
</table>

3 hours lecture
Prerequisite: SURV 121 (grade of "C" or higher)
Introduction to statute law, common law, case law, and legal principles of land boundaries and the practice of land surveying in Washington. Topics include an introduction to principles of professional practice and ethical consideration. [GE]

### Subdivision Planning and Plating

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV 225</td>
<td>3</td>
</tr>
</tbody>
</table>

3 hours lecture
Prerequisite: SURV 122 (grade of "C" or higher)
A study of selected state laws and regulations pertaining to the surveying profession that affect the surveying of division of lands; layout and design of subdivisions; environmental considerations and site analysis procedures. [GE]

### ArcGIS I

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV 250</td>
<td>3</td>
</tr>
</tbody>
</table>

2 hours lecture / 2 hours lab
Prerequisite: SURV 125 (grade of "C" or higher)
Introduction to ArcGIS. GIS concepts, methodologies, and techniques. [GE]
Introduction to GPS
SURV 253 3 Credits/Units
1 hours of lecture / 4 hours of lab
Prerequisite: SURV 252 (grade of "C" or higher)
Introduction to global positioning tools. Fundamental concepts and use of modern handheld GPS. Includes field work and use of basic GPS software. [GE]

Emerging Technology
SURV 255 3 Credits/Units
1 hours of lecture / 4 hours of lab
Prerequisite: MATH 103 (grade of "C" or higher), or eligibility for Math Level 80
An overview of the technologies used for gathering and management of spatial data and information including but not limited to the following: terrestrial scanning, mobile lidar, aerial imagery and airborne lidar in the use of modern surveying. [GE SE]

Survey Software Applications
SURV 264 4 Credits/Units
3 hours of lecture / 2 hours of lab
Prerequisite: SURV 121 (grade of "C" or higher)
Use of surveying and related software to solve and plot assignments in traverse calculations, horizontal and vertical curve alignments, profiles, contours, and earthwork calculations. Some hand generated plots and calculations will be made to supplement the computer calculations. [GE]

Selected Topics
SURV 280 1-6 Credits/Units
6 hours of lecture
Selected topics in Surveying. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE]

Special Projects
SURV 290 1-5 Credits/Units
5 hours of lecture
Opportunity to plan, organize, and complete special projects approved by the department. [GE]
TUTORING (TUTR)

Tutoring
TUTR 185 1-3 Credits/Units
6 hours of lab
Department consent required for enrollment. Introduction to methods and techniques in tutoring. Tutoring training assignments in various disciplines. [GE]

Tutoring-Writing
TUTR 186 1-3 Credits/Units
6 hours of lab
Department consent required for enrollment. Introduction to strategies for effectively tutoring writers at all stages of the writing process and experience working one-on-one with writing across the disciplines. [GE]
Shielded Metal Arc Welding
WELD 145  6 Credits/Units
3 hours of lecture / 6 hours of lab
Prerequisite: WELD 142 and WELD 143 (grades of "C" or higher), and concurrent enrollment in WELD 144 and WELD 145
Application of concepts of shielded metal arc welding processes on ferrous metals with a focus on fabrication techniques, proper use of hand tools and equipment found in industry. [GE]

Shielded Metal Arc Fabrication
WELD 145  6 Credits/Units
3 hours of lecture / 6 hours of lab
Prerequisite: WELD 142 and WELD 143 (grades of "C" or higher), and concurrent enrollment in WELD 144 and WELD 145
Application of concepts of shielded metal arc welding processes on ferrous metals with a focus on fabrication techniques, proper use of hand tools and equipment found in industry. [GE]

Welding Certification Prep
WELD 156  2 Credits/Units
4 hours of lab
Prerequisite: WELD 102 (grade of "C" or higher) and consent of Instructional Unit.
Department consent required for enrollment. Students will use lab time to practice towards a WABO and/or AWS welding certification(s). Weld certification testing is only done in WELD 256. [GE]

Weld Fabrication Projects
WELD 157  2 Credits/Units
4 hours of lab
Prerequisite: WELD 102 (grade of "C" or higher) and consent of Instructional Unit.
Department consent required for enrollment. Use the welding lab to design and/or build an approved fabrication project. WELD 157 can be substituted for WELD 156 to satisfy Welding Technology AAT and Welding Technician Certificate of Proficiency requirements.

Cooperative Work Experience
WELD 199  1-5 Credits/Units
15 hours of clinical
Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]

Applied Material Science
WELD 200  5 Credits/Units
3 hours of lecture / 4 hours of lab
Introduction to applied material science for technical professionals. Covers basic theory, application, and advanced manufacturing methods through a combination of lecture and laboratory activities. Topics: material properties, material structure, testing, manufacturing, joining, and material classification and identification for metallic, ceramic, polymeric, and composite materials. [GE]

Shielded Metal Arc Welding
WELD 240  6 Credits/Units
3 hours of lecture / 6 hours of lab
Prerequisite: WELD 144 and WELD 145 (grades of "C" or higher), and concurrent enrollment in WELD 240 and WELD 241
Instructional theory and application of arc cutting process/oxyfuel cutting and gas tungsten arc welding processes on ferrous metals. [GE]

Shielded Metal Arc Fabrication
WELD 241  6 Credits/Units
3 hours of lecture / 6 hours of lab
Prerequisite: WELD 144 and WELD 145 (grades of "C" or higher), and concurrent enrollment in WELD 240 and WELD 241
Application of concepts of gas tungsten arc welding processes on ferrous metals with a focus on fabrication techniques, proper use of hand tools and equipment found in industry. [GE]
Advanced Wire Feed Welding
WELD 242 6 Credits/Units
3 hours of lecture / 6 hours of lab
Prerequisite: WELD 240 and WELD 241 (grades of "C" or higher), and concurrent enrollment in WELD 242 and 243
Advanced instructional theory and application of arc cutting processes/oxyfuel cutting, sub-arc welding and wire feed welding processes on ferrous and nonferrous metals. [GE]

Advanced Wire Feed Fabrication
WELD 243 6 Credits/Units
3 hours of lecture / 6 hours of lab
Prerequisite: WELD 240 and WELD 241 (grades of "C" or higher), and concurrent enrollment in WELD 242 and 243
Application of concepts of wire feed welding processes on ferrous and nonferrous metals with a focus on fabrication techniques, proper use of hand tools and equipment found in industry. [GE]

Advanced Gas Tungsten Arc Welding
WELD 244 6 Credits/Units
3 hours of lecture / 6 hours of lab
Prerequisite: WELD 242 and WELD 243 (grades of "C" or higher), and concurrent enrollment in WELD 244 and 245
Advanced instructional theory and application of arc cutting processes/ oxyfuel cutting and gas tungsten arc welding processes on ferrous and nonferrous metals. [GE]

Advanced Gas Tungsten Arc Fabrication
WELD 245 6 Credits/Units
3 hours of lecture / 6 hours of lab
Prerequisite: WELD 242 and WELD 243 (grades of "C" or higher), and concurrent enrollment in WELD 244 and 245
Application of concepts of advanced gas tungsten arc welding processes on nonferrous metals with a focus on fabrication techniques, proper use of hand tools and equipment found in industry. [GE]

Weld Certification Test
WELD 256 1 Credit/Unit
1 hours of lecture / 1 hours of lab
Prerequisite: WELD 156 or WELD 157 (grade of "C" or higher).
A one day class to test for a WABO and/or AWS welding certification. Class fee is for one certification attempt as approved by the CWI instructor or department head. Some certifications are eligible for both WABO and AWS certification in one test. Required paperwork and fees will be submitted by the CWI instructor conducting the test after successful completion.

Special Projects
WELD 290 1-5 Credits/Units
5 hours of lecture
Projects assigned according to needs and abilities of the student. Hours arranged with instructor. Maximum of 15 credits allowed toward a certificate or degree. [GE]

Selected Topics
WELD 280 1-6 Credits/Units
6 hours of lecture
Selected topics in Welding. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE]

Selected Topics - Lab
WELD 281 1-6 Credits/Units
12 hours of lab
Selected topics in Welding. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE]
WOMEN'S STUDIES (WS)

Introduction to Women's Studies
WS 101
5 Credits/Units
5 hours of lecture
Prerequisite: Concurrent enrollment in, or completion of ENGL& 101 (grade of "C" or higher)
Contemporary feminist theory analyzing systems of power, privilege and inequity particularly with respect to gender, race, class, sexuality, age, and ability. Topics may include women and gender socialization, family, work, politics, health, sexuality, body image, violence, spirituality, art, and culture. Fulfills either Humanities or Social Science distribution requirements for the A.A. transfer degree. [GE, HA, PPI, SE, SS]

Women Across Cultures-Women's Studies
WS 201
5 Credits/Units
5 hours of lecture
A feminist analysis of the economic, reproductive, political, and religious factors that contribute to women's lower status and power in major world areas today. Through the lens of gender and its intersection with race, class, and sexual orientation, examine some of the similarities and differences in women's lives around the world. Through the contexts of colonialism, globalization, media representation, and migration, study global women's issues by examining how the power of wealthy, industrialized nations affects those in poor or post-colonial nations, as well as systemically non-dominant groups within the U.S. [GE, HA, SE, SS]

Women, Arts, and Culture-Women's Studies
WS 210
5 Credits/Units
5 hours of lecture
Examines how women have been represented in western culture and how female artists, writers, filmmakers, crafters and musicians have responded to such depictions and created their own work. Through a sampling of women's stories, history, art, music, and films, we will consider issues of representation and how they are shaped by the dynamics of gender, race, class, sexuality, ability status, gender identity, and other factors. We will also explore the possibilities of a "women's" culture through an examination of particular historical communities. [GE, HA, SE, SS]

Race, Class, Gender and Sexuality-Women's Studies
WS 220
5 Credits/Units
5 hours of lecture
Prerequisite: WS 101 (grade of "C" or higher)
Studies the social construction of difference, inequality and privilege in race, class, gender, sex, and sexual orientation in the U.S. Examines how these categories are created, maintained, and experienced; how meaning is assigned to those categories; and how social constructions can be challenged. [GE, PPI, SE, SS][PNP]

Racism & White Privilege In The U.S.-Women's Studies
WS 225
3 Credits/Units
3 hours of lecture
Critical examination of racism and white privilege in the U.S. analyzing systems of power, privilege and inequity; racial identity; and intercultural competence. [GE, PPI, SE, SS][PNP]

Selected Topics
WS 280
1-3 Credits/Units
3 hours of lecture
Selected topics in Women's Studies. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE, SE]
COLLEGE INFORMATION

- History (p. 254)
- Accreditation (p. 254)
- Clark CARES: Collaborate, Assess, Resource, and Engage Students (p. 255)
- College Assessment (p. 255)
- Consumer Information (p. 255)
- Equity in Athletics (p. 255)
- Graduation Rates (p. 255)
- Limitation of Liability (p. 256)
- Locations and Campuses (p. 256)
- Nondiscrimination and Equity (p. 256)
- Notification of Students’ Rights Under the Family Educational Rights and Privacy Act (p. 257)
- Student Rights and Responsibilities (p. 257)

History

In the midst of the Great Depression, a group of educators boldly embraced a dream of higher education for Southwest Washington. That dream became reality when Clark College was founded as a private junior college in 1933.

The college was originally located in Vancouver’s historic Hidden House, where it remained through 1937. During the next two decades, the college was housed at four different locations. In 1951, the college launched an evening program in the Applied Arts Center, the first building on the current 101-acre campus in Vancouver’s Central Park.

Initial accreditation was granted during the 1936-37 academic year following a visit by professors from the University of Washington. In 1948, the college first received accreditation from the organization known as the Northwest Association of Secondary and Higher Schools. Today, that organization is known as the Northwest Commission on Colleges and Universities (NWCCU). Since its first accreditation in 1937, through periodic reviews, Clark College has remained accredited throughout its history.

Clark College first received state financial support in 1941. Five years later, the college was placed under the general supervision of the State Board of Education, with the Vancouver School Board serving as its policy-making body.

In 1967, the Washington State Legislature created a state system of community college districts. Clark College, in District No. 14, is one of 34 Washington community and technical colleges, and serves residents of Clark, Skamania and west Klickitat counties. The college is governed by a five-member board of trustees appointed by the Governor.

The campus was designated a Bee Campus, USA (https://www.clark.edu/about/visitors-guide/beecampus/) in 2023. The college also offers classes on the campus of Washington State University Vancouver and at a satellite location in east Vancouver at the Columbia Tech Center. The college's non-credit Community and Continuing Education (https://www.clark.edu/cce/) program, offers corporate and continuing-education classes. Clark College has collaborated on partnerships with many regional colleges, universities, and technical institutions, allowing students to apply credits earned at Clark toward their bachelor's degrees.

Many of its annual events, like its Jazz Fest and Sakura Festival, are traditions that go back years or even decades.

Accreditation

Clark College is accredited by the Northwest Commission on Colleges and Universities (8060 165th Avenue NE, Suite 100, Redmond, WA 98052), a national accrediting body recognized by the U.S. Department of Education. Accreditation of an institution of higher education by the Northwest Commission on Colleges and Universities indicates that it meets or exceeds criteria for the assessment of institutional quality evaluated through a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the Northwest Commission on Colleges and Universities is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding an institution’s accreditation status by the Northwest Commission on Colleges and Universities should be directed to the administrative staff of the institution. Individuals may also contact:

Northwest Commission on Colleges and Universities
8060 165th Avenue N.E., Suite 100
Redmond, WA 98052
(425) 558-4224
www.nwccu.org (http://nwccu.org/)

Types of Accreditations

There are three types of accreditation in the United States: institutional, national, and specialized or programmatic. On July 1, 2020, the United States Department of Education’s (USDE) regulations eliminated the designation of regional accreditor and, thus, the seven regional accreditors, such as NWCCU, are now referred to as institutional accreditors.

- An institution may not be accredited by more than one institutional accrediting agency. It may, however, be accredited by an institutional accreditor and a national accreditor and/or have one or more of its academic programs accredited by specialized or programmatic accrediting agencies.

- Students attending accredited institutions may be eligible to apply for U.S. federal financial aid. Accreditation also helps ensure that credits and degrees are generally recognized for purposes of transfer, admission to other institutions, and employment.

- In many countries, the maintenance of educational standards is a governmental function; in the U.S., in contrast, accreditation is peer-driven and accrediting organizations are funded by the dues paid by member institutions. Review teams predominantly comprising experts and representatives from similar institutions evaluate an institution for initial accreditation or reaffirmation of accreditation.

- No institution in the U.S. is required to seek accreditation, but because of the recognized benefits of the process, including student eligibility for Title IV and other federal and state funds, most eligible institutions have sought to become accredited.
Each Clark College student is expected to participate in the college's assessment efforts. Programs and services use various means to gather assessment information including portfolios, performances, achievement tests, comprehensive examinations, surveys, interviews, focus groups, evaluation forms, and other methods. Occasionally, Clark College faculty and staff may present information about their assessment projects at professional conferences or in publications, for the purpose of contributing to professional knowledge in the field of education. Aggregate assessment data may be used in these presentations, such as aggregate results from quizzes, surveys, etc. Students’ consent must be obtained prior to presenting individual-level data.

**Consumer Information**

All consumer information, also known as Student Right to Know Information, is available on the Clark College website at [http://www.clark.edu/about/governance/policies-procedures/consumer_information/](http://www.clark.edu/about/governance/policies-procedures/consumer_information/).

**Equity in Athletics**

Clark College reports annually to the federal Department of Education ([http://ope.ed.gov/athletics/](http://ope.ed.gov/athletics/)) concerning the number of male and female student athletes, support for men’s and women’s intercollegiate sports, financial aid available for male and female athletes, and related issues. For a copy of the report, please contact:

Title IX Coordinator
Gerald Gabbard, Director of Labor & Compliance
Human Resources (Baird 133)
360-992-2105 or ggabbard@clark.edu (ggabbard@clark.edu)

For questions concerning the number of male and female student athletes, support for men’s and women’s intercollegiate sports, financial aid available for male and female athletes, and related issues, [contact the Office of Assessment and Institutional Research](http://ope.ed.gov/athletics/).

**Graduation Rates**

Clark College Graduation and Transfer-Out-Rates, 150% of Normal Time for First-Time, Full-Time Students, Fall 2012-2016 Cohorts. The federal graduation rate survey definitions pertain to a specific cohort of Clark College students: new students attending full time, who plan to earn a degree or certificate, and without prior college experience.

- 2012: Graduation Rate: 24% / Transfer-Out-Rate: 14% / # Students in Cohort: 1,118
- 2013: Graduation Rate: 31% / Transfer-Out-Rate: 14% / # Students in Cohort: 819
- 2014: Graduation Rate: 34% / Transfer-Out-Rate: 14% / # Students in Cohort: 950
- 2015: Graduation Rate: 36% / Transfer-Out-Rate: 16% / # Students in Cohort: 827
- 2016: Graduation Rate: 39% / Transfer-Out-Rate: 14% / # Students in Cohort: 969

Clark College provides this information pursuant to the federal Student Right to Know Act so that prospective students can make informed decisions about the college they might wish to attend. For help in interpreting these data, contact the Office of Assessment and Institutional Research, 360-992-2237.

View the most recent cohort graduation rates at the National Center for Education Statistics website: [https://nces.ed.gov/collegenavigator/](https://nces.ed.gov/collegenavigator/)
Limitation of Liability

The college's total liability for claims arising from a contractual relationship with the student in any way related to classes or programs shall be limited to the tuition and expenses paid by the student to the college for those classes or programs. In no event shall the college be liable for any special, indirect, incidental, or consequential damages, including but not limited to, loss of earnings or profits.

Locations and Campuses

Clark College has one main campus and three satellite locations located throughout Clark County. Each of the locations includes a variety of programs to serve the community and help students complete a program at Clark College.

Main Campus

Clark College’s beautiful main campus is located on 101 acres in Vancouver’s Central Park, just east of Interstate 5 and north of the Columbia River and Fort Vancouver Historic Reserve. This full-service campus includes a gym, music and theatre hall, library, student center, and a new dining space, which is scheduled to open in 2017.

Columbia Tech Center

The Columbia Tech Center (CTC), located on the east side of Vancouver, opened in 2009. CTC provide access to education eastern portion of the college’s service district, which includes Clark County communities like Camas and Washougal as well as parts of Skamania and Klickitat counties. The campus features state-of-the-art labs serving popular programs like network technology, biology, and mechatronics.

Clark College at WSU Vancouver

Clark College at Washington State University Vancouver, established in 2006, is the result of a longstanding partnership between Clark College and WSU Vancouver. Before WSU Vancouver moved to its current site in 1996, it was housed in Bauer Hall on Clark’s main campus. The 63,334 square foot, three-story building provides additional classrooms, science laboratories, computer labs, and support space to accommodate growing enrollment and the desire to provide access to lower division courses for WSU Vancouver students. The beautiful facility is home to Clark’s nationally-recognized nursing program as well as general education classes.

Clark College at Boschma Farms

Clark College at Boschma Farms is expected to be a boon for the region and represent a long-term vision for the college. Construction of the first building expected to start in 2017 on the 70-acre campus located just east of I-5 in Ridgefield, Washington.

Clark College Community and Continuing Education

Southwest Washington’s premier provider of workforce training and non-credit learning, serving more than 10,000 people annually.

Nondiscrimination and Equity

Clark College recognizes, understands, confronts and challenges the institutional systems of privilege, power, and inequity so that all members of the Clark College community can support student learning.
Notification of Students’ Rights
Under the Family Educational Rights and Privacy Act

Clark College conforms to the Family Educational Rights and Privacy Act (FERPA), as amended, which affords students certain rights as to their education records.

1. Students have the right to inspect and review their education records within 45 days of the day the college receives a written request for access. Students should submit, to the Registrar, written requests that identify the record(s) they wish to inspect. The Registrar will make arrangements for access and notify the student of the time and place where the record(s) may be inspected. If the records requested are not maintained in Enrollment Services, the student will be advised of the correct official to whom the request should be addressed.

2. Students may request that their education records be amended if they believe such information is inaccurate, misleading, or in violation of privacy rights. Students must request in writing that the office that maintains those records amend them. Students should identify the part of the records they want corrected and specify why they believe it is inaccurate, misleading, or in violation of privacy rights.

3. A student has the right to consent to disclosures of personally identifiable information contained in the student’s education records, except to the extent that FERPA authorizes disclosure without consent. With few exceptions (stated below), no one will have access to student records without the written consent of the student. Clark College will not release a student’s record to a parent/guardian without the student’s written permission. Such a policy is in effect regardless of the student’s age or financial dependency upon the parent/guardian.

   a. The college may release student directory information without student consent which includes student’s name, major field of study, enrollment status, dates of attendance, participation in recognized sports, degrees and certificates earned, term degrees and certificates awarded, and honors.

   b. Exceptions include school officials with a legitimate educational interest in a student’s educational record. A school official is a person employed by the college in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the college has contracted (such as an attorney, auditor, collection agent, or the National Student Clearinghouse, an agency which acts as a clearinghouse for student loan deferment reporting); a person elected to the board of trustees; or a student serving on an official committee, such as a disciplinary or grievance committee. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility. Exceptions also include accrediting agencies; student financial aid agencies; and those who require student information in an emergency situation in which someone’s health or safety is at risk. Clark College also discloses educational records without consent to officials of baccalaureate institutions in which a student seeks to, or intends to, enroll.

   c. In compliance with the Higher Education Amendments of 1998, the college is authorized to disclose information to a parent or guardian about any school disciplinary violation involving alcohol or a controlled substance which has been found to have been committed by a student who is under the age of 21.

   d. Pursuant to the Solomon Amendment, Clark College is authorized to disclose the following information to the military for recruitment purposes: student’s name, address, telephone listing, age, Clark student email, academic major, and degrees received from Clark College.

   e. Students who do not wish to have directory information released by the college must file a student directory restriction request with Enrollment Services.

4. A student has the right to file a complaint with the U.S. Department of Education concerning alleged failures by Clark College to comply with the requirements of FERPA by writing to:

   Family Policy Compliance Office
   U.S. Department of Education
   400 Maryland Ave. SW
   Washington, DC 20202-4605

   The Family Compliance Office investigates each timely complaint to determine whether the educational agency or institution has failed to comply with the provisions of FERPA. A timely complaint is defined as an allegation that is submitted within 180 days of the date of the alleged violation or of the date that the complainant knew or reasonably should have known of the alleged violation. In some instances, records may be withheld by the college. The Security/Safety Office may request a hold on records if there is concern that such records may compromise a criminal investigation.

Copies of the complete FERPA policy may be obtained at Enrollment Services. For additional information please see Policies and Procedures (https://www.clark.edu/about/governance/policies-procedures/consumer_information/ferpa/) and FERPA for Students (https://www.clark.edu/about/governance/policies-procedures/consumer_information/ferpa/ferpa-students.php) websites for additional information.

Student Rights and Responsibilities

Clark College provides the utmost quality in education and services to both its community and students. Upon admission to Clark College, students commit to adhering to the expected standards of responsible behavior within the college community. Clark College expects all students to behave consistent with the high standards of scholarship and conduct set by the college.

Clark College requires that all students adhere to the elevated standards of scholarship and conduct established by the institution. These standards of conduct are designed to align with Clark College’s educational objectives and offer students a comprehensive overview of their rights and responsibilities. Information about student rights, responsibilities, and the Code of Student Conduct can be accessed at:
http://www.clark.edu/clark-and-community/about/policies-procedures/student_code.php
DEGREE & CERTIFICATE REQUIREMENTS

• General Information (p. 259)
• Bachelor of Applied Sciences (p. 260)
• Transfer Degrees Overview (p. 262)
• Transfer Degree Distribution List (p. 264)
• Career and Technical Overview (p. 268)
• Career and Technical Degrees and Certificates Distribution List (p. 269)
• Non-Traditional Credit (p. 273)
• Credit Hours and Credit Load (p. 273)

General Information

Degrees & Certificates
Clark College awards six (6) degrees:

• the Associate in Arts degree, for completion of a program of study for transfer to a senior institution;
• the Associate in Science degree, for completion of a program of study in the sciences in preparation for transfer to a senior institution;
• the Associate in Fine Arts degree, for completion of a program in fine arts in preparation for transfer to a senior institution;
• the Associate in Applied Science degree, for completion of a program of study in an occupational program;
• the Associate in Applied Technology degree, for completion of a program of study in an occupational program;
• the Bachelor of Applied Science (BAS), to increase the educational pathways for professional and technical associate graduates.
  • BAS degrees require a minimum of one hundred eighty (180) credits/units and a minimum Grade Point Average (GPA) of 2.0.; each associate degree requires a minimum of ninety (90) credits/units and a minimum Grade Point Average (GPA) of 2.0.
• Certificates of Proficiency are awarded upon completion of a minimum of forty-five (45) credits/units of specialized occupational training, including general education requirements, and require a minimum GPA of 2.0.
• Certificates of Achievement are granted upon completion of a program of specialized occupational training of less than forty-five (45) credits/units and require a minimum GPA of 2.0.
• Certificates of Completion are granted upon completion of a program of specialized occupational training of less than twenty (20) credits/units (with varying credit/unit requirements).

Additional Information

• The grades assigned in transferable courses by the sending institution shall not be altered by the receiving institution.
• Courses completed with a grade of ‘D’ or above shall normally be accepted in transfer (except at The Evergreen State College, where a minimum of 2.0 or ‘C’ is required for transfer).
• Nontraditional grading practices require special handling, depending on the nature and circumstances of the program from which and to which a student is transferring, but receiving institutions shall take steps to assure all students receive equitable treatment.
• A student may earn more than one career-technical degree and/or certificate at Clark College, and a student may earn a combination of academic and career-technical degrees and/or certificates.
• A student can also earn a Direct Transfer Agreement degree and an additional MRP degree (for instance, a student can earn a degree in both Business Administration – MRP and an Associate in Arts – Transfer).

Academic Residency Requirements
In an effort to accommodate our mobile student population, Clark College has adopted a residency policy that recognizes the value of coursework completed from other institutions of higher learning.

To obtain a degree or certificate from Clark College, students are required to earn a minimum number of credits/units in residence at our institution. Clark College does allow students to transfer credits/units toward meeting degree or certificate program requirements. There is no restriction on the number of transfer credits/units allowed; however, students must meet the minimum in-residence credit/unit at Clark College for their specific program.

Requirements and Restrictions
Refer to the following information for specific requirements and restrictions for each type of program:

Bachelor Degree
A minimum of thirty (30) credits/units, pre-college or college level, must be completed at Clark College at any time to meet Academic Residency.

Associate Degree
A minimum of thirty (30) credits/units, pre-college or college level, must be completed at Clark College at any time to meet Academic Residency.

Certificate of Proficiency
A minimum of fifteen (15) credits/units, pre-college or college level, must be completed at Clark College at any time to meet Academic Residency.

Certificate of Completion
A minimum of ten (10) credits/units, pre-college or college level, must be completed at Clark College at any time to meet Academic Residency.

Certificate of Achievement
A minimum of ten (10) credits/units, pre-college or college level, must be completed at Clark College at any time to meet Academic Residency.

Non-traditional credit/unit and credit/unit earned through academic credit for prior learning may not be included within the minimum number of credits/units required.

Academic Subplans
Clark College utilizes three types of subplans. Subplans allow for specialization within a program. Some subplans are transcribed on student transcripts and some are not.

Academic Concentration
• Academic concentrations consist of 15 to 30 credits/units (on average) of course work applicable to transfer degree requirements, and the concentration must be earned concurrently with a transfer degree.
• Academic concentrations are transcribed on student transcripts.
• Academic concentrations must have some tangible transfer benefit for students (e.g., MOU or articulation agreement with specific transfer institutions).
• Academic concentrations must include one or more concentration-specific learning outcomes that are regularly assessed.
• Students are limited to one academic concentration per program (plan code).

Academic Emphasis
• Academic emphases are designed to expose students to a subject matter/discipline and represent a “suggestion of classes” or “possible sequence” of classes.
• Emphasis areas are not transcribed on student transcripts but can be informally used to reference a breadth of work in an area.
• Emphasis areas are informed by Guided Pathways Maps and not driven by transferability, community partnerships or articulation agreements. They aim to support the student experience and provide exposure to a wider breadth of course work in an “area”.

Academic Option
• Options are available to Professional Technical/CTE programs only.
• Options represent a grouping of classes within a focus area and the option once completed is transcribed on student transcripts.
• Programs that offer multiple options (focus areas) can require that students select a specific option and complete the grouping of classes outlined as part of a degree path.
• Students are limited to one academic concentration per program (plan code).

Online Learning Degrees
For information about Clark College eLearning programs and degrees, see Online Learning Degree Programs (http://www.clark.edu/academics/eLearning/programs/)

Academic Residency Requirements for Veterans
Clark College, in compliance with the Department of Defense (DOD) Voluntary Education Partnership Memorandum of Understanding (MOU) and Executive Order 13607 of April 27, 2012, limits academic residency requirements for active-duty service members to no more than 25 percent of the degree program (22.5 credits/units); recognizes all credit/unit course work offered by the institution as applicable in satisfying academic residency requirements; and allows service members to satisfy academic residency requirements with courses taken from Clark College at any time during their program of study.

Academic Honors
To be eligible for academic honors, students must have a minimum GPA of 3.4. Honors for the Associate in Arts degree and the Associate in Science – Transfer degree are based on the cumulative college-level GPA, while the Associate in Applied Science, Associate of Applied Technology and Certificate of Proficiency are based on the cumulative GPA. Honors for the Bachelor of Applied Sciences are based on cumulative college-level GPA. Students in the Bachelor of Applied Science and associate degree programs will earn the designation of “with honors” for a GPA of 3.4 to 3.89, and the designation of “with highest honors” for a GPA of 3.9 or higher. Certificates of Proficiency will be granted the designation of “with merit” for a GPA of 3.4 or higher (Certificates of Achievement are not eligible for honors designations). Those students participating in June ceremonies will receive recognition at the celebration based on their appropriate GPA on record at the end of winter term. If honor status changes once final grades are processed, adjustments will be made to the student record.

Distribution Coding
The following codes may be included in some course descriptions and indicate the applicability of the course toward the general education requirements of Clark College degrees and certificates. Be sure to verify which courses have been approved to meet general education requirements for your particular degree or certificate program as Distribution Coding is not universally applied.

<table>
<thead>
<tr>
<th>Code</th>
<th>General Education Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA</td>
<td>Written Communication Skills (AAS and CP only)</td>
</tr>
<tr>
<td>CP</td>
<td>Computational Skills</td>
</tr>
<tr>
<td>CT</td>
<td>Written Communication Skills (AAT only)</td>
</tr>
<tr>
<td>GE</td>
<td>General Elective</td>
</tr>
<tr>
<td>HA</td>
<td>Humanities Academic (A list)</td>
</tr>
<tr>
<td>HB</td>
<td>Humanities Performance (B list)</td>
</tr>
<tr>
<td>HE</td>
<td>Health</td>
</tr>
<tr>
<td>HPE</td>
<td>Health &amp; Physical Education</td>
</tr>
<tr>
<td>HR</td>
<td>Human Relations</td>
</tr>
<tr>
<td>NS</td>
<td>Natural Sciences</td>
</tr>
<tr>
<td>NS-Lab</td>
<td>Natural Science with Lab</td>
</tr>
<tr>
<td>OC</td>
<td>Oral Communications</td>
</tr>
<tr>
<td>PE</td>
<td>Physical Education Activity</td>
</tr>
<tr>
<td>PPI</td>
<td>Power, Privilege and Inequity</td>
</tr>
<tr>
<td>Q</td>
<td>Quantitative/Symbolic Reasoning</td>
</tr>
<tr>
<td>SE</td>
<td>Specified Elective</td>
</tr>
<tr>
<td>SS</td>
<td>Social Sciences</td>
</tr>
<tr>
<td>WC</td>
<td>Written Communication Skills (Transfer only)</td>
</tr>
</tbody>
</table>

Title IV Student Complaint Process
The Higher Education Act (HEA) prohibits an institution of higher education from engaging in a “substantial misrepresentation of the nature of its educational program, its financial charges, or the employability of its graduates.” 20 U.S.C. §1094(c)(3)(A). Further, each State must have “a process to review and appropriately act on complaints concerning the institution including enforcing applicable State laws.” 34 C.F.R. § 600.9. The Washington State Board for Community and Technical Colleges (SBCTC) maintains a process to investigate complaints of this nature brought by community and technical college students in the State of Washington. For more information, contact the SBCTC Student Services Office at 360-704-4315.

Bachelor of Applied Sciences
General Degree Requirements
Except for the BAS in Dental Hygiene, in addition to completing a two-year degree (AA, AFA, AAS, AAT, AAS-T, AST1, AST2) students must also:
Complete all of the major or distribution area requirements:

- Complete a minimum of one hundred and eighty (180) college-level credits/units
- Minimum of sixty (60) upper division (300 or 400 level) credits/units
- Maintain a minimum cumulative college-level grade point average (GPA) of 2.00 or higher
- Thirty (30) credits/units minimum must be completed at Clark College to meet Academic Residency

General Degree Credit/Unit Restrictions

- Academic Credit for Prior Learning: No more than forty-five (45) credits/units of can be applied to the Associate of Arts, Associate in Science Tracks 1 & 2, and Bachelor of Applied Science Degrees. This includes any combination of credits/units earned through Advanced Placement (AP), International Baccalaureate (IB), Cambridge International (CI), course challenges, or industry certifications.
- Course Challenge: Students may use credits/units earned from successful course challenges toward their degree or certificate, and the credits/units will apply towards academic residency requirements.
- Pass/Fail Grading Option: Sixty (60) credits/units maximum in courses with Pass/Fail grading option can apply toward the degree.
- Tech Prep/Direct Credit: Tech Prep/Direct Credit courses that are part of a professional program and fall into the restricted area in the DTA degree are limited to 15 credits/units. If Tech Prep/Direct Credit courses apply to a professional technical degree or certificate there is no limit to the number of credits/units that can be applied.
- Special Projects: No more than fifteen (15) credits/units in Special Projects will be allowed toward the Bachelor of Applied Science (BAS) degree.

General Information on the Transfer of Grades

The grades assigned in transferable courses by the sending institution shall not be altered by the receiving institution. They also are not used in calculating students’ Clark grade point average (GPA). Courses completed with a grade of "D" or above may be accepted in transfer. A grade of "D-" may not apply toward a completion of a Bachelor of Applied Science at Clark College. Nontraditional grading practices require special handling, depending on the nature and circumstances of the program from which and to which a student is transferring, but receiving institutions shall take steps to assure all students equitable treatment.

General BAS Degree Requirements

1. Students must earn a cumulative grade point average (GPA) of at least 2.0, as calculated by the degree awarding institution. Please refer to specific program for additional GPA requirements.
2. The general education courses will include courses earned at either/both the associate degree and/or applied bachelor's degree level, based on the total required 180 term hours of credit.

Basic Requirements (15 credits/units)

Communication Skills (10 credits/units)

Must include at least two communication courses to include a minimum of one English composition course; e.g. ENGL101. Remaining credits/units may be an additional composition course or designated writing-intensive courses or courses in basic speaking skills (e.g. speech, rhetoric, or debate).

Quantitative/Symbolic Reasoning Skills (5 credits/units)

- Five (5) credits/units of college level mathematics (a course with a Mathematics prefix numbered 100 or above) that furnishes the quantitative skills required in the commonly recognized educational transfer pathways toward a baccalaureate degree. Accepted courses in these pathways are: Pre-calculus or higher, Mathematics for Elementary Education, Business Pre-calculus/Finite Mathematics, Statistics, and Math in Society;
- or -
- Five (5) credits/units of a symbolic logic course that focuses on (a) sentence logic with proofs and (b) predicate logic with quantifiers and proofs and/or Aristotelian logic with Venn Diagrams.

Distribution Requirements (35 credits/units)

Humanities (5 credits/units)

A maximum of five (5) credits/units of List B (performance) Humanities coursework can be applied. A maximum of five (5) credits/units of 100-level world language can be applied.

Social Science (5 credits/units)

Natural Sciences with lab component (5 credits/units)

At least five (5) credits/units in physical, biological and/or earth sciences. Shall include at least one laboratory course.

Additional General Education Courses (20 credits/units)

Remaining general education courses needed to achieve the required 60 credits/units shall be selected from the Basic and Distribution Requirements listed above.

300 and 400 Level General Education Courses

In addition to 100/200 level courses, colleges may elect to develop 300/400 level general education courses that best suit the curriculum needed of the baccalaureate degree. These courses must be selected from the Basic and Distribution Requirements listed above. Students who are enrolled in a combination of upper and lower division courses will be charged for all upper and lower credits/units based on the upper division tuition schedule.

Refer to the specific degree requirements for further information.

Transfer in General Education Requirements

Students who have earned a baccalaureate degree from an institution accredited by one of the following agencies:

- Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges (ACCJC)
- Higher Learning Commission (HLC)
- Middle States Commission on Secondary Schools (MSA-CESS)
- Northwest Commission on Colleges and Universities (NWCCU)
- Southern Association of Colleges and Schools Commission on Colleges (SACSCOC)
General Transfer Degree Requirements

In addition to completing all of the major or distribution area requirements, students must also:

- Complete a minimum of ninety (90) college-level credits/units.
- Maintain a minimum cumulative college-level grade point average (GPA) of 2.00 or higher.
- Thirty (30) credits/units minimum must be completed at Clark College to meet Academic Residency.
- Student must complete at least sixty (60) General Education credits/units.

General Transfer Degree Credit/Unit Restrictions

- Cooperative Work Experience: No more than fifteen (15) credits/units may be applied to an associate degree.
- Course Challenge: Students may use credits/units earned from successful course challenges toward their degree or certificate, but the credits/units will not meet the academic residency requirements.
- Standardized Tests: Advanced Placement (AP), College Level Examination Program (CLEP), International Baccalaureate (IB), and/or Cambridge International (CI): A maximum of forty-five (45) credits/units from Academic Credit for Prior Learning can be applied to a degree.
- Pass/Fail Grading Option: Forty-Five (45) credits/units maximum in courses with Pass/Fail grading option can apply toward the degree.
- Tech Prep/Direct Credit: Tech Prep/Direct Credit courses that are part of a professional program and fall into the restricted area in the DTA degree are limited to 15 credits/units. If Tech Prep/Direct Credit courses apply to a professional technical degree or certificate there is no limit to the number of credits/units that can be applied.
- Special Projects: No more than fifteen (15) credits/units in Special Projects will be allowed to apply towards degree or certificate requirements unless specifically outlined by a program.
- A student may not be more than one (1) unit/credit short within an individual distribution area so long as at least sixty (60) distribution area credits/units is satisfied.
- Credit by Department: Ten (10) credits/units maximum from any single department can be used to fulfill Humanities, Social Sciences and Natural Sciences distribution requirements.
- World Language: Five (5) credits/units maximum in 100-level world language can be used to fulfill Humanities distribution requirements. Additional 100-level world language coursework can be used to meet Specified or General Elective requirements.
- Physical Education Activity: Three (3) credits/units maximum in PE activity can apply toward the degree.

General Information on the Transfer of Grades

The grades assigned in transferable courses by the sending institution shall not be altered by the receiving institution. They also are not used in calculating students’ Clark grade point average (GPA). Courses completed with a grade of “D” or above shall normally be accepted in transfer (except at the Evergreen State College, where a minimum of 2.0 or “C” is required for transfer). A grade of “D-” may not apply toward a completion of a transfer degree or Bachelor of Applied Science at Clark College. Nontraditional grading practices require special handling, depending on the nature and circumstances of the program from which and to which a student is transferring, but receiving institutions shall take steps to assure all students equitable treatment.

Associate in Arts (AA)-Direct Transfer Agreement (DTA)

The Associate in Arts (AA) degree is designed for students planning to transfer to a four-year institution to pursue a bachelor’s degree program. The degree, in most cases, meets the first two (2) years of general education requirements at the senior institution. There are exceptions; please check with the transfer institution for additional information. Most students transferring with the AA degree will be granted junior standing upon entry to the senior institution.

The standard Associate in Arts degree is also known as a Direct Transfer Agreement (DTA) Associate degree. The AA-DTA is a statewide agreement between the Washington State community and technical colleges and Washington State public universities, as well as some private colleges and universities. The agreement outlines transferability of coursework and standing; in most cases students who have completed an AA-DTA will also have satisfied general education requirements at the baccalaureate institution and will have junior standing. Students should review their baccalaureate institution to see if they are part of the DTA in Washington State.

AA - DTA General Education Credit/Unit Restrictions

- Physical Education Activity: Three (3) credits/units maximum in PE activity can apply toward the degree.
- A course can apply toward only one (1) distribution requirement (i.e. Communication Skills, Quantitative Skills/Symbolic Reasoning Skills, Humanities, Social Sciences, and Natural Sciences). The exception is for the Oral communication, College 101 and Power, Privilege and Inequity requirements, which are local degree requirements. When meeting these requirements, the same course can be applied to the degree requirement and to the distribution area.
- Excess credits/units earned in distribution areas (i.e. Communication Skills, Quantitative Skills/Symbolic Reasoning Skills, Humanities, Social Sciences, and Natural Sciences) can be used to fulfill Specified or General Elective Requirements.

Associate in Arts - Major Related Programs (AA - DTA/MRP)

To help transfer students better prepare for their junior year, two-year and four-year institutions are working together to create transfer associate degrees outlining the appropriate courses in order for students to be well prepared to enter their chosen major upon transfer. The MRP degrees
follow the Direct Transfer Agreement (DTA) format of the Associate in Arts degree. The DTA/MRP pathway is applicable to students planning to prepare for the following majors at various universities in Washington. Clark College offers the following Associate in Arts – DTA/MRP\(^1\) in:

- Biology
- Business
- Math Education
- Music
- Nursing
- Pre-Nursing

**AA - DTA/MRP General Education Requirements**

The MRP degrees listed above have slightly different graduation requirements than other Clark transfer degrees because the curriculum was created via an articulation agreement between Washington two-year and four-year schools. Most notably, DTA/MRP degrees differ from the Associate in Arts degree in the following ways:

- Health and Physical Education [HE,PE,HPE] is not required;
- College Preparation (COLL 101) is not required;
- Oral Communication [OC] is not required;
- Power, Privilege and Inequity [PPI] is not required;
- Social Sciences [SS] may be completed with two (2) subject areas;
- Specific coursework is identified and required for program completion.

Clark students are encouraged to take Health and Physical Education [HE,PE,HPE], College 101 [COLL], Power, Privilege and Inequity [PPI], and Oral Communication [OC] courses, where appropriate, in case their degree choice changes.

**Associate in Fine Arts (AFA)**

This transfer preparation degree is designed for students planning to transfer to a senior institution to pursue a bachelor’s degree program (BA or BFA) in Fine Arts. The degree programs focus on coursework specific to the intended major area of study at the senior institution. While coursework in general education, social sciences, and natural sciences is included, additional coursework in these areas will be required at the senior institution. It is important for students to meet with program-specific advisors to determine an appropriate educational plan. The AFA does NOT adhere to the direct-transfer agreement, so students need to be aware of requirements of the receiving senior institution. Currently, Clark College offers two (2) Associate in Fine Arts degrees: Graphic Design and Studio Art. Please contact the Art Department for advising information.

**AFA General Education Requirements**

**Written Communication Skills [WC]**

5 credits/units

To fulfill the communication skills requirement for the AFA degree students must complete ENGL& 101 or its equivalent at least five (5) credits/units. Students who complete ENGL& 101 or its equivalent at less than five (5) credits/units may complete the communications requirement by completing any of the courses (or their appropriate transfer equivalents) in Written Communications [WC] or Oral Communications [OC] as defined within the Associate of Arts distribution requirements.

**Quantitative Skills/Symbolic Reasoning Skills [Q]**

5 credits/units

To fulfill the quantitative skills requirement for the AFA degree, students must complete five (5) credits/units of college level mathematics.

**Health & Physical Education [HE, HPE, PE]**

3 credits/units

To fulfill the Health and Physical Education requirement for the AFA degree, students must complete two (2) qualifying credits/units of Health and one (1) credit/unit of any college-level Physical Education [PE] activity course, or HPE 220, HPE 258, or HPE 266.

**Humanities [HA]**

5 credits/units

To fulfill the Humanities requirement for the AFA degree students must complete five (5) credits/units of coursework from the Humanities [HA] Associate of Arts distribution list. Courses must be List A courses and in a subject area other than Art. The course completed cannot be part of the AFA major requirements.

**Social Sciences [SS]**

5 credits/units

To fulfill the Social Science requirement for the AFA degree students must complete five (5) credits/units of coursework from the Social Sciences [SS] Associate of Arts distribution list. The course completed cannot be part of the AFA major requirements.

**Natural Sciences [NS]**

5 credits/units

To fulfill the Natural Science requirement for the AFA degree students must complete five (5) credits/units of coursework from the Natural Sciences Associate of Arts distribution list. The course completed must include a lab. The course completed cannot be part of the AFA major requirements.

**Major Area Requirements**

The balance of the program shall be defined by the major department and should be a minimum of 90 credits/units.

**Associate in Science – Transfer (AST)**

The transfer preparation degrees are designed for students planning to transfer to a senior institution to pursue a bachelor’s degree program in science and/or engineering. The degree programs focus on coursework specific to the intended major area of study at the senior institution. While coursework in general education, humanities, and Social Sciences is included, additional coursework in these areas will be required at the senior institution. It is important for students to meet with program-specific advisors to determine an appropriate educational plan.

**Associate in Science – Track 1 (AST1)**

The AST1 degree track is for students intending to transfer into programs in:

- Biological Sciences
- Chemistry
• Environmental/Resources Sciences
• Geology

**Associate in Science – Track 2 (AST2)**

Associate in Science – Track 2 is for students intending to transfer into programs in:

**AST2 - Concentration Options**

• Clean/Renewable Energy
• Computer Science
• Engineering
• Physics

**AST2 – MRP**

• Bioengineering and Chemical Engineering
• Computer and Electrical Engineering
• Mechanical/Civil/Aeronautical/Industrial/Materials Science Engineering

"Washington 45" – List of One Year Transfer Courses

The list of courses in Washington 45 does not replace the Direct Transfer Agreement, Associate of Science Tracks I and II or any Major Related Program agreement, nor will it guarantee admission to a four-year institution. A student who completes courses selected from within the general education categories listed below at a public community, technical, four-year college or university in Washington State will be able to transfer and apply a maximum of 45 term credits/units toward general education requirement(s) at any other public and most private higher education institutions in the state. For transfer purposes, a student must have a minimum grade of C or better (2.0 or above) in each course completed from this list. Students who transfer Washington 45 courses must still meet a receiving institution’s admission requirements and eventually satisfy all their general education requirements and their degree requirements in major, minor, and professional programs. “First Year Transfer List” of general education courses (not all offered at Clark College):

- Communications (5 credits/units) – ENGL& 101, ENGL& 102
- Quantitative and Symbolic Reasoning (5 credits/units) – MATH& 107, MATH& 146 or MATH& 151
- Humanities (10 credits/units in two different subject areas or disciplines) – PHIL& 101, DRMA& 101
- For colleges that use History as a Humanities – HIST& 146, HIST& 147, HIST& 148
- Social Science (10 credits/units in two different subject areas or disciplines) – PSYC& 100, SOC& 101
- For colleges that use History as a Social Science – HIST& 146, HIST& 147, HIST& 148
- Natural Sciences (10 credits/units in two different subject areas or disciplines) – BIOL& 100, BIOL& 160 with lab ASTR& 101 with lab, CHEM& 110 with lab, CHEM& 121 with lab, ENVS& 101 with lab, GEO& 101 with lab.
- Additional 5 credits/units in a different discipline can be taken from any category listed above.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 103</td>
<td>College Trigonometry</td>
<td>5</td>
</tr>
<tr>
<td>MATH 104</td>
<td>Finite Math with Support</td>
<td>5</td>
</tr>
<tr>
<td>MATH 105</td>
<td>Finite Mathematics</td>
<td>5</td>
</tr>
<tr>
<td>MATH 110</td>
<td>College Algebra With Support</td>
<td>5</td>
</tr>
<tr>
<td>MATH 111</td>
<td>College Algebra</td>
<td>5</td>
</tr>
<tr>
<td>MATH 122</td>
<td>Math for Elementary Teachers</td>
<td>5</td>
</tr>
<tr>
<td>MATH 123</td>
<td>Math for Elementary Teachers</td>
<td>5</td>
</tr>
<tr>
<td>MATH 124</td>
<td>Math for Elementary Teachers</td>
<td>5</td>
</tr>
<tr>
<td>MATH 140</td>
<td>Calculus for Life Sciences</td>
<td>6</td>
</tr>
<tr>
<td>MATH 147</td>
<td>Statistics II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 215</td>
<td>Linear Algebra</td>
<td>5</td>
</tr>
<tr>
<td>MATH 221</td>
<td>Differential Equations</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 107</td>
<td>Math In Society</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 146</td>
<td>Introduction to Stat</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 148</td>
<td>Business Calculus</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 151</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 153</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 254</td>
<td>Calculus IV</td>
<td>5</td>
</tr>
<tr>
<td>PHIL&amp; 120</td>
<td>Symbolic Logic</td>
<td>5</td>
</tr>
</tbody>
</table>

**Health & Physical Education [HE, PE, HPE]**

3 credits/units

**Option One**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 100</td>
<td>Food and Your Health</td>
<td>2</td>
</tr>
<tr>
<td>HLTH 101</td>
<td>Health for Adult Living</td>
<td></td>
</tr>
<tr>
<td>HLTH 103</td>
<td>Environmental Health</td>
<td></td>
</tr>
<tr>
<td>HLTH 108</td>
<td>Happiness and Your Health</td>
<td></td>
</tr>
<tr>
<td>HLTH 206</td>
<td>Human Sexuality</td>
<td></td>
</tr>
<tr>
<td>HLTH 207</td>
<td>Women's Health</td>
<td></td>
</tr>
<tr>
<td>HLTH 210</td>
<td>Health and Social Justice</td>
<td></td>
</tr>
<tr>
<td>HLTH 212</td>
<td>Cannabis and Your Health</td>
<td></td>
</tr>
</tbody>
</table>
PE activity (PE, PEDNC, PEMAR) 1
Total Credits/Units 3

Option Two

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPE 258</td>
<td>Fitness-Wellness</td>
<td>3</td>
</tr>
<tr>
<td>or HPE 266</td>
<td>Mind Body Health</td>
<td></td>
</tr>
<tr>
<td>or HPE 220</td>
<td>Occupational Wellness</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits/Units 3

Humanities [HA (academics), HB (performance)]

15 credits/units

Select courses from at least two (2) subject areas for a minimum of fifteen (15) credits/units. You may include no more than ten (10) credits/units from any one subject area. A maximum of five (5) credits/units of “B” list coursework may be applied. A maximum of five (5) credits/units of 100-level world language can be applied.

<table>
<thead>
<tr>
<th>Department</th>
<th>HA</th>
<th>HB</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Sign Language</td>
<td>ASL 121, ASL 122, ASL 123, ASL 221, ASL 222, ASL 223</td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td>ART 100</td>
<td>ART 101, ART 103, ART 104, ART 105, ART 110, ART 117, ART 120, ART 121, ART 122, ART 123, ART 124, ART 125, ART 170, ART 173, ART 174, ART 180, ART 181, ART 182, ART 189, ART 190, ART 191, ART 203, ART 204, ART 208, ART 257, ART 258, ART 259, ART 260, ART 261, ART 262, ART 270, ART 271, ART 273, ART 274, ART 290</td>
</tr>
<tr>
<td>Communication Studies</td>
<td>CMST &amp; 102, CMST &amp; 210, CMST &amp; 220, CMST &amp; 230, CMST &amp; 240</td>
<td></td>
</tr>
<tr>
<td>Drama</td>
<td>DRMA 101</td>
<td>DRMA 140, DRMA 141, DRMA 150, DRMA 152, DRMA 250</td>
</tr>
<tr>
<td></td>
<td>DRMA 154</td>
<td></td>
</tr>
</tbody>
</table>
### Music
- MUSC& 104, MUSC& 141, MUSC& 142, MUSC& 143, MUSC& 231, MUSC& 232, MUSC& 233, MUSC 101, MUSC 110, MUSC 115, MUSC 137, MUSC 138, MUSC 151, MUSC 152, MUSC 153, MUSC 154, MUSC 155, MUSC 174, MUSC 175, MUSC 180, MUSC 181, MUSC 182, MUSC 183, MUSC 184, MUSC 185, MUSC 186, MUSC 196, MUSC 197, MUSC 201, MUSC 202, MUSC 210, MUSC 237, MUSC 238, MUSC 239, MUSC 250, MUSC 251, MUSC 252, MUSC 253, MUSC 254, MUSC 255, MUSC 270, MUSC 271, MUSC 272, MUSC 273, MUSC 274, MUSC 275, MUSC 280, MUSC 281, MUSC 282, MUSC 283, MUSC 284, MUSC 285, MUSC 290, MUSC 295, MUSC 296, MUSC 297

### Philosophy
- PHIL& 101, PHIL& 120, PHIL 115, PHIL 215, PHIL 216, PHIL 217, PHIL 240, PHIL 251

### Sociology
- SOC 161

### Spanish
- SPAN& 121, SPAN& 122, SPAN& 123, SPAN& 221, SPAN& 222, SPAN& 223

### Women's Studies
- WS 101, WS 201, WS 210

### Power, Privilege, and Inequity [PPI]
3 credits/units

Power, Privilege and Inequity required course fulfill the PPI requirement within an existing distribution area. Check course description for further distribution information.

### Social Sciences [SS]
15 credits/units

Select courses from at least three (3) subject areas for a minimum of fifteen (15) credits/units. You may include no more than ten (10) credits/units from any one subject area.

<table>
<thead>
<tr>
<th>Department</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addiction Counseling</td>
<td>ACED 101</td>
</tr>
<tr>
<td>Anthropology</td>
<td>ANTH&amp; 204, ANTH&amp; 206, ANTH&amp; 215</td>
</tr>
<tr>
<td>Communication Studies</td>
<td>CMST&amp; 230</td>
</tr>
<tr>
<td>Economics</td>
<td>ECON&amp; 201, ECON&amp; 202</td>
</tr>
<tr>
<td>English</td>
<td>ENGL 175</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>ENVS 231</td>
</tr>
<tr>
<td>Geography</td>
<td>GEOG&amp; 100, GEOG&amp; 102, GEOG&amp; 200, GEOG&amp; 207</td>
</tr>
</tbody>
</table>

- HIST 231, HIST 251, HIST 252, HIST 285
Political Science
POLS& 203
POLS 111, POLS 131, POLS 220, POLS 221, POLS 222, POLS 223, POLS 224, POLS 231

Psychology
PSYC& 100, PSYC& 200
PSYC 102, PSYC 203

Sociology
SOC& 101, SOC& 201
SOC 131, SOC 161, SOC 250

Women's Studies
WS 101, WS 201, WS 210, WS 220, WS 225

# Natural Sciences [NS, NS-Lab]
15 credits/units

Select courses from at least two (2) subject areas for a minimum of fifteen (15) credits/units. You may include no more than ten (10) credits/units from one subject area. You must include at least one lab science.

<table>
<thead>
<tr>
<th>Department</th>
<th>Lab Course</th>
<th>Non-Lab Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>ANTH&amp; 215</td>
<td>ANTH&amp; 245</td>
</tr>
<tr>
<td>Astronomy</td>
<td>ASTR&amp; 101</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>BIOL&amp; 100, BIOL&amp; 160, BIOL&amp; 175, BIOL&amp; 221, BIOL&amp; 222, BIOL&amp; 223, BIOL&amp; 241, BIOL&amp; 242, BIOL&amp; 251, BIOL&amp; 252, BIOL&amp; 253, BIOL&amp; 260, BIOL 101, BIOL 102, BIOL 105, BIOL 106, BIOL 150, BIOL 208, BIOL 224</td>
<td>BIOL 139, BIOL 140, BIOL 141, BIOL 142, BIOL 145, BIOL 167, BIOL 180</td>
</tr>
<tr>
<td>Engineering</td>
<td>ENGR&amp; 104</td>
<td></td>
</tr>
<tr>
<td>Environmental Science</td>
<td>ENVS&amp; 101</td>
<td>ENVS 202</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>ENVS 109, ENVS 200, ENVS 201, ENVS 208, ENVS 218</td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td>GEOG 205</td>
<td></td>
</tr>
<tr>
<td>Geology</td>
<td>GEO&amp; 101, GEO&amp; 103, GEO&amp; 109, GEO&amp; 218</td>
<td>GEO 109</td>
</tr>
</tbody>
</table>

Elective Requirements
Complete a total of twenty-seven (27) credits/units from courses numbered 100 and above. The two areas of electives are listed below.

Specified Electives [SE]
All courses numbered 100 and above (except 199 and 290) in the departments listed below may be used to meet the Specified Elective portion of the degree (some departments have chosen specifically listed courses only or have excluded specific courses). A maximum of two (2) credits/units in PE activity can apply toward this area.

Approved courses that apply: [HA, HB, HE, HPE, NS, OC, PPI, Q, SE, SS, WC] – 12 credits/units minimum.

<table>
<thead>
<tr>
<th>Department</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>ACCT&amp; 201, ACCT&amp; 202, ACCT&amp; 203 only</td>
</tr>
<tr>
<td>Addiction Counseling</td>
<td>ACED 101 only</td>
</tr>
<tr>
<td>American Sign Language</td>
<td></td>
</tr>
<tr>
<td>Anthropology</td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td></td>
</tr>
<tr>
<td>Astronomy</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>BUS&amp; 101, BUS&amp; 201; BUS 211 only</td>
</tr>
<tr>
<td>Chemistry</td>
<td></td>
</tr>
<tr>
<td>Communication Studies</td>
<td>Excluding CMST 280</td>
</tr>
<tr>
<td>Computer Science &amp; Engineering</td>
<td>CTEC 121, CTEC 122 only</td>
</tr>
<tr>
<td>Computer Technology</td>
<td></td>
</tr>
<tr>
<td>Drama</td>
<td></td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>ECED&amp; 105, ECED&amp; 115, ECED&amp; 120</td>
</tr>
<tr>
<td>Economics</td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td></td>
</tr>
<tr>
<td>Environmental Science</td>
<td></td>
</tr>
<tr>
<td>Forensic Science</td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td></td>
</tr>
<tr>
<td>Geology</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>Excluding HLTH 120, HLTH 123, HLTH 124</td>
</tr>
<tr>
<td>Health &amp; Physical Education</td>
<td>Excluding HPE 280, HPE 290</td>
</tr>
<tr>
<td>History</td>
<td></td>
</tr>
<tr>
<td>Human Services Substance Abuse</td>
<td>HSSA&amp; 101</td>
</tr>
<tr>
<td>Japanese</td>
<td></td>
</tr>
<tr>
<td>Journalism</td>
<td>JOUR 101, JOUR 111 only</td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
</tr>
</tbody>
</table>
Meteorology
Music
Nutrition
Oceanography
Philosophy
Physical Education
Physical Science
Physics
Political Science
Psychology
Sociology
Spanish
Women’s Studies

A maximum of two (2) credits/units in PE activity can apply toward this area.

General Electives [GE]
A maximum of fifteen (15) credits/units of general electives can apply. Courses must be 100-level or higher. Physical Education activity credits/units are limited to a maximum of three (3) credits/units regardless of distribution area in the DTA degree. Coursework in FLPC cannot apply.

- Many private non-profit colleges and universities have distinct general education requirements. Students should check with institution(s) they plan to attend regarding application of transfer credits/units that will meet general education requirements.
- Disciplines are sometimes called “subjects” or “subject matter areas” and designated by a prefix (i.e., PHIL for Philosophy and POLS for Political Science).

Career and Technical Overview

Degree & Certificate Intent
The career and technical education degrees and certificates are designed for students interested in gaining specific technical career skills. Students focus on completing program-specific coursework, balanced by minimal general education courses. Although the Associate in Applied Science and the Associate in Applied Technology degree programs are not designed to guarantee transfer to a senior institution, some institutions may accept technical coursework for students in certain areas of study. Students should contact an advisor and/or the senior institution for additional information.

Associates General Requirements
Complete a minimum number of credits/units in specified curriculum:

- Associate Degree: Ninety (90) credits/units minimum
  - Associate in Applied Sciences (AAS): Students must complete the courses listed in their career plan, plus electives as needed to meet the ninety (90) credit/unit requirement. Most occupational programs require more than fifty-nine (59) credits/units of specific requirements.
  - Associate in Applied Technology (AAT): Students must complete the courses listed in their career plan, plus electives as needed to meet the ninety (90) credit/unit requirement. All Associate in Applied Technology degree programs require at least seventy-five (75) credits/units of major-related requirements.
- Certificate of Proficiency: Forty-five (45) credits/units minimum
- Certificate of Achievement: Twenty-one (21) credits/units minimum
- Certificate of Completion: 19 credit/unit maximum
- Maintain a minimum cumulative grade point average (GPA) of 2.0 or higher

Meet academic residency requirements as follows:

- Associate Degree: Thirty (30) credits/units minimum must be completed at Clark College.
- Certificate of Proficiency: Fifteen (15) credits/units minimum must be completed at Clark College.
- Certificate of Achievement: Ten (10) credits/units minimum must be completed at Clark College.
- Earn a grade of “C” (2.0) or higher in each major area requirement and specifically listed courses unless otherwise noted in the department requirements for all courses taken at Clark College.

General Credit/Unit Restrictions

- Academic Credit for Prior Learning: A maximum of sixty (60) credits/units from AP, IB, CI, course challenges, or industry certification credits/units can be applied to a degree. Credit by Challenge coursework will meet academic residency requirements.
- College Level Examination Program (CLEP): Students may request up to fifteen (15) CLEP credits/units to be applied to a degree. credits/units will be used to fulfill general elective requirements only.
- Tech Prep/Direct Credit: Tech Prep/Direct Credit courses that are part of a professional program and fall into the restricted area in the DTA degree are limited to 15 credits/units. If Tech Prep/Direct Credit courses apply to a professional technical degree or certificate, there is no limit to the number of credits/units that can be applied.
- Cooperative Work Experience: No more than fifteen (15) credits/units may be applied to an associate degree.
- Special Projects: No more than fifteen (15) credits/units in Special Projects will be allowed to meet degree or certificate requirements unless specifically outlined by the program.
- Military Experience: credits/units may be earned by previous military experience but cannot exceed twenty five percent (25%) of the degree or certificate. Please contact the Credentials Evaluations Office at Clark College for further information.
- Pass/Fail Grading Option: Sixty (60) credits/units maximum in courses with Pass/Fail grading option for an associate degree.

General Information
For Associate in Applied Science degrees, General Education courses are restricted to two (2) distribution areas in the general education area of the degree.

Certificate of Achievement (CA)
The Certificate of Achievement is designed for students who wish to receive specialized occupational training for a specialized career objective requiring less than forty-five (45) credits/units, but more than twenty (20) credits/units. Students must maintain a cumulative grade point average (GPA) of 2.0 or better. Students are required to complete a minimum of ten (10) credits/units at Clark College to meet the Academic Residency requirement.

Certificate of Completion (CC)
The Certificate of Completion is designed for students who wish to gain entry-level skills or for those who wish to upgrade their skills in a short
period of time. Certificates of Completion typically consist of three to four courses, requiring twenty (20) or less credits/units. They are awarded by the department with the approval of the program advisory committee and the Office of Instruction. The courses can be taken simultaneously or individually as your schedule allows. These certificates are not awarded a standard Clark College diploma.

**Career and Technical Degrees and Certificates Distribution List**

**Professional and Technical Degrees and Certificates Distribution Lists**

**Associate in Applied Science (AAS)**

**Associate in Applied Technology (AAT)**

**Certificate of Proficiency (CP)**

**Certificate of Achievement (CA)**

**Certificate of Completion (CC)**

**Degree & Certificate Intent**

The career and technical education degrees and certificates are designed for students interested in gaining specific technical career skills. Students focus on completing program-specific coursework, balanced by minimal general education courses. Although the Associate in Applied Science and the Associate in Applied Technology degree programs are not designed to guarantee transfer to a senior institution, some institutions may accept technical coursework for students in certain areas of study. Students should contact an advisor and/or the senior institution for additional information.

**General Requirements**

Complete a minimum number of credits/units in specified curriculum:

- **Associate Degree:** Ninety (90) credits/units minimum
  - **Associate in Applied Sciences (AAS):** Students must complete the courses listed in their career plan, plus electives as needed to meet the ninety (90) credit/unit requirement. Most occupational programs require more than fifty-nine (59) credits/units of specific requirements.
  - **Associate in Applied Technology (AAT):** Students must complete the courses listed in their career plan, plus electives as needed to meet the ninety (90) credit/unit requirement. All Associate in Applied Technology degree programs require at least seventy-five (75) credits/units of major-related requirements.
- **Certificate of Proficiency:** Forty-five (45) credits/units minimum
- **Certificate of Achievement:** Twenty-one (21) credits/units minimum
- **Maintain a minimum cumulative grade point average (GPA) of 2.0 or higher**

Meet academic residency requirements as follows:

- **Associate Degree:** Thirty (30) credits/units minimum must be completed at Clark College.
- **Certificate of Proficiency:** Fifteen (15) credits/units minimum must be completed at Clark College.
- **Certificate of Achievement:** Ten (10) credits/units minimum must be completed at Clark College.
- **Earn a grade of "C" (2.0) or higher in each major area requirement and specifically listed courses unless otherwise noted in the department requirements for all courses taken at Clark College.**

**General Credit/Unit Restrictions**

- **Physical Education Activity:** Three (3) credits/units maximum in PE activity can apply toward an associates degree.
- **Academic Credit for Prior Learning:** A maximum of sixty (60) credits/units from AP, IB, CI, course challenges, or industry certification credits/units can be applied to a degree. Credit by Challenge coursework will meet academic residency requirements.
- **College Level Examination Program (CLEP):** Students may request up to fifteen (15) CLEP credits/units to be applied to a degree. Credits/Units will be used to fulfill general elective requirements only.
- **Tech Prep/Direct Credit:** Tech Prep/Direct Credit courses that are part of a professional program and fall into the restricted area in the DTA degree are limited to 15 credits/units. If Tech Prep/Direct Credit courses apply to a professional technical degree or certificate, there is no limit to the number of credits/units that can be applied.
- **Cooperative Work Experience:** No more than fifteen (15) credits/units may be applied to an associate degree.
- **Special Projects:** No more than fifteen (15) credits/units in Special Projects will be allowed to meet degree or certificate requirements unless specifically outlined by the program.
- **Military Experience:** credits/units may be earned by previous military experience but cannot exceed twenty-five percent (25%) of the degree or certificate. Please contact the Credentials Evaluations Office at Clark College for further information.
- **Pass/Fail Grading Option:** Sixty (60) credits/units maximum in courses with Pass/Fail grading option for an associate degree.

**General Education Requirements**

Note: Some specific requirements of a program may also meet the General Education requirements.

**Communication Skills [CA, CT]**

<table>
<thead>
<tr>
<th>Department</th>
<th>AAS - 6 credits/units minimum (CA)</th>
<th>AAT - 5 credits/units minimum (CT)</th>
<th>CP - 3 credits/units minimum (CA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>BUS 107, BUS 211</td>
<td>BUS 107, BUS 211</td>
<td>BUS 107, BUS 211</td>
</tr>
<tr>
<td>Communication</td>
<td>CMST&amp; 210&lt;sup&gt;1&lt;/sup&gt;, CMST&amp; 220&lt;sup&gt;1&lt;/sup&gt;, CMS&lt;sup&gt;1&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studies&lt;sup&gt;1&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>ENGL 99, ENGL&amp; 101, ENGL&amp; 235</td>
<td>ENGL 99, ENGL&amp; 101, ENGL&amp; 235</td>
<td>ENGL 99</td>
</tr>
<tr>
<td>Management</td>
<td>MGMT 107</td>
<td>MGMT 107</td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>PTWR 135</td>
<td>PTWR 135</td>
<td>PTWR 135</td>
</tr>
<tr>
<td>Technical Writing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>1</sup> Communication Studies courses cannot be counted toward the first three (3) credits/units of Communication Skills [CA, CT].

Note: Pharmacy Technician students may meet the Communication Skills requirement by achieving the following:

- Earn a grade of "C" (2.0) or higher in each major area requirement and specifically listed courses unless otherwise noted in the department requirements for all courses taken at Clark College.
Placement into ENGL& 101.

Health & Physical Education [HE, HPE, PE] - 3 credits/units
Select three credits/units from either Option One or Option Two:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits/Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Option One</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select two credits/units from the following:</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>HLTH 100</td>
<td>Food and Your Health</td>
</tr>
<tr>
<td></td>
<td>HLTH 101</td>
<td>Health for Adult Living</td>
</tr>
<tr>
<td></td>
<td>HLTH 103</td>
<td>Environmental Health</td>
</tr>
<tr>
<td></td>
<td>HLTH 108</td>
<td>Happiness and Your Health</td>
</tr>
<tr>
<td></td>
<td>HLTH 206</td>
<td>Human Sexuality</td>
</tr>
<tr>
<td></td>
<td>HLTH 207</td>
<td>Women's Health</td>
</tr>
<tr>
<td></td>
<td>HLTH 210</td>
<td>Health and Social Justice</td>
</tr>
<tr>
<td></td>
<td>HLTH 212</td>
<td>Cannabis and Your Health</td>
</tr>
<tr>
<td></td>
<td><strong>Option Two</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one from the following:</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>College-level Physical Activity course (PE, PEDNC, PEMAR)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Computational Skills [CP]</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department</td>
<td>AAS - 3 credits/units minimum</td>
</tr>
<tr>
<td></td>
<td><strong>American Sign Language</strong></td>
<td>ASL 121</td>
</tr>
<tr>
<td></td>
<td><strong>Art</strong></td>
<td>ART 101, ART 103</td>
</tr>
<tr>
<td></td>
<td><strong>Communication Studies</strong></td>
<td>CMST 103, CMST&amp; 210</td>
</tr>
<tr>
<td></td>
<td><strong>Human Relations [HR]</strong></td>
<td>BUS&amp; 101</td>
</tr>
<tr>
<td></td>
<td><strong>Psychology</strong></td>
<td>PSYC 100, PSYC&amp; 100</td>
</tr>
<tr>
<td></td>
<td><strong>Sociology</strong></td>
<td>SOC 131, SOC 250</td>
</tr>
<tr>
<td></td>
<td><strong>Women's Studies</strong></td>
<td>WS 101</td>
</tr>
<tr>
<td></td>
<td><strong>Humanities [HA, HB] - AAS - 3 credits/units minimum</strong></td>
<td></td>
</tr>
</tbody>
</table>

Department | HA | HB
--- | --- | ---
American Sign Language | ASL 121, ASL 123, ASL 222, ASL 223 | ASL 125
Art | ART 101, ART 103, ART 104, ART 105 | ART 101, ART 103, ART 104, ART 105, ART 106, ART 108
Communication Studies | CMST 102, CMST& 210, CMST& 220, CMST& 230, CMST& 240 | CMST 103

Human Relations [HR]

<table>
<thead>
<tr>
<th>Department</th>
<th>AAS - 3 credits/units minimum</th>
<th>AAT - 5 credits/units minimum</th>
<th>CP - 3 credits/units minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addiction</td>
<td>ACED 101, ACED 201</td>
<td>ACED 101, ACED 201</td>
<td>ACED 101, ACED 201</td>
</tr>
<tr>
<td>Counseling</td>
<td>AUTO 140, AUTO 180</td>
<td>AUTO 140, AUTO 180</td>
<td>AUTO 140, AUTO 180</td>
</tr>
<tr>
<td>Automotive</td>
<td>AUTO 140, AUTO 180</td>
<td>AUTO 140, AUTO 180</td>
<td>AUTO 140, AUTO 180</td>
</tr>
<tr>
<td>Business</td>
<td>BUS&amp; 101</td>
<td>BUS&amp; 101</td>
<td>BUS&amp; 101</td>
</tr>
<tr>
<td>Drama</td>
<td>DRMA&amp; 101, DRMA 140, DRMA 141, DRMA 150, DRMA 152, DRMA 250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>ENGL&amp; 226, ENGL 121, ENGL 126, ENGL 127, ENGL 242, ENGL 275, ENGL 276, ENGL 277</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGL 133, ENGL 143, ENGL 145, ENGL 150, ENGL 156, ENGL 173, ENGL 175, ENGL 176, ENGL 240, ENGL 243, ENGL 267, ENGL 272</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japanese</td>
<td>JAPN&amp; 121, JAPN&amp; 122, JAPN&amp; 123, JAPN&amp; 221, JAPN&amp; 222, JAPN&amp; 223</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journalism</td>
<td>JOUR 101, JOUR 111</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Music</th>
<th>MUSC&amp; 104, MUSC&amp; 141, MUSC&amp; 142, MUSC&amp; 143, MUSC&amp; 231, MUSC&amp; 232, MUSC&amp; 233</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MUSC 116, MUSC 117, MUSC 118, MUSC 125, MUSC 127, MUSC 135, MUSC 101, MUSC 110, MUSC 115, MUSC 137, MUSC 138, MUSC 139, MUSC 150, MUSC 151, MUSC 152, MUSC 153, MUSC 154, MUSC 155, MUSC 170, MUSC 171, MUSC 172, MUSC 173, MUSC 174, MUSC 175, MUSC 180, MUSC 181, MUSC 182, MUSC 183, MUSC 184, MUSC 185, MUSC 186, MUSC 195, MUSC 196, MUSC 197, MUSC 201, MUSC 202, MUSC 210, MUSC 239, MUSC 250, MUSC 251, MUSC 252, MUSC 253, MUSC 254, MUSC 255, MUSC 270, MUSC 271, MUSC 272, MUSC 273, MUSC 274, MUSC 275, MUSC 280, MUSC 281, MUSC 282, MUSC 283, MUSC 284, MUSC 285, MUSC 290, MUSC 295, MUSC 296, MUSC 297</td>
</tr>
<tr>
<td></td>
<td>All MUSCA courses</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Philosophy</th>
<th>PHIL&amp; 101, PHIL&amp; 120</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PHIL 115</td>
</tr>
<tr>
<td></td>
<td>PHIL 215, PHIL 216, PHIL 217, PHIL 240, PHIL 251, PHIL 280</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sociology</th>
<th>SOC 161</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish</td>
<td>SPAN&amp; 121, SPAN&amp; 122, SPAN&amp; 123, SPAN&amp; 221, SPAN&amp; 222, SPAN&amp; 223</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Women's Studies</th>
<th>WS 101, WS 201, WS 210</th>
</tr>
</thead>
</table>

**Social Sciences [SS] - AAS - 3 credits/units minimum**

<table>
<thead>
<tr>
<th>Department</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addiction Counseling</td>
<td>ACED 101</td>
</tr>
<tr>
<td>Anthropology</td>
<td>ANTH&amp; 204, ANTH&amp; 206, ANTH&amp; 215</td>
</tr>
<tr>
<td>Communication Studies</td>
<td>CMST&amp; 230</td>
</tr>
</tbody>
</table>
### Economics
- ECON& 201, ECON& 202
- ECON 101, ECON 110, ECON 120

### English
- ENGL 175

### Environmental Science
- ENVS 231

### Geography
- GEOG& 100, GEOG& 102, GEOG& 200, GEOG& 207
- GEOG 205, GEOG 220, GEOG 221, GEOG 222, GEOG 223, GEOG 224

### History
- HIST 231, HIST 251, HIST 252, HIST 285

### Political Science
- POLS& 203
- POLS 111, POLS 131, POLS 220, POLS 221, POLS 222, POLS 223, POLS 224, POLS 231

### Psychology
- PSYC& 100, PSYC& 200
- PSYC 102, PSYC 203

### Sociology
- SOC& 101, SOC& 201
- SOC 131, SOC 161, SOC 250

### Women's Studies
- WS 101, WS 201, WS 210, WS 220, WS 225

### Natural Sciences [NS-Lab/NS] - AAS - 3 credits/units minimum

<table>
<thead>
<tr>
<th>Department</th>
<th>Lab Course</th>
<th>Non-Lab Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>ANTH&amp; 215</td>
<td>ANTH&amp; 245</td>
</tr>
<tr>
<td>Astronomy</td>
<td>ASTR&amp; 101</td>
<td></td>
</tr>
</tbody>
</table>

### Chemistry
- CHEM& 110, CHEM& 121, CHEM& 131, CHEM& 151, CHEM& 152, CHEM& 153, CHEM& 251, CHEM& 252, CHEM& 253
- CHEM 105, CHEM 141, CHEM 142, CHEM 143, CHEM 241, CHEM 242, CHEM 243

### Engineering
- ENGR& 104

### Environmental Science
- ENVS& 101
- ENVS 109, ENVS 200, ENVS 201, ENVS 208, ENVS 218

### Geography
- GEOG 205

### Geology
- GEOL& 101, GEOL& 103
- GEOL 102, GEOL 109, GEOL 218

### Meteorology
- METR 101

### Nutrition
- NUTR& 101

### Oceanography
- OCEA& 101

### Physical Science
- PHSC 101, PHSC 102
- PHSC 106

### Physics
- PHYS& 101, PHYS& 124, PHYS& 125, PHYS& 126, PHYS& 231, PHYS& 232, PHYS& 233
- PHYS& 100, PHYS& 134, PHYS& 135, PHYS& 136, PHYS& 241, PHYS& 242

### Certificate of Achievement (CA)

The Certificate of Achievement is designed for students who wish to receive specialized occupational training for a specialized career objective requiring less than forty-five (45) credits/units, but more than twenty (20) credits/units. Students must maintain a cumulative grade point average (GPA) of 2.00 or better. Students are required to complete a minimum of ten (10) credits/units at Clark College to meet the Academic Residency requirement.

### Certificate of Completion (CC)

The Certificate of Completion is designed for students who wish to gain entry-level skills or for those who wish to upgrade their skills in a short period of time. Certificates of Completion typically consist of two to four courses, requiring twenty (20) or less credits/units. The courses can be taken simultaneously or individually as your schedule allows. Students must maintain a cumulative grade point average (GPA) of 2.00 or better. Students are required to complete a minimum of ten (10) credits/units at Clark College to meet the Academic Residency requirement.
Non-Traditional Credit
International Baccalaureate (IB)
360-992-2805

Clark College recognized the International Baccalaureate (IB) program as a coherent, challenging course of study and responds individually to each participant's petition for granting of college credit. Students may be awarded credit for completing individual areas of study within the program. Credit is posted with an "S" grade at the end of the quarter for which the score report was received, once a transcript record has been established. No credits/units will be awarded for an examination if the student has already earned credit in a duplicate course; a maximum of forty-five (45) credits/units in IB coursework can apply towards BAS, AA, or AST degree requirements.

Once scores are received and reviewed, an email will be sent to the student at the Clark College student email address regarding the credits/units to be awarded. IB credits/units are posted to the transcript at the end of the term in which the scores were submitted as long as the student is enrolled in that term.

Students should have an official copy of their IB scores sent to:
Clark College
Attn: Enrollment Services/GHL 128
1933 Fort Vancouver Way
Vancouver, WA 98663

For a current list of available courses and available credit, please visit the Credential Evaluations website (https://www.clark.edu/enroll/credential-evaluation/).

Advanced Placement (AP)
360-992-2805

Clark College grants credit for completion of the College Board’s Advanced Placement (AP) examinations. AP is a cooperative educational endeavor between secondary schools and colleges and universities. The program provides motivated high school students with the opportunity to take college-level courses in a high school setting. AP courses are taught by high school teachers, following course guidelines developed and published by the College Board. Students who participate in the program gain college-level skills and also earn college credit. Credit is posted with an "S" grade at the end of the quarter for which the score report was received, once a transcript record has been established. No credits/units will be awarded for an examination if the student has already earned credit in a duplicate course; a maximum of forty-five (45) credits/units in AP coursework can apply towards BAS, AA, or AST degree requirements.

Once scores are received and reviewed, an email will be sent to the student at the Clark College student email address regarding the credits/units to be awarded. AP credits/units are posted to the transcript at the end of the term in which the scores were submitted as long as the student is enrolled in that term.

Students should send an official copy of their AP scores to:
Clark College
Attn: Enrollment Services/GHL 128
1933 Fort Vancouver Way
Vancouver, WA 98663

Where to Get AP Scores
The College Board: Advanced Placement Program
PO Box 6671
Princeton, NJ 08541-6671
Phone: 609-771-7300
TTY: 609-882-4118
www.collegeboard.org (https://www.collegeboard.org/)

Cambridge International (CI)
360-992-2805

Clark College will grant a minimum elective credit for each Cambridge International Examination for A-level exam with a passing grade for approved examinations. Credit will be awarded on the basis of official Cambridge International Examination results, not transcript notation. Duplicate credit for the same subject taken on different exams will not be granted. Credit is posted with an "S" grade at the end of the quarter for which the score report was received, once a transcript record has been established. No credits/units will be awarded for an examination if the student has already earned credit in a duplicate course; a maximum of forty-five (45) credits/units in CI coursework can apply towards BAS, AA, or AST degree requirements.

Once scores are received and reviewed, an email will be sent to the student at the Clark College student email address regarding the credits/units to be awarded. CI credits/units are posted to the transcript at the end of the term in which the scores were submitted as long as the student is enrolled in that term.

Students should send an official copy of their CI scores to:
Clark College
Attn: Enrollment Services/GHL 128
1933 Fort Vancouver Way
Vancouver, WA 98663

Credit Hours and Credit Load
320.001 Credit Hours and Credit Load

The State Board for Community and Technical Colleges has established rules for how community and technical colleges determine course credit hours. These rules are based on the type of instructor contact hours and the ratio of those hours to the number of weeks in a quarter. "Credit hours" are defined as the unit by which an institution measures its course work. The number of credit hours assigned to a course is defined by the number of hours per week in class and the number of hours per week in out of class preparation. Clark College uses these rules to establish credit hours assigned to each course offered by the College. Credit loads are determined based on the credit hours for which a student enrolls.

Faculty members are charged with assessing student learning outcomes associated with course credit.

A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:
1. One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter of credit, or the equivalent amount of work over a different time; or

2. At least an equivalent amount of work as required in the above paragraph for other academic activities as established by the institution, including laboratory work, internships, practicals, studio work, and other academic work leading to the award of credit hours.

The following definitions have been established to guide instructional practice, with each definition equating to a minimum of three weekly hours of student’s effort per credit.

Credit hours for three categories of instruction are:

- **Theory:** Students are engaged with faculty and class members in learning theoretical material and/or engaging in activities to apply the theory leading to mastery of course outcomes. Modes of instructional delivery could include but are not limited to: lecture, small group discussion, guided conversation, demonstration, case studies, role-playing, problem based inquiry, and collaborative activities. Instruction may be a mix of presentation, facilitation, and guided activities evidenced by frequent ongoing communication between instructor and students. Such activities could take place in a variety of instructional modalities. One credit is generated by one weekly contact hour of instruction or the equivalent amount of work over a different amount of time. Generally requires out-of-class student effort, typically two hours per class hour.

- **Guided Practice:** Students are actively engaged in practicing and mastering skills under the supervision of the instructor. This category of instruction could include but are not limited to labs, studios, shops, clinical experiences, computer-mediated learning, hands-on projects, or other skill building activities. Instruction may be individualized or group-focused and include skills assessment. Such activities could take place in a variety of instructional modalities. One credit is generated by two weekly contact hours of instruction or the equivalent amount of work over a different amount of time. May also include out-of-class student effort, typically one hour per two class hours.

- **Field-Based Experience:** Students are engaged in autonomous study or related work activity under the intermittent supervision of the instructor. This mode includes working with or under the direction of professional practitioners and may include preceptorships, co-ops, internships, seminars, or service learning activities. Verification of learning outcomes is documented by college faculty in collaboration with professional practitioners. One credit is generated by a minimum of three weekly contact hours of supervised learning experience. Programs may determine that additional hours are needed for the student learning needs. However, only one credit will be generated for enrollment counting purposes.

All instructional modalities use the credit hour determination provided above. Credit hours for all instructional modalities are determined based on the equivalence of credit hours to the Clark College’s traditional face-to-face courses. Listed below are all instructional modalities Clark College provides, including modalities Clark aims to provide:

- **Traditional (face-to-face) classes**
  Students and instructors meet together for a certain number of hours, in a classroom and on a regular weekly schedule.

- **Online classes**
  Online classes consist entirely of online elements with no face-to-face component. Some online classes require students to interact with each other, the faculty, and content at specific times, while others are entirely self-paced. The number of credits/units offered in an online course is based on equivalency of learning outcomes of face-to-face modality.

- **Hybrid classes**
  Hybrid classes combine face-to-face classroom time with online instruction. Students in a hybrid class come to campus at scheduled times and meet face-to-face with instructors and students. Many class activities are conducted online, including class work assignments, discussions and group projects. The number of credits/units offered within a hybrid course is based on equivalency of learning outcomes of face-to-face modality.

- **Flipped classes**
  The flipped classroom reverses the traditional educational arrangement by delivering instructional content outside of the classroom, often online. Students spend classroom time actively engaging in concepts to clarify and apply the knowledge, under the guidance of the instructor. Credits/Units are awarded based on learning outcomes earned equal to those offered within face-to-face modality.

- **Competency-based education**
  Competency-based education (CBE) allows students to earn credit based on their proven mastery of a subject rather than classroom time. The number of credits/units offered within a CBE course is based on equivalency of learning outcomes of face-to-face modality. CBE courses are offered within the quarter system. A week of instruction within the CBE courses are any seven-day period in which the institution makes available to the students enrolled in the CBE program the instructional materials and faculty support to enable the student to engage in an educational activity. CBE courses are faculty led with weekly consultations with faculty members to discuss academic course content in addition to assessments of learning.

  Exceptions are noted in the quarterly schedule (some classes are not scheduled in the usual College class periods.)

  This policy will be reviewed by Executive Cabinet according to the program review policy schedule.

Contact hours in online, hybrid and competency-based classes may vary from more traditional face-to-face classes. Students should demonstrate equivalent learning outcomes regardless of instructional modality.
DIRECTORIES AND ACADEMIC CALENDAR

• Phone Directory (p. 275)
• Academic Calendar (p. 275)

Phone Directory
Alphabetical Quick Dial Phone List: http://www.clark.edu/directories/quick-dial/index.php

Employee Directory: https://www.clark.edu/directories/employee-search.php

ASCC Officers Phone List: http://www.clark.edu/directories/quick-dial/ascc.php

Clark College at Columbia Tech Center (CTC) Phone List: http://www.clark.edu/directories/quick-dial/ctc.php

Fax Numbers Phone List: http://www.clark.edu/directories/quick-dial/fax.php

Clark College at Washington State University Vancouver (WSUV) Phone List: http://www.clark.edu/directories/quick-dial/wsuv.php

Academic Calendar
https://www.clark.edu/enroll/registration/academic-calendar.php
ENROLLMENT, AID AND COLLEGE LIFE

- Academic Standards Policy (p. 276)
- Advising (p. 277)
- Career Services (p. 277)
- College Life (p. 277)
- Credential Evaluations Office (p. 283)
- Enrollment Services (p. 286)
- eLearning (p. 289)
- Financial Aid (p. 290)
- Registration (p. 296)
- Special Instructional Programs and Locations (p. 300)
- Student Orientation (p. 301)
- Student Success Programs (p. 301)
- Veteran and Military (p. 301)

Academic Retention Concern (ARC)

Academic Standards Policy

Clark College is committed to the academic success of its students. The primary purpose of the Academic Standards Policy is to quickly identify and alert students with low academic achievement and provide those students with resources and assistance to improve their academic performance. This policy applies to all students. Some individual college programs/funding sources may have additional requirements. Students in these programs should contact the appropriate program advisor for information regarding these requirements or check with an academic advisor if they have questions. Students must earn a cumulative GPA of 2.0 or better to remain in good academic standing. The following will be imposed progressively for students who do not remain in good academic standing.

Academic Standards Procedure

Academic Concern

If your cumulative GPA falls below 2.0 AND you did not achieve a quarterly GPA of 2.0 or better, you will be placed on Academic Concern.

- You will be sent an e-mail to your Clark student e-mail address that offers information about the Academic Standards process and tells you what happens at each stage.
- You may access our listing of college resources and we highly recommend taking advantage of the support and services available.

Academic Intervention

If your cumulative GPA remains below 2.0 for the second consecutive quarter AND you did not achieve a quarterly GPA of 2.0 or better, you will be placed on Academic Intervention.

- You will be required to attend a group workshop to complete a success plan that outlines steps for improving your academic performance.
- You may lose the ability to carry a full course load.

Completion of the above actions during your quarter on Academic Intervention may be a factor in any future appeal processes related to academic dismissal.

One (1) Quarter Academic Dismissal

If your cumulative GPA remains below 2.0 for the third consecutive quarter AND you did not achieve a quarterly GPA of 2.0 or better, you will be placed on One (1) Quarter Academic Dismissal.

- You will be blocked from registering for classes while on One (1) Quarter Academic Dismissal.
- You will be sent an e-mail to your Clark student e-mail address that outlines the Appeal Process for One (1) quarter Academic Dismissal. To have a successful appeal, you must submit all documents requested including documentation of circumstances over which you did not have control. Decisions will be made and communicated to you before the first day of classes.
- If you do not appeal or if your appeal is denied, you will be administratively withdrawn and tuition will be refunded.
- You will also receive information about how to Return from One (1) Quarter Academic Dismissal. You will be notified about the process, expectations and time deadline to make an appointment to see a designated staff member. This appointment will need to be scheduled no later than three (3) weeks before the first day of classes for the quarter in which you plan to return. If you do not schedule your appointment by this date, you will need to wait an additional quarter to be reinstated. For the reinstatement appointment, you must prepare a written plan and a Return to College Form in advance that includes the following items for your discussion with the staff member.<p>Your short-term educational goals Specific plans to overcome barriers and improve your academic progress Proposed course schedule* You will be blocked from registering for classes while on Four (4) Quarter Academic Dismissal.
- If you enrolled for classes before academic dismissal status, you will be administratively withdrawn and tuition will be refunded.
- There is no appeal process.
- You will receive information about how to Return from Four (4) Quarter Academic Dismissal. You will be notified about the process, expectations and time deadline to make an appointment to see a designated staff member. This appointment will need to be scheduled no later than three (3) weeks before the first day of classes for the quarter in which you plan to return. If you do not schedule your appointment by this date, you will need to wait an additional quarter to be reinstated. For the reinstatement appointment, you must prepare a written plan and a Return to College Form in advance that includes the following items for your discussion with the staff member.
  - Your short-term educational goals
  - Specific plans to overcome barriers and improve your academic progress
  - Proposed course schedule*

The designated staff member will review the plan with you and outline specific conditions you must meet for return from Four (4) Quarter Academic Dismissal (e.g., you may lose the ability to carry a full course load). Once the plan is finalized, you will return to Academic Intervention status.
**You will not be allowed to register for online (DL) or hybrid (H#) courses unless approved as a disability accommodation or extenuating circumstances prevent you from attending face-to-face courses.**

**Academic Good Standing**
You will return to Academic Good Standing once your cumulative AND quarterly GPA reach at least 2.0.

**Advising**
360-992-2345
www.clark.edu/advising (http://www.clark.edu/enroll/advising-services/)

**Mission of Academic Advising:**
Grounded in equity, Advising Services partners with students to co-create individualized academic plans that align with their personal and career goals. We provide holistic and inclusive support that promotes learning and student success.

**Academic Advising support for students include:**
- Scheduled one-on-one academic advising appointments both in-person and virtual on topics such as:
  - Co-developing academic plans
  - Evaluating unofficial transcripts for new students
  - Assisting with maximum time-frame appeals
  - Transfer planning to four-year institutions
  - Major declaration
  - Understanding program requirements
  - Understanding college policies and procedures
  - Class selection
  - Drop-in opportunities for quick questions both in-person and virtual.
  - Assignment to academic advisors by Areas of Study and receive regular email communication outreach.
  - Workshops for understanding degree requirements and transfer pathways.
  - Transfer advising.
  - Running Start advising.
  - Supportive connections and referrals to resources and departments across campus.

**Career Services**
360-992-2902
Careerservices@clark.edu
http://www.clark.edu/enroll/careers/index.php
Online job and internship database: Penguin Jobs

Career Services provides the resources and strategies for choosing a college major; developing career plans; finding and preparing for jobs, internships, and volunteer opportunities; and making successful career transitions. Career Services staff provide support through one-on-one meetings, group meetings, classroom visits, and workshops. Services are free and open to students, alumni, and community members.

**Resources and support for students, alumni, and community members:**
- Guidance with identifying interests to explore career options or select a program of study.
- Information about employment outlooks, labor trends, wages, and job preparation.
- Resources to explore education programs, transfer schools and scholarship information.
- Strong Interest Inventory and Myers-Briggs Type Indicator assessments, including a career report and 90-minute small group interpretation of results.
- An online job and internship database, Penguin Jobs, located on the Career Services website: www.clark.edu/cc/penguinjobs.
- Institutional hire job referrals for on- and off-campus student employment opportunities.
- Assistance with resume writing, cover letters, and interviewing skills.
- Job- and career-related workshops and resources.

**Employer services:**
- Free advertisement of job and internship opportunities through Penguin Jobs.
- Free on-campus recruiting table.
- Career engagement events.

**College Life**

**Archer Gallery**
360-992-2246

Archer Gallery has been exhibiting fine art in Southwest Washington since 1978, consistently presenting an impressive list of artists and exhibits. Featuring both established and emerging talents, the cultural, social, and ethnic diversity of the region is expressed in the exhibition schedule. While the gallery exhibits works by national artists, the main focus is on Northwest and Washington artists. Artist talks, workshops, and other engagement events accompany each exhibition.

Archer Gallery is located on the lower level at the south entrance of the Penguin Union Building and features 2,000 square feet of exhibition space. All exhibits are free and open to students and the community. Support for the Archer Gallery is provided by the Associated Students of Clark College (ASCC), the Clark College Foundation, the College, and donations from individuals. Archer Gallery is wheelchair accessible.

**Athletics**

**Clark College Penguins**
360-992-2691

Clark College is a member of the Northwest Athletic Conference (NWAC). The NWAC is the parent organization and coordinates and regulates both men’s and women’s athletics for thirty-six (36) community colleges located in Idaho, Oregon, Washington, and British Columbia. Clark sponsors intercollegiate teams for women in volleyball, cross
country, basketball, track and field, softball, and soccer; and for men in soccer, cross country, basketball, baseball, and track and field. Students interested in intercollegiate sports should contact the Athletics Department.

Penguin Athletic Club
360-992-2301

Through individual, family, and corporate memberships, the Clark College Penguin Athletic Club (PAC) provides funding for athletic scholarships, special events, recognition for student athletes, coaching enhancements, and general support for all eleven (11) Clark teams competing for the Penguins. Membership in the PAC provides special discounts on both alumni and PAC events, free admission to all home regular season games, and the opportunity to utilize the Clark College Thompson Fitness Center for a nominal fee per term or per year. For more information, please contact the PAC office.

Bookstore
bookstore@clark.edu
www.clarkbookstore.com (http://www.clarkbookstore.com)

The Clark College Bookstore, owned and operated by the College, is located in Gaiser Hall and provides home delivery, free in-store pickup, a CONTACT US service link, Clark College Theatre and College event tickets (https://www.clarkbookstore.com/site_theatre.asp), and helpful information, conveniently from the store website. All required text materials are available to order from the store site only. The store vigorously maintains the lowest possible price for required course materials adopted by Clark Professors.

Shop in store for Clark logo apparel, gifts and spirit gear, grab & go food, candy, and beverages, organizational, class, and study supplies, gift cards, test and reference items, and much more.

Personal services, also available in store, include Clark student IDs (http://www.clark.edu-campus-life/student_ID.php), C-Tran bus passes (http://www.clark.edu-campus-life/student_ID.php), faxing, notary public, special orders, USPS stamps, all Non-Required text shopping, and a friendly and helpful staff. Information regarding accepted payment methods (https://www.clarkbookstore.com/site_payment_options.asp), returns/exchanges (https://www.clarkbookstore.com/site_returns.asp), and more can be obtained by visiting us in store or online at www.clarkbookstore.com (https://www.clarkbookstore.com/).

Bulletin Boards
360-992-2701
events@clark.edu

The majority of campus bulletin boards are used for college or departmental information only. There is one Community board located in Penguin Union Building that is for general information. Student-to-student announcements and other materials must be dated and posted for a period not to exceed two weeks. Signs or posters may not be placed on glass, painted, or metal surfaces. Materials placed improperly will be removed by college personnel.

Child and Family Services
360-992-2393

Toddler and Preschool Childcare Services, Summer School-Age Program

The Child and Family Studies program is located at the north end of the Clark College main campus. Childcare and early education services with family support options are available to Clark College students, faculty, staff, and the local community. As the early childhood education lab school we pride ourselves on providing high quality care and education. Childcare services are available for children twelve (12) months and walking through five (5) years of age. Contact the program for more information or to arrange a tour. Services are available from 7:30 a.m. through 5:00 p.m. Monday – Friday.

Event Services
360-992-2701
events@clark.edu

The hub of campus life is the Student Center in Gaiser Hall. This facility provides space for dances, concerts, dinner theater, lectures, and other college/community events. College rooms are available for small and large meetings of students, staff, and community groups. A use agreement will be sent to those contracting for college facilities outlining responsibilities and privileges. Space utilization cannot conflict with regularly scheduled classes or activities, and space is assigned on a first-come, first-served basis. There is a charge for use of college facilities by off-campus groups. To arrange for the use of any college space, contact the Event Services office.

Student Life
360-992-2441

Facebook: Clark College Student Life
Instagram: clarkstudents
Penguin Union Building 160

The Office of Student Life coordinates programs, support services, and activities that enhance the educational experience of a diverse student population and fosters the intellectual and personal development of students on campus.

Student Life services and resources include:

- The Associated Students of Clark College (ASCC) Student Government
- The Activities Programming Board (APB)
- Events and activities including Welcome Week, Involvement Fair, and Spring Fest – see our online events calendar for more information
- Clubs, programs, committees, and other student involvement opportunities
- Discounted Fitness Center passes
- Student-use lockers

For more information on any of these services, contact the Office of Student Life, located in the Penguin Union Building, room 160, visit us online, or connect with us on social media.

Student Clubs and Programs
Clubs and programs provide students an opportunity to develop leadership skills, responsibility, and apply academic, vocational and/or personal learning through involvement on campus and in the community. With many options to choose from, students are bound to find something to match their interests. Clubs and programs may have an educational, national, cultural, political, activity and/or religious focus.

**Student Government – Associated Students of Clark College (ASCC)**


Recognized by the Board of Trustees as the representative body of Clark College students, ASCC Student Government consists of seven-members that act as a liaison between students, faculty, staff, administration, and the community. They are charged with review and implementation of the ASCC Constitution and Bylaws, committee appointments, club promotion and approval, recruitment for student involvement, oversight of the Services and Activities (S&A) fees, and keeping students informed about legislative policies that directly affect them. All enrolled students are members of ASCC and are thus eligible to participate in events.

**Activities Programming Board (APB)**


With the motto, “We run the fun!” APB is charged with the creation of a comprehensive events calendar to include awareness, cultural, educational, family, and social events for Clark students. Hosting many events throughout the year, including the annual Spring Fest event, it is easy to find an opportunity to relax, learn, and connect at Clark. To find out more about upcoming events visit our online events calendar.

**Student Publications**

**The Iceberg Comic Anthology**

Facebook: The Iceberg

Instagram: clark.iceberg

The Iceberg is an annual anthology of comics featuring writing and art produced by Clark students and alumni. This program supports student leaders, the creation of the annual publication, and an event to showcase the final production.

For more information about how to get involved, contact the faculty adviser: Grant Hottle ghottle@clark.edu or Toby Peterson tpeterson@clark.edu

**Phoenix**

http://clarkphoenix.com/

Phoenix, Clark College’s literary and arts magazine, is funded by ASCC to encourage the creative efforts of Clark College students. All Clark College students registered in the immediate spring, summer, fall, or winter terms prior to publication may submit fiction, poetry, flat artwork and photographs of three-dimensional work. Under the direction of the faculty advisors from English and from Art, staff members practice budgeting, marketing, writing, editing, judging, and layout skills. Volunteer student staff members are welcome; some paid student staff positions exist.

**The Swift**

https://www.clark.edu/academics/programs/dept/english/swift.php

Funded by the Associated Students of Clark College (ASCC), The Swift: Clark College Literary Journal is dedicated to publishing skillful and inventive creative writing by Clark students, alumni, and staff. The journal is student-run and supported by faculty and staff from the Art and English Departments. Students enrolled in English 277 start the production of the journal each Fall Quarter. An editorial staff of literary students continue production work during Winter Quarter with the publication and distribution of the annual journal occurring Spring Quarter each year.

The Swift accepts submissions from the Clark College community, including students, faculty, staff, and alumni. For submission guidelines and timelines contact theswift@clark.edu.

For more information about how to get involved as a staff member, contact the faculty adviser: Dawn Knopf, Director of The Swift at dknopf@clark.edu.

**Computer Services**

**Computer Labs**

Students enrolled in credit classes may use the open computer lab facilities at Clark College. Students are required to use their college-supplied network account to access computer resources in the labs. Open computer labs are available at the following locations:

- Applied Arts (AA4), Rm. 116
- Cannell Library (LIB), Rm. 100
- Scarpelli Hall (SHL), Rm. 135
- STEM Building (SBG), Rm. 252

**Wireless Network Access**

Students may use personal computers and mobile devices to access the Internet and online services available through the Clark College website using the college wireless network. Wireless access is available in most college facilities. A network account is required to use the wireless network.

**Computer Proficiency: A Statement to Students**

Students at Clark College, in order to succeed here and in communities outside the college, need to be familiar with and capable of using computers and computer software. Both upper division college work and the requirements of the workplace demand such skills. Many Clark College faculty will require students to access class materials on the Internet, use a word processor, e-mail, and databases as part of regular course activities.

Students need to determine which computer skills are appropriate to their areas of study and take positive steps to acquire and use them early. To facilitate appropriate student access to computers and computer software, the college provides classrooms, labs, course work, and library access where students can learn about and use these tools.

Students should contact their instructors, the college library, Office of Student Affairs, the Associated Students of Clark College (ASCC), the Pathways Center, or the Advising and Counseling offices to find out what computer resources are available and when they can be accessed. Advisors, counselors, and faculty can help students choose appropriate courses to help them achieve computer proficiency.

**Counseling and Health Center**

360-992-2614 (call or text)

chc@clark.edu
Located in the Health Sciences Building, the Counseling and Health Center provides mental health counseling and medical services that are quickly and easily accessible on campus. Counselors provide free, confidential short-term, group and individual counseling to support student wellness and academic success. They also provide workshops on different topics to support student wellbeing. An advanced medical practitioner is also available to provide low-cost health services during limited hours. Services, pricing, and office hours are available at the website listed above. Over the counter medications, menstrual supplies, and safer-sex items are available free of charge. The Counseling and Health Center also offers students a sensory room and chill-out space for students that need a quiet place to unwind and decompress. The CHC also offers private lactation spaces for students to use during class terms.

**Dental Hygiene Clinic**

360-992-2158

High-quality dental care is provided at a reduced fee by students under the direct supervision of licensed dental hygienists and dentists. Adults or children, four (4) years of age or older, are selected for care based on the educational needs of the students. Services provided may include exams, x-rays, scaling and polishing, sealants, fillings, diet analysis, and personalized preventive education. Free screenings are available by appointment.

**Disability Support Services (DSS)**

360-992-2314 – Voice 360-991-0901 – Video Phone
dss@clark.edu

www.clark.edu/DSS (http://www.clark.edu/DSS/)

Clark College and the Disability Support Services (DSS) office assist students with disabilities in pursuing their educational goals. Clark College is committed to ensure its, programs and services are accessible and inclusive for students with disabilities.

Through DSS, students with disabilities can request accommodations to ensure equal access and discuss their concerns regarding barriers encountered. DSS will primarily focus on approving and providing, in partnership with faculty, student disability accommodations for classes. As well as serve as a resource to the campus community in striving to make Clark College both accessible and inclusive for students with disabilities.

**Emergency Procedures**

www.clark.edu/emergency (http://www.clark.edu/emergency/)

The college’s emergency procedures are displayed on posters in all classrooms and offices, as well as on the clark.edu (http://www.clark.edu/) website.

Depending on the type of incident, mass notification may be delivered via office and classroom phones, active computer screens, active Smart Classroom screens and interior loudspeakers. Additional notifications are also available to students and employees through text messages and email with a free subscription to RAVE (https://www.clark.edu/its/documentation-and-resources/students/rave_emergency_notification_system.php). The college also has made the RAVE Guardian mobile safety smartphone application available to all students and employees. To connect with the Guardian app, please text the word “Guardian” to 67283 to be guided to the download process.

Exercises (drills) will be conducted several times each year to ensure general preparedness. All members of the college community are expected to participate. When possible, advance notification of planned exercises will be circulated.

**Fitness Center**

360-992-2808


The Thompson Fitness Center, located in the O’Connell Sports Complex (OSC), is free to students currently enrolled in an HPE, fitness trainer or PE class. The following individuals are eligible to use the fitness center during open times for a term or annual usage fee, which is payable at the Cashier’s Office:

- Currently enrolled part and full-time Clark College students (not eligible for annual pass) and students returning in fall quarter
- Clark employees, their spouses and children sixteen (16) years old and older, including emeritus faculty and their spouses
- Penguin Athletic Club members, sixteen (16) years old and older
- Alumni Association members, sixteen (16) years old and older

Completion of fitness center basics, circuit fitness and/or weight training class is recommended before using the fitness center.

**Food Service**


The McClaskey Culinary Institute in Gaiser Hall (GHL) at Clark College Main Campus offers a variety of dining options:

- Retail Bakery offering coffee and specialty beverages as well as a large variety of baked goods prepared by students in the Professional Baking and Pastry Arts Program
- The Restaurant opens for lunch during the term is run by second year students in the Cuisine Program
- Multiple Kiosks where students in the Cuisine Program produce a variety of lunch options during the term
- The Grill opens during the term and breaks, serving breakfast, burgers, sandwiches and more
- Grab & Go Salads, Sandwiches and more available year-round

At the McClaskey Culinary Institute, we strive to provide options for all diets and tastes in a welcoming environment conducive to studying or meeting with friends.

**Health Insurance**

http://www.clark.edu/campus-life/student-support/counseling/health_services/insurance.php

Information about how to obtain health coverage through the Washington Health Benefits Exchange and the Affordable Care Act can be found at the link above.
Health insurance is required for all international students, who are advised to discuss their health insurance options with the Office of International Programs.

**Housing**
Campus housing is not available. While the college does provide a housing website (https://www.clark.edu/campus-life/student-life/housing.php) and referral bulletin board, located in central Gaiser Hall, it does not assume the responsibility for screening rentals. International Programs works with international students to secure off-campus housing for them. Please contact International Programs for details.

**Library**
360-992-2151
http://library.clark.edu/
Clark College Libraries provide the Clark community with information resources in a wide variety of formats as well as equipment available for checkout. We also provide learning environments for individual or group study in our open spaces and study rooms. Library faculty offer a variety of instruction sessions, research assistance, and workshops. On the library website (https://library.clark.edu/), Clark College students, faculty, and staff have 24/7 access to thousands of resources including eBooks and full-text journals through our online catalog and more than 75 electronic databases. Through Summit (https://library.clark.edu/content/summit/), students and employees can also request resources from over 35 college and university libraries throughout Washington, Oregon, and Idaho for pickup at Clark College. All are encouraged to ask librarians for assistance using our wide range of in-print and online resources.

Please visit the library website (https://library.clark.edu/) or call 360-992-2151 for our hours of service and further library information.

**MESA Program**
360-992-2024
mesa@clark.edu
http://www.clark.edu/academics/programs/dept/mesa/ (http://www.clark.edu/academics/programs/dept/mesa/)
The Mathematics, Engineering, Science Achievement (MESA) Program is part of a nationally recognized academic support program that seeks to increase diversity to meet current, future, and global workforce demands in Science, Technology, Engineering, and Mathematics (STEM) disciplines. Specifically, the goal of MESA is to increase the number of historically underrepresented students (including Black/African American, Indigenous/Native American, Latino/Hispanic, Native Hawaiian/Pacific Islander, and/or women) who are prepared to transfer to 4-year colleges or universities in pursuit of STEM related degrees, and ultimately careers.

Resources available to students include: a dedicated study center, academic and transfer advising, scholarship and internship opportunities, career and professional development workshops, university and industry visits, networking and mentoring opportunities, and a lending library offering access to textbooks, laptops, calculators, and other supplies.

**Office of Diversity and Equity**
360-992-2292
https://www.clark.edu/campus-life/student-support/diversity-and-equity/
The function of the Office of Diversity and Equity is to support the goals of Clark’s Social Equity Plan. We assist in the accomplishment of these goals through serving as a resource on related issues, providing training and educational programs, inviting speakers and performers, and providing opportunities for individuals to feel connect with those who have felt disconnected in the past and with their community. The Office of Diversity and Equity is committed to serving systemically non-dominant communities as they navigate Clark College. We support Clark College’s goal of recruiting and retaining a diverse student body and workforce.

The Diversity Center is a welcoming and safe place for the entire Clark community (students, faculty, staff, and community members) to learn about and engage in conversations regarding diversity, inclusion, power, privilege, inequity, and social justice.

**Parking and Traffic Rules**
360-992-2133
Traffic and parking regulations at the College are authorized by the Board of Trustees and codified under the Washington Administrative Code (132N-156 WAC). The enforcement of parking and traffic regulations is the responsibility of the Security/Safety Department.

Student parking on the Clark College campus is limited to open parking spaces. Open parking spaces are identified as lined spaces without any special labels. No permit is required to park in open parking. Restricted parking areas include faculty/staff (F/S) parking, visitor or metered parking, and disabled person parking. No one may park in these areas without the proper permit or other authorization.

Drivers of vehicles on campus shall obey all regulatory signs, including stop signs and directional arrows, and shall comply with directions of campus security officers in the control of traffic and parking.

Any violations of college parking and traffic rules and regulations may result in issuance of a monetary citation by the Security/Safety Department. Vehicle impounding, immobilization, or transcript hold may result if vehicles are parked improperly or if fines are not paid.

The Security/Safety Department works continually toward safe and effective parking lot use. Concerns, suggestions, and ideas for meeting the challenges of managing campus parking are always welcome. Students should contact the Security/Safety Department in Gaiser Hall for a complete copy of the Clark College Parking and Traffic Rules and Regulations, or for a copy of the Parking Survival Guide

**Public Transportation**
Clark College is served by C-Tran, the Clark County Community Transit System (https://www.c-tran.com/), at the main campus, Clark College at WSU Vancouver, and Clark College at Columbia Tech Center. The Clark College main campus is currently served by three (3) bus lines which link the college to all parts of the city of Vancouver, Clark County, and to Portland, Oregon.

**Free C-TRAN Education Opportunity Pass**
To encourage and enable transit ridership, C-TRAN extends the Education Opportunity Pass (EOP) to include Clark College students. The C-TRAN Bus Pass can be obtained quarterly in the Clark College Bookstore. Current quarter registration and a valid Clark College Student...
annual ID are required to obtain a quarterly C-Tran EOP. The EOP is valid in Clark County only.

Van service is now available at a reduced rate to students with disabilities. Check with C-Tran for more details by calling 360-695-8918 (voice) or 360-695-2760 (TTY).

Additional information about the C-TRAN EOP program can be obtained from:

- For STUDENTS, contact the Bookstore Department in Gaiser Hall.
- For EMPLOYEES, contact the Security/Safety Department in Gaiser Hall.

Security/Safety Department
360-992-2133

The Clark College Security/Safety Department works to provide a safe and secure environment in which members of the college community can pursue their educational and professional goals. The Department is comprised of full and part-time non-sworn officers and support staff. An officer can be reached on main campus 24 hours a day/7 days a week/365 days a year. The department is charged with protecting life and property, providing service and assisting students, staff, and community members. The Security/Safety Department strives to offer proactive protection services to the college community by stressing prevention above response, planning above reaction, education above enforcement, and service above all. The Security/Safety Department can provide informational and directional assistance; security escorts across campus; crime prevention advice; and other general assistance to students, staff, faculty and guests of the college. The Security/Safety Department works cooperatively with the emergency response agencies (police, fire & EMS) in emergency, dangerous or volatile situations, and/or in criminal investigations.

The Department provides all information required by the Clery Act, which is published in an annual security report by October 1st of each year. For more information about the Annual Crime and Security Report please visit: http://www.clark.edu/campus-life/student-support/security/index.php

Student Ambassadors and the Campus Visit Program
360-992-2078
http://www.clark.edu/welcome-center/student-ambassadors.php

Student Ambassadors are current Clark College students who assist with the admissions and orientation process of starting at Clark. Student Ambassadors are also available to take you on a campus tour so you can begin to become familiar with campus. Taking a campus tour with a current student is a great way to hear the student perspective of being at Clark.

Student Discounts
A list of merchants that offer student discounts can be found at: https://studentdiscountlist.org/washington-wa-student-discount-list-retail-grocery-travel/

Student ID Cards
Annual Clark College student photo ID cards can be obtained in the Clark College Bookstore, Gaiser Hall, for a minimal fee. Current registration and valid photo ID are required to obtain a Clark College student ID (being on a wait list is not considered registered). ID cards are not required by the College but do provide free or discounted admission to College events and may qualify for student discounts offered by many local businesses.

Tutoring Services

Tutoring is designed to provide individualized attention that supports student learning and academic success. Our friendly, supportive, and encouraging tutors assist with most English, math, science, and general education classes offered at Clark College. Tutors will also help students develop skills and confidence to become stronger, more independent learners. Students who come in for tutoring may also access computers, software, handouts, reference materials, and other resources.

Tutoring services are FREE to all registered Clark College students.

Transitional Studies Tutoring Center
360-992-2750

Located in the T Building, room 228. The Transitional Studies Tutoring Center supports CAP and ESL students with tutoring and computer-based learning. One-on-one and small-group tutoring are available for adults learning English as a second language, as well as for native English speakers who want to improve basic reading, writing, and math skills.

Language & Writing Center
360-992-2253

Located in Hawkins Hall, room 102. Writing tutors are available to help students with all types of writing—essay assignments, journals, research papers, resumes, scholarship essays, and more. Assistance is available at all stages of the writing process, from generating ideas to reviewing completed drafts. Although tutors do not edit or proofread, they will help students determine what their tendencies are concerning grammar errors, explain general concepts, and offer strategies that can lead to more effective writing.

Language students can meet with a tutor for conversation practice and help with written and oral assignments in English and world languages offered at Clark. All services are available on a drop-in or appointment basis.

Science, Technology, Engineering, & Math Center
360-992-2694

Located in Bauer Hall, room 101/102. Tutors provide assistance with most levels of math, chemistry, engineering, physics, biology, and other STEM subjects. Help is available on a drop-in or appointment basis.

Accounting & Business Center
360-992-2445

Located in Applied Arts 4 (AA4), room 106. Tutoring assistance is available for all levels of accounting and for most business and economics courses. Help is available on a drop-in basis.
Online Tutoring

Online assistance is available for currently enrolled Clark students. Using the online Writing Lab, students can upload a draft of their paper and receive written feedback, usually within 24-72 hours. Tutors are also available to assist via Live Chat (synchronous) or eQuestions (asynchronous) in various subjects, including physics, chemistry, biology, math, calculus, statistics, Spanish, accounting, and more.

For eTutoring access and login directions, go to the eTutoring webpage (http://www.clark.edu/campus-life/student-support/tutoring/etutoring.php). Canvas course shells may also include an eTutoring link in the navigation panel on the left of the screen.

Veterans Center for Excellence
360-992-2073
vetresources@clark.edu

Located in Penguin Union Building, room 015, the Veterans Resource Center is available to help veterans and their dependents connect with the resources and networks of support available to them at Clark College and in the local community. We provide a welcoming staff, mentoring from student veterans, and tools to succeed academically and personally. The VRC also provides a math tutor, computer stations, printers, TV, and a comfortable environment to relax. Veterans are encouraged to visit the center to receive information and assistance regarding:

- Benefit Applications and Procedures
- GI Bill® Certification
- Veterans Advocacy
- Community Support
- Transition Services
- Campus & Community Resources
- Specialized Programs and Workshops
- Veterans Club

Clark College does not and will not provide any commission, bonus, or other incentive payment based directly or indirectly on success in securing enrollment or financial aid to any persons or entities engaged in any student recruiting or admissions activities, or in making decisions regarding the award of student financial assistance.

Selected programs of study at Clark College are approved by the Workforce Training and Education Coordinating Board's State Approving Agency (WTECB/SAA) for enrollment of those eligible to receive benefits under Title 38 and Title 10, USC.

Credential Evaluations

The Credential Evaluations Department provides assistance for students seeking an evaluation of their progress towards completion. Evaluators will review and evaluate official transcripts sent to Clark College, process applications for program completion, and respond to Academic Credit for Prior Learning inquiries. For more detailed information about what Credential Evaluations is responsible for, please visit https://www.clark.edu/enroll/credential-evaluation/ or call 360-992-2805.

Credential Evaluation Policies

Academic Standards Petition

Students who believe an error has been made, or who would like to request an exception to the established degree requirements should contact the Credential Evaluations Office to inquire about an Academic Standards Petition.

Catalog Lifespan

Students may complete their degree(s) or certificate(s) under the requirements set forth in any catalog issued during their attendance at Clark College. However, no catalog will be valid for more than four (4) years. Any student not in attendance at Clark College for two (2) or more calendar years is required to complete the program requirements of the catalog in effect at the time of their re-entry to the college.

Diplomas

Diplomas will be mailed eight (8) weeks following the completion of a student’s degree or certificate requirements. Diplomas that are lost or misplaced may not be available for reprint. Contact the Credential Evaluations Office for more information.

Graduation Application Deadlines

Students must submit a graduation application in order to be awarded a degree or certificate upon the fulfillment of the completion requirements. Students are encouraged to submit the graduation application one term before they plan to complete all of their requirements.

The priority processing deadline for graduation applications is the tenth (10th) day of the term in which the student plans to finish degree or certificate requirements; applications will be processed in the order received and the degree or certificate will be awarded in the term of completion.

Graduation applications received after the priority deadline and through the last day of the term will be accepted; applications received during this non-priority period will be processed in the order that they were received. Applications received after the last day of the term may be moved to the next term.

Academic Credit for Prior Learning

Have you dreamed of completing a degree you started long ago? Is it overwhelming to consider beginning or returning to school after being out of the educational system for several years? The process may not be as difficult as you may think!

Academic Credit for Prior Learning, as defined by the Washington State Legislature, is the “knowledge and skills gained through work and life experience; through military training and experience; and through formal and informal education and training from in-state and out-of-state institutions including foreign institutions” (RCW 28B.77.230).

Legislation passed by the state of Washington requires Clark College to collaborate with the State Board of Community and Technical Colleges in supporting the state goals for credit for prior learning. Clark College is committed to fostering an educated and skilled workforce, which is essential for economic prosperity and meaningful work for the citizens in Clark’s service area. Further, Clark College is dedicated to awarding credit for applicable learning experiences that can help more students complete their training and degree programs sooner by evaluating an individuals existing knowledge and competencies for college credit.
Students may be assessed through various processes that will determine the degree to which you have met the learning outcomes of the content in question. This could be a test, written assessment, oral interview, project, performance, or another appropriate method by which the faculty member determines your understanding of the subject matter. No more than forty-five (45) credits/units of Academic Credit for Prior Learning can be applied to the Associate of Arts, Associate in Science Tracks 1 & 2, and Bachelor of Applied Science Degrees.

Clark College, in accordance with the State Board for Community and Technical College guidelines, recognize four categories of Academic Credit for Prior Learning:

**Credit by Testing**

Standardized exams provide credit opportunities to students who have already acquired specific knowledge and skills that they would otherwise be acquiring in a college course. This category will be noted on transcripts as awarded for prior learning and includes Advanced Placement (AP), International Baccalaureate (IB), College Level Examination Program (CLEP), and Cambridge “A” Level Exam.

**College Level Examination Program (CLEP)**

Clark College awards credit for successful CLEP examinations. An up-to-date list of subjects and required scores can be found on [https://www.clark.edu/enroll/credential-evaluation/clep.php](https://www.clark.edu/enroll/credential-evaluation/clep.php). To be considered for credit, a student must pass the examination with the equivalent of a "C" or better grade. The transcript will reflect the credit/unit granted by listing the equivalent course number, title, and credits/units. Not all institutions accept CLEP credits. Credits may count toward satisfying distribution requirements for any degree/certificate. Students intending to transfer to another institution should contact the transfer institution for information on their CLEP policy.

**Procedure for Requesting CLEP Credits**

Students should have an official copy of their CLEP scores sent to:

Clark College  
Attn: Enrollment Services/GHL128  
1933 Fort Vancouver Way  
Vancouver, WA 98663

Once scores are received and reviewed, an email will be sent to the student at the Clark College student email address regarding the credits/units to be awarded. CLEP credits are posted to the transcript at the end of the term in which the scores were submitted as long as the student is enrolled in that term.

**Where to Get CLEP Scores**

CLEP Transcript Service  
PO Box 6600  
Princeton, NJ 08541-6600  
Phone: 1(609)771-7865  
www.collegeboard.org (https://www.collegeboard.org/)

**Course Challenges**

Students who believe that previous experience has provided them with the competencies essential for passing a course may request to challenge that course. Faculty or departments will create these assessments. The assessments can be written, oral, practical demonstration, or some combination thereof. A course challenge process may be used when:

1. There is a specific Clark College course for which the student believes that the learning outcomes can be met, and
2. The course can be challenged (some courses may not be challengeable).

Students wishing to challenge a course may not be currently enrolled in the course they wish to challenge, nor may students challenge courses if they have completed a course with a higher degree of difficulty. Courses that have been successfully challenged will be appear on the student’s transcript with an "S" grade. There will be no transcript entry for an unsuccessful challenge. The successful challenge will appear on the student’s transcript within the term earned and does not count toward the Clark College residency requirement. Students should check with the Credentials and Evaluation Office for the current application process and course challenge fees.

**Extra-institutional Learning**

This category assesses the knowledge and skills acquired outside the institution, and is objectively verified through third-party certifications, industry-recognized testing/training, and crosswalks. Credit may be awarded for documented experiential learning outside the college upon the recommendation of appropriately qualified teaching faculty. This category also includes Joint Services Transcripts and American Council on Education (ACE).

**Military Experience**

360-992-2711

Students can receive academic credits/units for experience and knowledge gained through military participation. Credits/Units will be conferred based on ACE credit recommendations, in consultation with academic departments. Academic credit for military experience will be limited to twenty-five (25) percent of total credits/units required for degree/certificate completion. Students should consult the Veterans Affairs Department to discuss applying military credits/units to their degree plan. The Credential Evaluations Department will evaluate all incoming military credits/units upon receipt.

Clark College meets the requirements of RCW 28B.10.057 by awarding academic credit for military training. The academic credit awarded for prior military training is granted only for training that is applicable to the student's degree or certificate requirements. The individual must be enrolled in Clark College and have successfully completed any military training course or program as part of the military service that is:

- Recommended for credit/unit by a national higher education association that provides credit/unit recommendations for military training programs;
- Included in the individual's military transcript issued by any branch of the armed services;
- Documented military training or experience that is substantially equivalent to any course or program offered by the institution of higher education

Clark College enrolled students who are veterans of any branch of the United States armed services who wish to receive transfer credit must provide an official Joint Services Transcript (JST) through the armed services in which he/she served, from the Community College of the Air Force or any other college/university attended. Upon receipt of the official transcript the following actions will occur:

- The Credentials Evaluations Office will evaluate the transcript for reading, English, and mathematics placement and any academic
(general education) credits/units earned, posting to the student record as applicable.

- Technical classes that require more review to determine a direct equivalency will be forwarded to appropriate program faculty along with the course description and the accompanying ACE (American Council on Education) course recommendation.

- Military credit/unit recommendations that are direct equivalents to Clark course offerings may be articulated to that specific course. If direct course equivalents do not exist, elective credit/unit (non-direct equivalent) will be awarded when possible. Both direct and non-direct equivalents must be applicable toward the veteran's program of study.

- The Credentials Evaluations Office will post the credit/unit to the student record and then notify the student of credits/units accepted with directions on how to access their records so they may view credit/unit applicability to their program of study.

- In the case of a change of program, the veteran must notify the Credential Evaluations Office so the transfer credit/unit may be re-evaluated and applied to the student record as applicable.

- Per the Veteran's Administration, all veteran student transfer credit/unit must be evaluated within two (2) terms of program start. After the third term, if the student does not submit all transcripts, he/she may be decertified for the use of VA education benefits.

- Veteran students using education benefits are not permitted to opt out of transfer credit/unit evaluation.

Military credit will not be granted for:

- Non-credit/unit courses and workshops
- Remedial or college preparatory courses
- Sectarian religious studies

Prior Experiential Learning

This includes the skills, knowledge, and attitudes gained through non-formal (mainly work-based) and informal (life-experience) means. Prior experiential learning is assessed through portfolio development and review. Academic credits awarded for this category must not exceed twenty-five (25) percent of the credits needed for a degree.

For more detailed information on Academic Credit for Prior Learning please contact 360-992-2805.

Graduation Ceremony

Participation in Commencement Ceremonies

The June Commencement ceremony is for those students who have completed or plan to complete their degree or certificate during the current academic year. Participation is not required. Candidates must file their graduation application and cap and gown order by the appropriate deadline to be eligible. Ceremony participation does not guarantee degree completion. Students completing their degree in the summer term may participate in Commencement of the previous academic year.

Caps & Gowns

Only students who submit a Cap and Gown Order Form and Graduation Application will be allowed to participate in the Commencement ceremony. The Cap and Gown Order Form is online and is available to students once they have submitted the graduation (program completion) application. The Cap and Gown Order Form deadline for submission will be published on the website. There is a fee for caps and gowns; please refer to the order form for current pricing. If you have received honors, honors regalia will be available in the bookstore at the time you pick up your cap and gown packet. Students who have submitted the Cap and Gown Order Form will receive detailed information in May regarding the process for ceremony participation and cap and gown disbursement.

Transfer Credit

Transfer Institution Accreditation Requirements

Clark College accepts credits/units from approved accredited institutions of higher education. Recognized accrediting bodies are as follows:

- Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges (ACCJC)
- Higher Learning Commission (HLC)
- Middle States Commission on Secondary Schools (MSA-CESS)
- Northwest Commission on Colleges and Universities (NWCCU)
- Southern Association of Colleges and Schools Commission on Colleges (SACSCOC)
- Middle States Commission on Higher Education (MSCHE)
- New England Commission of Higher Education (NECHE)
- WASC Senior College and University Commission (WSCUC)

Domestic Institution Transfer Policy

Students who have attended other recognized accredited institutions of higher education may choose to transfer credit to Clark College to meet course prerequisites and degree requirements. All coursework, including courses earned as part of prior degrees, will be evaluated on a course-by-course basis for transferability to Clark College. The Credential Evaluations Office will review the content of each course transferred and determine the appropriate course equivalency.

Official copies of transcripts are required for evaluation. Transcripts are considered official if issued directly from the prior institution or delivered in the original sealed envelope. Course descriptions and/or syllabi may be required to complete evaluations in some instances. It is the student’s responsibility to request course and catalog information from an outside institution and provide them to Clark College. Once transcripts from other institutions are received, they become part of a student’s permanent educational record and cannot be released by Clark College.

Although there is no limit on the number of credits/units that can transfer into the college, students must meet the Academic Residency requirements for their program. Dental Hygiene and Nursing students MUST provide all transfer institution transcripts during the application process.

International Institution Transfer Policy

Students with credits/units from international institutions of education may submit their academic records for credit/unit consideration. The amount of credit/unit awarded will vary, based on the individual record of the student. Clark College does not recognize English coursework completed in countries outside of the United States, with the exception of Australia, Canada (except Quebec province), Ireland, New Zealand, and the United Kingdom.

Clark College requires translation and evaluation of the student’s academic record from an agency that is a member of the National Association of Credential Evaluation Services. A current list of members is available online at www.naces.org (http://www.naces.org). The costs of agency services are the responsibility of the student.
Distribution Reciprocity
The Washington State Community and Technical College Inter-College Reciprocity Policy (Distribution Reciprocity) provides guidelines for transfer credit/unit treatment among the Washington state community colleges. If a student transfers an individual course that meets a Communication Skills, Quantitative Skills, or Distribution Requirement at the sending college for a specific transfer degree, that course is considered to have met that requirement at the receiving college for a similar transfer degree, even if this course does not have an exact equivalent. The receiving institution will accept a specific course's distribution area for a transfer degree if that student:

1. Has met the sending institution's residency credit/unit and meets the receiving institution's policy on continuous enrollment (enrollment pattern needed to complete under the catalog at entrance).
2. Has met the entire Communication Skills, Quantitative Skills, or Distribution Requirement of a transfer degree, according to the sending institution's degree criteria.
3. Has maintained a cumulative college-level grade-point average (GPA) of 2.0 or better at the sending institution.

Students who believe they may qualify for the Distribution Reciprocity agreement should contact the Credential Evaluations Office.

Enrollment Services
360-992-2107

All students intending to enroll at Clark College are required to submit an application for admission. Application for admission is available on the Clark College website at www.clark.edu/enroll/admissions/apply.php.

Clark College admits anyone who is at least 18 years of age, who is a graduate of an accredited high school or the equivalent, is a participant in Running Start, or participant in other approved programs designed for age-specific groups. Exceptions to this policy may be granted by the college for special consideration of underage individuals not participating in one of the above-mentioned programs. The college reserves the

New Student Admission
Students with no previous college experience must complete an admissions application. For more information please visit website at www.clark.edu/enroll/admissions/index.php (http://www.clark.edu/enroll/admissions/)

Transfer Student Admission
Students transferring from other colleges are required to submit an admissions application.

If a student intends to use previously earned credits/units toward a program at Clark College, an official transcript of their college records must be sent to Enrollment Services at the time of application for admission. Students may use previous coursework or course placement to meet the prerequisite for English and/or Mathematics. Please visit www.clark.edu/assessment (http://www.clark.edu/enroll/admissions/assessment/) for additional information. All admission materials become the property of the college and will not be returned to the student or forwarded to another institution.

Returning Student Admission
Students who are returning to Clark College after an absence of four (4) or more terms must reapply for admission. If a student has attended another college since their last enrollment at Clark College and wants to apply those credits/units to a Clark College program, an official transcript must be sent to Enrollment Services. All admission materials become the property of the college and will not be returned to the student or forwarded to another institution.

Running Start Admission
360-992-2366

The Running Start program allows high school juniors and seniors to earn college credits/units while completing their high school education - saving students money while advancing their education. Students are able to attend college, at minimal cost, while still living at home as a high school student.

Students are able to select courses that challenge them academically and provide real-world applications. Many students earn their associate’s degree and leave prepared to start a career or transfer to a four-year institution to pursue their bachelor’s degree. Students must complete an application for admission and meet requirements of the Running Start program. Visit www.clark.edu/runningstart (http://www.clark.edu/enroll/admissions/running_start/) for additional information.

International Student Admission
360-992-2390

Clark College accepts qualified international students from around the world who wish to study in the U.S. using an F-1 student visa.

To be eligible for admission, applicants must submit the international student application form, application fee, and supplemental documents. International student admission information can be found on the International Programs web page: www.clark.edu/international (http://www.clark.edu/international/).

Applicants must submit financial documentation with their application to prove that sufficient funds are available for their first year of study. Resources must cover cost of tuition, fees, books, medical insurance, living expenses, and transportation. Medical insurance while in the U.S. is mandatory and will be added to the student's bill each term.

Exception to Admission (Underage Policy)
https://www.clark.edu/enroll/admissions/exceptions.php

Clark College admits anyone who is at least 18 years of age, who is a graduate of an accredited high school or the equivalent, is a participant in Running Start, or participant in other approved programs designed for age-specific groups. Exceptions to this policy may be granted by the college for special consideration of underage individuals not participating in one of the above-mentioned programs. The college reserves the
Residency Classifications
www.clark.edu/enroll/admissions/admission_forms.php

To qualify for any of the residency classifications listed below, students must be U.S. citizens, permanent resident, refugees, or non-immigrant resident with visa classifications of A, E, G, H, I, K, or L.

Residency Classification Definitions
- Washington In-State Resident: A person who meets the qualifications of citizenship, has been living in the state of Washington for a minimum of 12 months prior to the beginning of the term, and has taken actions to declare Washington as their state of permanent residence.
- Washington Non-Resident Waiver: A person who meets the qualifications of citizenship and who has been living in the state of Washington for more than one day prior to the beginning of the term.
- Non-Resident: A person who resides outside of the state of Washington and does not qualify for the Washington Border Waiver; a person who does not submit the required documents for the Washington Residency Reclassification Application, Washington Non-Resident Waiver, Oregon Border Waiver or Oregon Border Opportunity Waiver.
- Non-Resident Refugee: A person who holds Refugee-Parolee status and has established a domicile in Washington before the first day of the term.
- Non-Citizen: A person who does not meet the qualifications of citizenship, regardless of their length of time domiciled in the state of Washington.
- Oregon Border Waiver: A person who meets the qualifications of citizenship and who has been living in one of the 13 qualifying Oregon border counties for a minimum of 90 days prior to the beginning of the term.
- Oregon Border Opportunity Waiver (HB1474): A person who meets the qualifications of citizenship, was living in a qualifying Oregon border county for at least 90 days immediately prior to moving to Washington state, has been living in Washington for less than 12 months, and has taken all steps to declare Washington as their state of permanent residence.
- Oregon Border Waiver: A person who meets the qualifications of citizenship in addition to the documents listed above. The Oregon Non-Resident Waiver requires one piece of documentation from the list above, while the Oregon Border Waiver requires one piece of documentation from the list above from Oregon rather than from Washington. For additional details, refer to the directions on the application forms.

* Note that the Oregon Border Opportunity Waiver also requires proof of Oregon border county residency in addition to the documents listed above. The Washington Non-Resident Waiver requires one piece of documentation from the list above, while the Oregon Border Waiver requires one piece of documentation from the list above from Oregon rather than from Washington. For additional details, refer to the directions on the application forms.

The forms are available online at http://www.clark.edu/enroll/admissions/admission_forms.php or visit Enrollment Services in Gaiser Hall room 128.

Applying for Residency Reclassification
Students are granted residency classification based on the information provided on the initial admissions application. The student is responsible for submitting the appropriate application and supporting documentation to have residency reviewed for a reclassification to a new category. Applicants who are not U.S. citizens are required to submit a copy of their permanent resident card or I-94 for reclassification consideration. All residency reclassification requests and documentation are accepted until the 30th calendar day of the term. The college has ten (10) business days to review a completed application before making a decision on the reclassification request. If the application is approved, adjustments to the tuition will be applied to the term for which the reclassification was submitted. If the application materials are incomplete or received after the 30th calendar date of the term, the request will be reviewed for the following term. Residency changes are not retroactive.

Supporting documentation is defined in two categories: proof of physical presence and proof of intent to remain in the state of Washington. Students applying for reclassification will be asked to provide these documents as part of their application materials. Acceptable types of documents are listed below.

- Proof of Physical Presence (one document required, showing at least 12 months)
  - Copy of mortgage closing statement for the home in which the student resides;
  - Copy of a rental/lease agreement for the home in which the student resides; or
  - Copy of rental receipts or mortgage payment receipts for the home in which the student resides.
- Proof of Intent to Remain (three documents required, each showing at least 12 months)
  - Valid Washington driver's license;
  - Valid Washington voter registration;
  - Valid Washington vehicle registration (not title);
  - Proof of permanent full-time employment; or
  - Verification of checking, savings or safe deposit box accounts located at a bank in Washington.

- Washington Residency Reclassification Form: Used to apply for in-state status by those who did not reside in Washington State for at least 12 months prior to enrolling at Clark College.
- Border County Opportunity Application HB1474: Used to apply for in-state status by those who qualify under the Oregon Border Opportunity Waiver guidelines.
- Washington Non-Resident Waiver: Used to apply for the waiver by those who originally applied for admissions with a non-Washington state address and who have since moved to Washington and established a residency.
- Oregon Border Waiver: Used to apply for the waiver by those who are residing in a qualifying Oregon border county.

Washington residency is governed by RCW.28B-15, RCW 46.16.028, RCW 46.20.021, WAC 250-18, and WAC 208-104-006. Contact Enrollment Services at 360-992-2107 with any questions regarding your residency status or how to apply for a reclassification. You can also visit Enrollment Services in Gaiser Hall room 128.

HB 1079 (Undocumented Person) Waiver
Effective April 2022, Washington state law was changed to qualify certain students who are not permanent residents or citizens of the United
States as eligible to pay resident tuition rates. To be eligible to sign this affidavit, you must:

- Earn a high school diploma, GED®, or diploma equivalent from anywhere in the United States before your first term at the college determining residency, and
- Maintain a primary residency in Washington for at least 12 consecutive months immediately before your first term at the college determining residency. The Washington residence must be for purposes other than college. If you take any courses at another Washington college during the prior 12 months, you cannot have taken more than six credits/units in any given term. If you exceed that limit you must prove that you have a Washington residence for non-college reason.

**Active Duty Military**

Active duty military stationed in the state of Washington, as well as their spouses and dependents, qualify as residents for tuition purposes. At the time spouses or dependent family members apply for admission, documentation such as a copy of the military ID card or other appropriate documents must be presented.

**Washington National Guard**

Washington National Guard members, as well as their spouses and dependents, qualify for resident tuition as long as they are domiciled in Washington.

**Veterans Tuition Exemption**

- Washington state provides a 25% discount for tuition at public colleges and universities for all veterans. The veteran must provide a DD214 to the Veterans Center of Excellence to qualify.
- The Washington state 100% tuition waiver allows a 100% totally and permanently disabled (as awarded by the Veterans Administration), veterans spouse or child to be granted 100% tuition and a small book stipend to attend Washington State schools such as Clark College. Requirements for eligibility as well as a link to the RCW (Washington Law) that governs this waiver:
  - Disabled veteran must be a resident of Washington state
  - The child must be a resident of Washington state
- To qualify for this waiver please provide the following to veterans@clark.edu:
  - Veterans valid WA state issued ID or Driver’s License or bill in veterans name with WA state address to verify residency
  - Students valid WA state issued ID or Driver’s License or bill in students name with WA state address to verify residency
  - Complete and return attached 100% waiver application
  - Provide a copy of the Veterans 100% disability award letter from the VA.
  - Provide a copy of the Veteran’s DD-214

**Tuition Waivers**

Most tuition waiver guidelines and charges are set by the Washington state legislature and may change on an annual basis. Those eligible for waivers are listed below, under the departments that serve them.

- Enrollment Services
  - Clark College employee
  - Classified state employee or Washington Public Higher Education employee
  - Senior Waiver
  - Children of deceased law enforcement officer or firefighter
  - Children and spouse of totally disabled, or POW/MIA, or deceased eligible veterans, or National Guard members
  - Native American Waiver
  - Washington Non-Resident Waiver
  - Oregon Border County Waiver
  - Non-Resident Refugee Waiver
  - Apprentice
  - Vocational 18+ credits/units
  - Dislocated forest products workers or their unemployed spouses
  - Wrongfully convicted individual, their children and stepchildren
  - Running Start
- High School Completion Office
- Veterans Resource Center
- Military personnel
- Running Start Office
- Running Start

**Course Placement**

360-992-2588

Course placement is an important step toward student success. Prior to accessing placement services, students must complete an application for admission. Many courses at Clark College have placement prerequisites for English and Mathematics ability. The course that students place into determines how they progress through their program of study and how long their degree will take. We have a variety of ways to assess skills, and one method may not work for all. Visit www.clark.edu/assessment (http://www.clark.edu/enroll/admissions/assessment/) for more information on available placement and retesting options.

**High School+**

360-992-2741

Begun in 2015, High School+ is a program that helps students earn their high school diplomas in a more timely and convenient way than was previously available. The High School+ curriculum combines basic skills coursework with more rigorous academic education and training so that students can upgrade their skills while working toward a high school credential. The coursework is listed in the schedule as College and Academic Preparation (CAP). CAP is designed both to help students earn their high school diploma and/or prepare for the GED® exam. In addition, the coursework can help students who have already completed high school or the GED® but who need to improve their academic skills before entering into their program of study at Clark College.

Adults interested in participating in the High School+ program will need to apply for admission, submit their high school transcripts, take the CASAS test, and meet with the High School Completion Advisor prior to beginning their classes.
General Educational Development (GED®) Testing

Clark College is an official General Educational Development (GED®) testing site. The GED® tests provide a high school credential to adults who have not graduated from a traditional high school. Participants in GED® testing may go on to further their education at Clark College following the examination process or can participate in traditional college classes while completing the GED tests.

The GED® test is designed for adults who are 19 years old or older and who have not received a traditional high school diploma. Examinees who are 16 to 18 years old and wish to take the GED test must provide a high school release form from the school district in which they live.

The GED® examinations are given in the following four (4) subject areas:

• Social Studies
• Science
• Mathematics
• Language Arts

Successful completion of each of these examinations leads to the issuance of a GED® certificate.

The GED® test is now offered in a computer-based format. In order to begin the process of obtaining a GED®, participants may register online at https://GED.com/ (https://ged.com/). The GED® test must still be taken in person at an official GED® testing center.

eLearning

eMail: eLearning@clark.edu
Website: eLearning at Clark College (http://www.clark.edu/academics/eLearning/)

What is eLearning?

eLearning at Clark College provides alternative options to students that give them the opportunity to attend classes beyond the traditional on-campus experience. eLearning courses offer scheduling flexibility and convenience for today’s busy lifestyles. eLearning courses maintain the same quality and outcomes as traditional on-campus classes and require the same time commitment to the coursework.

Clark College has dedicated a number of resources to ensuring exceptional Universal Design for Learning practices and proactively attending to accessibility concerns.

What Types of Classes are Offered?
eLearning classes are offered in the following formats: online, online-remote, and hybrid. To learn more about eLearning class formats, please go to What is eLearning page (http://www.clark.edu/academics/eLearning/whatis.php). General modality descriptions are as follows:

• Online or Remote – A course that uses web-based tools and where 100% of the instruction and interaction between instructor and student is done online, either asynchronously or with some synchronous meeting times.
• Hybrid – A course that displaces some, but not all face-to-face class time with web-based tools.
• Web Enhanced – A face-to-face course that does not replace any face-to-face seat time, and access to web-based tools is required.

For more information regarding these modalities, please contact the Advising department.

Students considering registration in hybrid or online courses can get help preparing by visiting the following pages:

• Are You Ready for Online Learning (https://www.sbctc.edu/becoming-a-student/right-degree-you/is-online-learning-for-me/)? (short assessment quiz)
• Find your score, then read these recommendations (https://www.clark.edu/academics/eLearning/programs/readiness_results.php)
• How to be a Successful eStudent (http://www.clark.edu/academics/eLearning/self_assess.php)
• eLearning Degrees (http://www.clark.edu/academics/eLearning/programs/) and Courses
• Canvas Student Orientations (http://www.clark.edu/academics/eLearning/student_orientation.php)

What Types of eLearning Programs are Offered?

Through the eLearning course modalities, students have several options to complete a degree through Clark College eLearning:

1. Associate of Arts-Degree Transfer with emphasis in:
   • Communications Studies (CMST website (https://www.clark.edu/academics/programs/department/communication/))
   • English (ENGL website (https://www.clark.edu/academics/programs/department/english/))
   • Geography
   • History (HIST website (https://www.clark.edu/academics/programs/department/history/))
   • Psychology
   • Sociology
   • Spanish (SPAN website (https://www.clark.edu/academics/programs/department/spanish/))

2. Associate of Arts-Degree Transfer with concentration in:
   • Women’s Studies (WS website (https://www.clark.edu/academics/programs/concentrations/womens-studies/))


4. AAT in Health Information Management (Associate of Applied Technology Degree) (HIM-AAT website (https://www.clark.edu/academics/programs/health-care-and-biosciences/health-information/))

5. AAT in Network Technologies (Associate of Applied Technology Degree) (Online Remote: requires weekly Zoom meetings) (NTEC-AAT website (https://www.clark.edu/academics/programs/technology-and-engineering/network-technical/))

6. AAT in CISCO Technologies (Associate of Applied Technology Degree) (Online Remote: requires weekly Zoom meetings) (CISCO-
must meet the following criteria to be eligible for federal student aid:

- Be a regularly admitted student to Clark College (not Running Start),
- Completed a high school diploma or GED,
- Be a U.S. citizen or eligible non-citizen,
- Not owe an overpayment on a federal grant,
- Not in default on a federal student loan,

Students who cannot complete the FAFSA due to citizenship status, defaulted loans or federal grant overpayments can apply for state financial aid by completing the Washington Application for State Financial Aid (WASFA). To be eligible for state financial aid students must:

- Have a high school diploma or GED,
- Not be in default on a state loan,
- Not owe a repayment on a state grant,
- Be enrolled in an eligible degree or certificate program,
- Maintain satisfactory academic progress,
- Be a Washington State resident

Financial Aid

360-992-2153

http://www.clark.edu/enroll/paying-for-college/financial-aid/index.php

The Financial Aid Office increases opportunities for both access and success by helping students seek, obtain, and make the best use of all financial resources.

Financial Aid Eligibility

All students are encouraged to apply for financial aid by completing the Free Application for Federal Student Aid (FAFSA). In general, students must meet the following criteria to be eligible for federal student aid:

7. **BAS in Cybersecurity (Bachelor's in Applied Science Degree) (Online Remote: requires weekly Zoom meetings; coming Spring 2022)** (CBAS website [https://www.clark.edu/academics/programs/science-technology-and-engineering/cbas/](https://www.clark.edu/academics/programs/science-technology-and-engineering/cbas/))

**How Do I Start an eLearning Class?**

eLearning classes follow the same college policies and procedures as face-to-face classes; therefore, they have the same start and end dates, unless otherwise noted. This means students are expected to log into the Learning Management System (Canvas) the first day of the term for class instruction and to begin participation.


**Technical Requirements and Support**

To see if you have appropriate technology for eLearning courses go to the Technical Requirements and Resources page [https://www.clark.edu/its/documentation-and-resources/academic-technology/tech_reqs.php](https://www.clark.edu/its/documentation-and-resources/academic-technology/tech_reqs.php).

Technical support is available through the TechHub [https://www.clark.edu/its/documentation-and-resources/students/techhub/](https://www.clark.edu/its/documentation-and-resources/students/techhub/) for:

- LMS login and troubleshooting
- Computer lab and student wireless login and troubleshooting
- Mobile device connectivity
- Course-specific software and e-books
- eTutoring login
- Online student services
- Computer usage and troubleshooting
- Student Gmail


**Washington Application for State Financial Aid (WASFA)**

Students who cannot complete the FAFSA due to citizenship status, defaulted loans or federal grant overpayments can apply for state financial aid by completing the Washington Application for State Financial Aid (WASFA). To be eligible for state financial aid students must:

- Have a high school diploma or GED,
- Not be in default on a state loan,
- Not owe a repayment on a state grant,
- Be enrolled in an eligible degree or certificate program,
- Maintain satisfactory academic progress,
- Be a Washington State resident

Additionally, if selected, students must submit all requirements needed for verification. Students must meet all requirements for federal and state aid.

**Application Process**

Students can start the annual application process by completing either the Free Application for Federal Student Aid (FAFSA [http://www.fafsa.gov/](http://www.fafsa.gov/)) or the Washington State Application for State Financial Aid (WASFA [https://wasac.wa.gov/student-residency/](https://wasac.wa.gov/student-residency/)). The FAFSA/WASFA is used to determine which types of financial aid a student may be eligible to receive.

The Financial Aid Office may request additional information to complete a student’s application after receiving the FAFSA or WASFA. Information needed will be requested through the student’s “To Do” list in ctcLink Self-Service and communicated by email using preferred email address. Students are encouraged to complete all required information by each term’s priority processing date to avoid delays in receiving their financial aid offer.

**Types of Financial Aid Available**

Financial aid includes grants, tuition waivers, student employment, scholarships, and student loans.

- Grants and tuition waivers are need-based forms of aid that generally do not have to be repaid,
- Student employment is available to help students pay for school through paid employment,
- Loans are a form of aid available that must be repaid with interest upon graduation, leaving school or dropping below 6 credits/units per term

**Federal Pell Grant**

The Federal Pell Grant is awarded based on financial need to undergraduate students. The initial award amount is based on the Student Aid Index (SAI) and assumed full-time enrollment (12+ credits/units) for a maximum of three terms. Students who attend four terms may qualify for funds in the spring. Eligibility is limited to a lifetime maximum of 18 full-time terms.
Federal Supplemental Educational Opportunity Grant (FSEOG)

FSEOG is awarded based on financial need to students with an SAI of 0 or lower who are eligible to receive a Pell Grant. The award is not prorated for less than full-time enrollment however, students must enroll in a minimum of six credits/units per term to receive FSEOG.

Washington College Grant (WCG)

The initial WCG award is based on assumed full-time enrollment (12+ credits/units) for all terms, including summer. The award is prorated for less than full-time enrollment however, a minimum of three credits/units is required to qualify for the award. Eligibility is limited a lifetime maximum of 18 full-time terms. Students completing the WASFA for state aid only, must meet all requirements for state financial aid.

College Bound Scholarship (CBS)

The CBS scholarship is available to students who signed up for the program in the seventh or eighth grade and graduated from a Washington high school without any felony convictions. Eligible students must enroll in college within one year of graduating high school.

The initial award is based on assumed full-time enrollment (12+ credits/units) for all terms, including summer. The award is prorated for less than full-time enrollment however, a minimum of three credits/units is required to qualify for the award. Eligibility is limited to a lifetime maximum of 18 full-time terms. Students completing the WASFA for state aid only, must meet all requirements for state financial aid.

Passport to College Promise

Passport to College Promise is a state grant program available to former foster youth or students who experienced unaccompanied homelessness. To qualify students must complete the FAFSA or WASFA, meet Washington State residency requirements and enroll in at least six credits/units each term.

Clark College Grants and Waivers

Clark College reserves a percentage of tuition revenue and offers these funds to students who are a Washington State resident or eligible for in-state tuition in the form of institutional grants and tuition waivers. Grants offered are based on need. The award is not prorated based enrollment intensity however, a minimum of three credits/units is required.

Waivers offered may only be awarded to reduce the cost of tuition and cannot be applied toward fees or refunded directly to students. Tuition waivers are not prorated based on enrollment intensity and there is no minimum credit level.

Work-Study

Work-Study offers are awarded based on need. Funds are earned through employment on and off campus. Students must be enrolled in six or more credits/units per term.

Offers are automatically awarded to students for fall, winter and spring terms. Students who are interested in work study for Summer term should complete a Change Form (https://www.clark.edu/enroll/paying-for-college/financial-aid/forms.php) to request funds for summer. Visit the Work-Study (https://www.clark.edu/enroll/paying-for-college/wstudy.php) page for more information.

Federal Direct Loans

Federal Direct Loans are a form of financial aid that must be repaid with interest. There are two types of Direct Loans:

• Direct Subsidized Student Loan: Awarded based on need to undergraduate students. The Department of Education pays interest while students are enrolled in school in at least six credits/units. Payments are automatically deferred while students are enrolled in at least six credits/units.
• Direct Unsubsidized Student Loan: Non-need-based loan available to undergraduate and graduate students. The student is responsible for interest while in school. Payments are automatically deferred while students are enrolled in at least six credits/units.

Students must meet all requirements for Title IV eligibility. The initial award amount is an offer after evaluating eligibility for need-based aid. Students who are interested in borrowing their Direct Loan offer can get started by:

• Accepting all or a portion of their loan offer online in their ctcLink Self Service,
• Complete a Master Promissory Note (https://studentaid.gov/mpn/),
• Complete Entrance Counseling (https://studentaid.gov/entrance-counseling/) (required for first-time borrowers only)

Financial Aid Offers

Students are notified by email with a financial aid offer when their application is processed. The initial aid offer is based on the assumption that students will enroll in 12+ credits/units each term, which is considered full-time. Students may still be eligible for aid at a lower enrollment intensity, although some grant aid will be prorated based on the student's enrollment intensity.

Students who plan to enroll less than full-time (12 credits/units) will need to complete an Enrollment Change Form (https://www.clark.edu/enroll/paying-for-college/financial-aid/forms.php) to confirm their enrollment intensity and request to have their aid adjusted to their planned enrollment intensity before disbursement of funds.

Financial Aid Disbursement and Tuition Deadlines

Tuition deadlines for each term are published on the College's website (https://www.clark.edu/enroll/registration/tuition-fees/tuition_payment_process.php). Students who have been awarded financial aid funds will have a tuition hold placed on their account to prevent a drop for non-payment until funds can be disbursed to pay charges.

Financial aid grants, tuition waivers and loan funds that have been accepted will be automatically used to pay outstanding tuition and fees approximately 1-2 business days before the first day of classes. Please allow additional time for processing and disbursement for summer term.

Any credit balance of financial aid funds remaining after payment of tuition and fees will be refunded to students. Clark College partners with BankMobile to deliver financial aid credit balance refunds. Funds are sent to BankMobile who in turn issues a refund according to the disbursement option selected. Additional information can be found online at: https://bankmobiledisbursements.com/how-it-works/
Financial Aid Census Date and Repayment Policy

The Financial Aid Office uses an "enrollment lock" date for Federal Pell Grant, Washington College Grant, College Bound Scholarship, and Passport to College Promise funds. The "lock" date is also known as the "census date." The census date is the 10th business day of the term, except for summer which has a census date of the eighth business day. Through this date, college policy allows students to drop classes without a grade of "W." Tuition refunds may also be issued for courses dropped following to the Clark College Refund Policy (http://www.clark.edu/enroll/registration/refund_policies.php).

Schedule changes made through the census date may have different impacts. Factors to consider include whether aid from the grant programs locked at census have already been disbursed, and whether classes were added or dropped.

Adding Classes

Financial aid funds are increased for enrollment intensity changes from adding eligible courses through the census day. Additional funds awarded are applied toward payment of charges for classes added, and any remaining balance is refunded through BankMobile Disbursements.

Dropping Classes

Financial aid funds are reduced for enrollment intensity changes resulting from dropping eligible classes through the tenth day. This will result in repayment owed to Clark College and/or the state aid program(s) depending on the funding type received.

Complete Withdrawals

Withdrawing from all financial aid eligible credits/units through the tenth day will result in repayment of all funds received. For Washington College Grant, College Bound Scholarship, Washington Bridge Grant and Passport to College Promise the full balance of the award received will be owed. Repayment of other sources of aid is subject to the Clark College Return of Title IV Repayment Policy (https://www.clark.edu/enroll/paying-for-college/documents/Return_of_Title4_Policy.pdf) requirements and based on number of days attended within the term.

Late Starting and/or Early Ending Classes

Classes that start after the census date and/or end before the last day of the term are considered module courses. Eligible module classes are included in the enrollment intensity at the time of disbursement as long as the student was enrolled in the course(s) by the census date. Students who withdraw from a module class on or before the scheduled course start date are considered to have not commenced attendance and will require an enrollment intensity review. A reduction of eligibility will result if the student did not commence attendance in the enrollment intensity funded.

Late Enrollment

Clark College may allow enrollment in classes after the census date on case-by-case basis with instructor permission. Late enrollments may result in a funding adjustment.

The complete Financial Aid Census Date and Repayment Policy (https://www.clark.edu/enroll/paying-for-college/documents/CC_Refund_Repayment_Policy.pdf) is available online. Students are encouraged to visit the Financial Aid Office to ask about the impact of dropping classes before making changes to their schedule.

Financial Aid Satisfactory Academic Progress

Students must meet Financial Aid Satisfactory Academic Progress (SAP) Policy (https://www.clark.edu/enroll/paying-for-college/documents/SatisfactoryAcademicProgressPolicy.pdf) requirements to remain eligible for federal, state, and institutional financial aid. SAP is reviewed both annually and at the end of each payment period. Students are notified via email if SAP conditions are not met. All terms of attendance, including those in which financial aid was not received, are used in determining SAP status.

There are three standards to the SAP Policy that are evaluated at the end of each term:

I. Grade Point Average (GPA) requirement is to maintain a minimum 2.0 cumulative GPA. If the cumulative GPA falls below 2.0 at the end of the term the student will not have met the GPA requirement to remain in good standing. In addition, a student must maintain a minimum 2.0 cumulative GPA at the end of their sixth term or an automatic suspension will occur. Courses with an S (Satisfactory), U (Unsatisfactory), I (Incomplete), and W (Withdrawal) do not have an impact on GPA. For repeated coursework, only the highest grade achieved will count in the GPA calculation.

II. Pace of Progression is calculated by dividing the cumulative earned by the cumulative attempted credits/units. When this calculation falls below 67%, a student is no longer on pace to graduate on time. In addition to earning at least 67% of their attempted credits/units, students must also complete all credits/units within their enrollment level which is captured on the census date each term. Pace of progression that is 66.6% or higher will be rounded to 67%. Whether or not aid was received, all program credits/units, including transfer and remedial credits/units, will be taken into consideration. Courses with grades of F (Failed), I (Incomplete), U (Unsatisfactory), W (Withdrawal), Y (In Progress) and repeated courses are included in the calculation of attempted credits/units. Only the highest grade achieved will count as attempted and earned credit/unit for repeated courses. Courses approved on Set-Aside Petitions will count as attempted credits/units. Non-graded coursework and (*) grades are excluded from pace of progression for credit/unit bearing classes. Program changes do not affect pace of progression.

III. Maximum Timeframe is measured to ensure students are taking required courses to complete their certificate or degree. Program progression must be reviewed when students have reached 150% of the length of program. Financial aid recipients will be ineligible for further funding if it is mathematically impossible to complete the program of study within 150% of the length of the program. All credits/units, regardless of whether they were taken while on financial aid, including credits/units removed with an approved Set-Aside Petition are used in calculating maximum timeframe. Transfer credits/units accepted for use towards the current certificate or degree are also included. Repeated credits/units (R grades) are counted as attempted towards maximum timeframe. Transitional support coursework that is attempted and
results in an asterisk (*) grade such as ABE, GED, ESL, ENL, and some CAP coursework are excluded from the federal maximum timeframe calculation. Funding of remedial courses is limited to 45 attempted credits/units. Program changes do not affect maximum timeframe.

Additional Maximum Timeframe Information ***

Maximum credit/unit warning notifications will be issued when a student has attempted between 125% and 149.99% of the credits/units required for their declared program. Once a student has attempted 150% of the credits/units required for their declared program, federal financial aid will be suspended.

**Financial Aid Warning**

Students will be placed on Financial Aid Warning for one term if:

- Cumulative GPA falls below 2.0 at the end of a term and/or
- Pace of progression is less than 67% and/or
- Students on Warning are eligible to receive financial aid the next term of attendance but are in jeopardy of losing their financial aid eligibility. If all SAP requirements are not met at the end of the next term of attendance, financial aid will be suspended. Warning status will be cleared if all SAP requirements are met at the end of the next term of attendance.

**Financial Aid Suspension**

Students will be placed on financial aid suspension if:

- On Financial Aid Warning/Probation and
- Cumulative GPA falls below 2.0 at the end the term and/or
- Pace of progression is less than 67% and/or
- Cumulative GPA falls below a 2.0 at the end of the 6th term of attendance and beyond
- 150% Maximum Timeframe is exceeded
- Conditions of their Academic Plan have not been met

Students on financial aid suspension are not eligible for future financial aid including grants, work-study, and loans. Financial Aid Suspension remains in place until the student has an approved appeal or has met the reinstatement criteria (See Regaining Financial Aid Eligibility).

**Financial Aid Probation**

If the Financial Aid Committee approves a student’s appeal, financial aid will be reactivated on a probationary status. Students on Probation are eligible to receive financial aid.

Probation status will be cleared if all SAP requirements are met at the end of the next term of attendance. If all SAP requirements are not met, a Financial Aid Suspension will occur (see Financial Aid Warning section for details).

If it is mathematically impossible to meet all SAP requirements by the end of the next term of attendance, the Financial Aid Committee may approve an appeal on an Academic Plan, allowing for an extended Probationary period. If at any time while on an academic plan, the student does not achieve progress towards meeting the pace, term enrollment, and GPA requirements, or other conditions set by the Committee, a Financial Aid Suspension will occur (see Financial Aid Warning section for details).

**Appeals**

Students have the option to submit an appeal to address financial aid suspension for not meeting any combination of the SAP elements. Appeals must be submitted by the priority processing date listed on the Financial Aid (https://www.clark.edu/enroll/paying-for-college/financial-aid/maintain-aid/) website in order to be considered for the Federal Pell Grant for that term and include all required documentation listed under the appeal type.

Appeals are reviewed by an Appeals Committee which consists of financial aid representatives. The Committee’s decision is final and cannot be appealed further. If the appeal is approved, the student will be placed on a probationary status. Students are notified of their decision through email.

The Financial Aid Office does not guarantee an appeal submitted will result in an approval. The student is responsible for paying any and all costs of attendance while awaiting an appeal outcome. The Financial Aid Office allows for the following appeals:

- Maximum Timeframe Appeal (https://www.clark.edu/enroll/paying-for-college/documents/22-23-MAX-Appeal.pdf)

**Change of Records SAP Review**

SAP is evaluated both annually and at the end of each term. SAP can be re-evaluated for a grade or program change that occurs. Students may notify the Financial Aid Office of a grade or program change by submitting a Change of Records SAP Review Form and will be notified of any changes via email.


**Reinstatement Criteria**

If a student chooses not to appeal or has exhausted the two (2) appeal limit they may be eligible for reinstatement when they have satisfied the following conditions:

1. Enroll in and successfully complete a term within the enrollment level recorded at census, and
2. Earn a cumulative GPA of 2.0 or higher, and
3. Have a pace of progression of 67% or higher.

In the reinstatement term, receiving grades of F (Failed), I (Incomplete), U (Unsatisfactory), W (Withdrawal), Y (In Progress), and repeating courses may hinder eligibility for financial aid reinstatement and could increase the number of credits/units required to restate.

When the reinstatement criteria are met, aid is reactivated based on available funding and may not reflect the original aid offer. Meeting reinstatement criteria does not negate any repayment owed to the financial aid programs or Clark College.

**Financial Aid Limitations**
Financial Aid

- FLPC, ESL, IELP and most CAP classes are not eligible for financial aid. Only CAP 46 and 90 are eligible for financial aid.
- Repeating Courses: Once credit/unit is earned, financial aid can only fund one additional attempt of a course.
- Financial aid can up to 45 credits/units remedial coursework.
- Repayment obligations cannot be appealed.
- Lifetime eligibility limits cannot be appealed

This Satisfactory Academic Progress Policy is subject to change at any time due to federal regulations and/or requirements established by the Financial Aid Office.

Clark College Return of Title IV (R2T4) Funds Policy

Financial aid funds are awarded assuming students will attend Clark College for the entire term. If a student withdraws, the Financial Aid Office is required to calculate the amount of Federal Student Aid, also known as Title IV funds, earned and return the unearned part of the aid disbursed for the term.

There are two scenarios where a student is considered withdrawn which will result in a Return of Title IV calculation: official and unofficial withdrawals.

- Official Withdrawal: When the student officially withdraws from classes through Enrollment Services (https://www.clark.edu/enroll/registration/manage-enrollment/).
- Unofficial Withdrawal: When the student stops attending classes before the end of the term and does not complete official withdrawal procedures

Calculating the Return of Title IV Funds

The Financial Aid Office follows a federal formula approved by Congress to calculate the amount of funds earned and the amount of funds that must be returned. This includes:

1. Establishing the date of withdrawal, calculating the number of days in the term and the number of days the student was enrolled.
2. Using the number of days attended, calculating the percentage of Title IV funds earned and the amount of Title IV funds that were not earned.
3. Determine the total amount of Title IV aid that must be returned to the Department of Education and allocate the return, in order of priority, established by Congress.

Returning of Unearned Funds

The Financial Aid Office will revise the financial aid awards to return unearned funds, in order, to the Department of Education. Students will be notified by email of the Return of Title IV calculation detailing the amount disbursed and the amount earned from each aid program. Students who earned less than the amount disbursed will owe outstanding charges to the college. Separate billing statements will be sent by Clark College Accounting Services.

Post-Withdrawal Disbursements

Occasionally, a student may withdraw before all aid they were eligible for was disbursed. If the Financial Aid Office determines the student earned more aid than was disburse, the student may be eligible for a disbursement of funds after the withdrawal. This is considered a post-withdrawal disbursement.

Post-withdrawal disbursements of eligible grant funds will automatically be made to the student account to pay outstanding institutional charges such as tuition and fees. Any remaining credit balance will be refunded directly to the student through BankMobile. Students who are eligible for post-withdrawal disbursement of loan funds will be notified by email of their eligibility with a deadline to claim available funds.

The complete Return of Title IV Policy (https://www.clark.edu/enroll/paying-for-college/documents/Return_of_Title4_Policy.pdf) is available online. Students are encouraged to visit the Financial Aid Office to ask about the impact of withdrawing from classes before making changes to their schedule.

Other Educational Resources Available

Scholarships

360-992-2582
http://www.clark.edu/enroll/paying-for-college/scholarships/index.php

Funding for scholarships is made possible through the generous support of individuals and organizations. The Clark College Foundation is one of the largest community college foundations in the country and offers many scholarships to Clark College students each year.

Individual scholarships may have specific eligibility criteria such as maintaining a certain grade point average (GPA) or enrollment intensity to qualify for funds awarded. Students should refer to the scholarship award letter they receive from the Foundation for the conditions of their award. The scholarship application is separate from the application for financial aid.

Generally, scholarship applications are available between January through April, and funds are awarded for the following academic year.

Workforce Education Services

360-992-2729

Workforce Education Services (WES) administers a variety of programs that are designed to support students who are seeking certificates and degree programs with an employment goal, as well as students enrolled in Transitional Studies programs. Eligibility, including eligible degree types, vary and are dependent on individual program requirements.

Students may receive assistance with tuition, fees and books as well as help in accessing other supports, to include public benefits, by completing the Workforce Education Services Application online at: https://apps.clark.edu/WESapplication (https://apps.clark.edu/WESapplication/).

Opportunity Grant

360-992-2039

The Opportunity Grant program serves low-income students who are pursuing professional/technical programs that lead to high-wage, high-
have submitted or are in the process of submitting their certificate of

Visit the VCOE website for more information.

Veteran Education Resources

Eligible veterans and dependents must request certification each term for approved degree and certificate programs. Only courses required for the program and on the student degree worksheet will be funded. Audited courses are not eligible. Students are required to make satisfactory academic progress as defined by Clark College and are required to contact the Veterans Center of Excellence prior to making any schedule changes. Visit the VCOE website for more information. https://www.clark.edu/campus-life/student-support/vrc/ (https://www.clark.edu/campus-life/student-support/vrc/)

GI Bill® and Vocational Rehabilitation and Employment students who have submitted or are in the process of submitting their certificate of eligibility to Clark's School Certifying Official will not have a penalty imposed, including late fees, or be denied access to school facilities, or be required to borrow additional funds, because of delayed payments from the VA.

Clark College attempts to limit student enrollment to 85% veteran enrollment per program cohort. In the event that a veteran wishes to enroll in a course that has already reached the 85% cap, he or she may do that but will not be eligible for VA payment of tuition and fees. The Code of Federal Regulations (38 CFR 21.4201) states the VA shall not approve the enrollment of any VA-eligible person, not already enrolled in any course for any period during which more than 85% of the students enrolled in the course are having all or part of their tuition and fees paid to or for them by Clark College or the VA.

Students whose parent was a member of the U.S. armed forces and died because of military service performed in Iraq or Afghanistan after 9/11 or was a public safety office who died in the line of duty may qualify for additional Federal Pell Grant funds. Eligibility for additional funds may be considered if the student was under the age of 24 or enrolled in college at the time of the parent’s death. Students should contact the Financial Aid Office if they believe they may qualify.

Military Tuition Assistance

To activate your tuition assistance authorization, follow these steps (you may have already completed some or all of these):

- Apply for college admission/ activate Clark student email account
- Complete assessment testing
- Submit transcripts from prior colleges you have attended
- Meet with an Academic Advisor to develop an Education Plan
- Submit Education Plan to military base contact
- Register in required classes based on your Education Plan
- Submit a copy of your Education Plan and approved Tuition Assistance authorization to ddaniel@clark.edu

Important Notes:

- Your Tuition Assistance Authorization will not cover college fees. Some fees are embedded in the Tuition Rate Schedule: https://www.clark.edu/enroll/registration/tuition-fees/index.php. After you send your TA authorization, a calculation of the costs that you will be responsible to pay along with the due date and payment information will be issued.
- If your service branch denies payment of the authorized TA funds due to grades, non-attendance or any other situation, you will be responsible for the costs and must make payment to Clark College. Failure to pay these costs will restrict further enrollment and access to academic records.
- If you change your major, you must provide a revised Education plan to your military base contact and myself
- Please notify me of your enrollment every term and your intent with utilizing tuition assistance. Please ensure that you are notifying me prior to the tuition due date to ensure that I have placed a protective hold on your account so that you are not dropped for non-payment.

You must submit a Graduation Application one term before completing your certificate or degree requirements and notify me of your anticipated graduation date. https://www.clark.edu/enroll/credential-evaluation/graduation-application.pdf
Additionally, Clark College, in partnership with the Department of Defense, wants you to be an informed consumer. We invite you to review the following websites to learn more about Clark College and the services available to you.

Prospective Student Resources:

- College Scorecard (http://collegecost.ed.gov/scorecard/)
  A resource to assist prospective students and their families evaluate options in selecting a school.

- College Navigator
  A tool that provides consistent information about tuition, fees, retention, graduation, and loan default rates by college.

- Paying for College
  A resource that explains federal student loans and repayment options.

- Financial Aid Shopping Sheet
  A standardized award letter students and their families use to compare financial aid by institution.

- Clark College Student Support Services
  Disability Support Services (DSS)
  Qualified persons with disabilities can receive accommodation to assure equal access.

- Financial Aid Resources & Application
  Apply for Federal financial aid and find additional resources available to support education costs.

- Advising, program/degree planning, Credentials/graduation application
  Academic Advisors are available to map education plans and provide college transfer information.

- Job Search Assistance (http://www.clark.edu/enroll/careers/job-search/)
  Explore career options; find employment opportunities, co-op, and internships.

Clark College signs the Department of Defense (DOD) Voluntary Education Partnership Memorandum of Understanding (MOU) and conforms to Executive Order 13607 April 27, 2012, establishing Principles of Excellence for Educational Institutions Servicing Service Members, Veteran Spouses and family members. Credit for military experience may be granted toward general elective and specific vocational program coursework. Potential students are required to submit military and all other school transcripts, to be applied toward their intended program of study, no later than the start of their second term of enrollment. Military training and experience granted for credit/unit recommendations are based on the American Council of Education (ACE) guidelines for military training. Students may receive credit for prior learning for some military training—refer to the Credit for Prior Learning policy section of this catalog.

The College's School Certifying Officials' contact information is listed below:

Donna Larson
dlarson@clark.edu (egonzalez-roman@clark.edu)

Eli Gonzalez-Roman
egonzalez-roman@clark.edu

Megan Anderson
mmanderson@clark.edu

Registration

360-992-2183

For more detailed information regarding enrollment for new, continuing or transfer students please see the website at http://www.clark.edu/enroll/registration/index.php (http://www.clark.edu/enroll/registration/).

Continuing student access to enroll is based on a number on a number of factors. Participation in specific programs and number of credits/units earned are among the factors utilized to determine access.

Priority registration access is given to eligible veterans. Qualifying students will receive access to registration services prior to the continuing student population. Students approved for registration accommodation due to disability will also register during this time period.

Specific information on dates, deadlines, and hours of service can be found on the Clark College website at www.clark.edu/current (http://www.clark.edu/current/).

Course Formats

Students may register for courses in several different formats including web-enhanced, hybrid and online. See Clark College eLearning for more details on what each format requires.

Registration Policies

Credit/Unit Maximum

Students may register online or in person for 0-20 credits/units. Students who wish to add excess credits/units (i.e., 21 or more) must make an appointment and obtain permission from an advisor to register over the credit/unit maximum.

Late Registration Policy

Beginning the third (3rd) day of the term, instructor permission is required to enroll into any regular starting class.

First Week Attendance Policy

It is essential that students attend the first class meeting of their courses. If a student is unable to attend due to an emergency or conflict of a serious nature, students should contact the instructor. If the instructor is not designated in the class schedule, the student should contact either the Division Office or the Office of Instruction, which will direct the student appropriately. Students who fail to attend one (1) or more sessions during the first five (5) days of the term may be dropped from the class. Students who miss any classes during the first five (5) days are responsible for verifying their enrollment status.

Students enrolled in online courses must log into their course by the first day of the term and complete all first-week course requirements by
their due dates. This is accomplished by accessing the Canvas course shell unless alternate instructions have been provided by the instructor. For more information about logging into Canvas, visit eLearning Getting Started (http://www.clark.edu/academics/elearning/begin.php). If a student has not completed first-week course requirements set by the instructor during the first five (5) days of the term, the student may be dropped from the course.

Note: Students who drop or are dropped by the college during the first five (5) days of the term will receive a full refund of tuition and fees, if due. Students are responsible for verifying all transactions regarding course registration.

Dropping a Class and/or Withdrawal from the College

Students who find it necessary to withdraw from classes must do so formally. The withdrawal process can be completed online using ctcLink or in person using a Change of Registration form at the Enrollment Services Office. The dates and deadlines for dropping and/or withdrawing from classes are available at www.clark.edu/enroll/registration/academic-calendar.php (http://www.clark.edu/enroll/registration/academic-calendar.php)

• A class officially dropped before the tenth (10th) day (eighth day in summer) of the term will not be entered on the student’s transcript.
• After the tenth (10th) day and through the end of the term, regular starting classes formally dropped online or at the Enrollment Services Office will be posted to the student's transcript with a withdrawal grade of “W” assigned to the class. The withdrawal deadline is the day before the last day of the term.
• For courses with unusual start and end dates, the withdrawal is the day before the last day of the term.
• If the student decides not to attend, it is their responsibility to withdraw from all classes. Withdrawals will not be accepted for a class that has ended.

Administrative Withdrawal

Students unable to withdraw by the end of the term due to extenuating circumstances should contact the Enrollment Services Office for information on requesting an Administrative Withdrawal.

Auditing a Class

Students may enroll in a course on an audit basis with instructor’s written consent and upon payment of the regular tuition and fees so long as course prerequisites are met. Within a week of enrolling in a course, the instructor will provide the student with specific expectations regarding participation in class discussion, class activities, submission of coursework and quizzes/tests, as well as the extent to which the auditing student can expect feedback and evaluation from the instructor. To change from credit to audit or audit to credit, the student must complete a Change of Registration form at the Enrollment Services Office. Such changes may be made only with the written consent of the instructor and must be processed by the end of the tenth (10th) day of the term (eighth day in summer). Students will not receive grades and will not receive college credit.

Student Attendance Status

Clark College considers students enrolled in twelve (12) or more credits/units to be full-time students. The definition of “full-time student,” however, may vary for certain agencies, such as Veterans Services, Financial Aid, Social Security, and insurance companies. Student attendance status for Financial Aid and MGIB GI Bill® Chapters 30, 31, 35, 1606, 1607, is as follows:

Financial Aid

GI Bill® Attendance Status for Fall, Winter and Spring Terms

<table>
<thead>
<tr>
<th>Attendance Status</th>
<th>Credit/Unit Hours Per Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time student</td>
<td>12 credit/unit hours</td>
</tr>
<tr>
<td>Three-quarter-time student</td>
<td>9-11 credit/unit hours</td>
</tr>
<tr>
<td>Half-time student</td>
<td>6-8 credit/unit hours</td>
</tr>
</tbody>
</table>

GI Bill® Attendance Status for Summer Term

<table>
<thead>
<tr>
<th>Attendance Status</th>
<th>Credit/Unit Hours Per Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time student</td>
<td>8 credit/unit hours</td>
</tr>
<tr>
<td>Three-quarter-time student</td>
<td>6-7 credit/unit hours</td>
</tr>
<tr>
<td>Half-time student</td>
<td>4-5 credit/unit hours</td>
</tr>
<tr>
<td>Less than half-time</td>
<td>3 credits/units or less</td>
</tr>
</tbody>
</table>

Post 9/11 GI Bill® Student Attendance Status

Post 9/11 GI Bill® calculated at Rate of Pursuit. Students must be enrolled at more than half-time to receive their expected BAH.

• 12 credits/units or more is considered full-time training for Post 9/11 GI Bill® for Fall, Winter, and Spring terms. (7 or more credits/units is required for BAH payment)
• 8 credits/units or more is considered full-time training for Post 9/11 GI Bill® during Summer term only. (5 or more credits/units is required for BAH payment)

Absence

Students are expected to attend classes in which they are enrolled. Attendance may be a factor in grading for a course. When unavoidable absence occurs, it is the obligation of the student to notify the instructor and arrange for the make-up work deemed necessary by the instructor. Reference the course syllabus for absence management details.

A member of the Washington National Guard or any other military reserve component who misses any form of participation/attendance in a class due to being ordered to service for 30 days or less, or requiring medical treatment for that service, is entitled to make up academic assignments without prejudice to the final course grade or evaluation. Documentation must be submitted prior to absence. Contact the Veterans Center of Excellence for more information.

Change of Contact Information

To ensure receipt of important information, students must notify the college of any change of address, telephone, and preferred name. Contact information may be updated in ctcLink. Offices that should be informed include Enrollment Services and Financial Aid.

Tuition and Fees

The first tuition due date is three weeks before the term begins. Tuition is due on a weekly basis after that:

• Students can verify the amount of tuition and the due date by viewing their schedule and other information in ctcLink.
• Students who enroll Saturday through Friday must pay tuition and fees no later than the following Monday by 5:00 p.m.
If Monday happens to be a holiday, payment is due on Tuesday by 5:00 p.m.

Students who enroll after the 10th day of the term (8th day of summer term) must pay tuition by the end of the same business day on which they register (5:00 p.m.).

Students receiving financial aid, scholarship, agency, or Veterans benefits are responsible for paying outstanding tuition and fees by the tuition due date when aid is insufficient to cover the total cost.

Students who do not pay tuition and fees will be dropped from their classes unless:

- A tuition deadline exception has been activated on the student account.
- The outstanding balance is $100 or less.
- A signed agreement to participate in the STEPP deferred payment plan has been submitted and payments are up to date.
- Registration for classes occurs after the tenth (10th) day of the term.

It is the responsibility of the student to officially withdraw from classes if they are unable to pay tuition and fees. A 100% refund will be issued through the fifth (5th) business day of each term permitting in compliance with Washington State Regulations.

Students with any outstanding debt owed to the college will:

- Be blocked from future registration.
- Be sent to Collections and a collection fee will be added to any tuition and/or fees outstanding at the end of the term.

Matriculation and Facilities/On-Campus Parking Fee

Students are charged per credit/unit hour to a maximum of twenty (20) hours for matriculation and facilities/on-campus parking.

[1] These fees are refundable on the same basis as tuition.

Technology Fee

Students are charged per credit/unit hour to a maximum of twenty (20) hours for technology such as computer software, computer replacement, and technical lab assistance to maintain open computer labs. Other examples of technology available to students are online registration and technical lab assistance to maintain open computer labs. Other examples of technology available to students are online registration and student kiosks, and online services featured on the Clark College website.

[1] These fees are refundable on the same basis as tuition.

Additional Fees

Some courses may require payment of lab or course fees in addition to or instead of tuition. These fees help the college defray expenses not funded by the state. Fees are used for specific course expenses such as breakage, hazardous waste management, consumable supplies, special materials, minor repairs, and materials that become the property of the student.

Textbooks and Supplies

The Clark College Bookstore stocks required textbooks (including the associated ISBN) and supplies as requested by classroom instructors. Also available are many supportive suggested materials to assist the student’s class preparation and participation. The store staff understands the financial impact of class materials, and thus provides the lowest prices for new textbooks of any college in this region and diligently pursues and stocks as many used textbooks as possible, partly supplied from a student book buyback program. In addition, the store offers a number of other affordability services for Clark students, such as textbook and calculator rentals, hold services, peer-to-peer exchange and much more. To obtain current book and supply lists and receive assistance in cost estimating, please visit the Clark College Bookstore on the main Clark College campus or visit its website at www.clarkbookstore.com (https://www.clarkbookstore.com/).

Financial Obligations of the Student

Students are expected to meet their financial obligations to the college. Clark College staff will act in accordance with adopted procedures and, if necessary, initiate legal action to ensure that collection matters are brought to a timely and satisfactory conclusion. Collection fees will be added to debts owed the college.

Admission to or registration with Clark College and other college services, will be withheld for failure to meet financial obligations.

Refund Policy

A student who officially withdraws using ctcLink or through the Enrollment Services Office may receive a refund of tuition and certain fees. The complete Refund Policy is printed in the college information section of this catalog and is available online at http://www.clark.edu/enroll/refund_policies.php.

Students who believe extenuating circumstances justify an exception to the policy may make a formal request at the Enrollment Services Office. Exceptions may be granted for extreme, extenuating, urgent, and unavoidable circumstances that prevent a student from withdrawing within the established guidelines. Students receiving financial aid should contact the Financial Aid office as soon as possible to discuss the impact of requesting an exception due to federal financial aid guidelines.

Grades and Records

BEAdA for CAP and ESL Coursework

BGB Grading Basis is used whether or not the class is graded. The BGB Grading Basis does not require actual grading. This grading basis will exclude the enrollment from Financial Aid Pace and Satisfactory Academic Progress calculations. This grading basis allows a grade to be applied and for the student to view the grade and units in Student Self-Service. The grade points and credits/units associated to the BGB grading basis will not factor into any college-level calculation.

Grade Legend

Clark College uses the grading symbols listed below. The grades A, B, C, and D may include pluses (+) and minuses (-).

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Grade Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
</tbody>
</table>
Incomplete Grades

An incomplete grade may be given if the instructor is satisfied that unavoidable circumstances have prevented the student from completing the course work and the student has requested this option.

The incomplete grade remains on the student’s transcript for 90 (ninety) days, or until the student completes the required work and the instructor submits an amended grade to the Enrollment Services office. If the instructor does not submit an amended grade within 90 (ninety) days, the ‘I’ grade will revert to ‘F’ for a letter graded course or ‘U’ for a Pass/No Pass course.

Incomplete grades can impact Financial Aid funding, please refer to the Satisfactory Progress Policy at http://www.clark.edu/enroll/paying-for-college/get-keep/index.php (http://www.clark.edu/enroll/paying-for-college/financial-aid/maintain-aid/)

Pass/No Pass

Students may request to enroll in approved courses on a Pass/No Pass (PNP) basis. Please see the class schedule to see which specific courses can only be graded Pass/No Pass. Classes eligible for Pass/No Pass are indicated by the [PNP] under the class description. No more than sixty (60) credits/units from 100 or 200 level courses taken for pass/no pass will be allowed toward the Associate in Arts degree, Associate in Science degree, the Associate in Applied Science degree, the Associate in Applied Technology degree, or Bachelors of Applied Science. Students must earn a grade of “C” or better (2.00 GPA) to be given a “Satisfactory” grade in a pass/no pass course. An “Unsatisfactory” grade will be posted for students earning less than a “C” grade. Students planning to transfer to a university should contact that institution to determine their policy for acceptance of pass/no pass courses.

Repeating a Course

Students may repeat a course taken at Clark College in order to improve their skills or the course grade. All course repeats must comply with the Procedures for Repeating a Course.

- The course repeat policy only applies to courses that are taken at Clark College
- A course may be repeated only twice (taken a total of three times) unless otherwise specified in the college catalog. The "W" (Withdraw) grade IS included as a repeated course attempt.
- Credit/Unit for any course is earned only once (except for courses designed to be taken multiple times, as noted in the course catalog).
- Only the highest grades awarded will be used in computing the Clark College GPA.
- Each grade received will remain on the student’s transcript; a repeat notation will be posted to the transcript for these courses.
- Courses must be repeated for a letter grade unless the course is offered only as pass/fail.
- The course repeat process DOES NOT apply to grade symbols: N or Y.
- The Clark College repeat policy may or may not be recognized by other institutions, it is at their sole discretion.
- To repeat a course, students must re-register and pay all necessary tuition and fees.

Setting Aside Past Record

Qualified students may set aside a previous substandard academic record that does not reflect their true ability at Clark College. Setting aside does not expunge the previous record, but places a “grade forgiveness” notation on the student’s transcript, marking the term from which the college will calculate a new GPA for determining probation, eligibility, or honors at graduation. Students may not count credits/units set aside to fulfill credit/unit requirements for graduation nor remove credits/units that had been used to fulfill requirements for graduation. Students should understand that the record to be set aside includes all courses taken before the term selected by the student, and those courses may not be used to satisfy future course prerequisites.

Students may set aside a previous record if:

Grade Information

Students enrolled in credit/unit classes may obtain grade information approximately eight (8) business days after the end of each term.

Students may access grades by logging into MyClark@ctcLink, select the Academic Records tile and choose either "View Grades" or "View Unofficial Transcripts."

Grade Point Average (GPA)

Grade points are calculated by multiplying the number of credit/unit hours for each course by the decimal grade appropriate for the grade earned. The term GPA is computed by adding the total number of grade points for the term and dividing by the total number of credits/units attempted in courses that received a letter grade.

<table>
<thead>
<tr>
<th>Credit/Unit Hrs Attempted</th>
<th>Grade</th>
<th>Grade Points Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>B+ = 3.3</td>
<td>16.5</td>
</tr>
<tr>
<td>3</td>
<td>C = 2.0</td>
<td>6.0</td>
</tr>
<tr>
<td>8 Total Credits/Units</td>
<td>22.5 Total Grade Points</td>
<td></td>
</tr>
</tbody>
</table>

Dividing 22.5 by 8 computes to a grade point average of 2.81.

The student’s cumulative grade point average may be obtained by adding the total number of grade points for all terms and dividing by the total number of credits/units attempted in the courses that received a letter grade.

As of Summer 2021, most Basic Education for Adult (ESL, CAP and CCAP) courses are graded, however the credits/units and GPA will not be reported on the transcript.

Incomplete Grades

An incomplete grade may be given if the instructor is satisfied that unavoidable circumstances have prevented the student from completing the course work and the student has requested this option.

The incomplete grade remains on the student’s transcript for 90 (ninety) days, or until the student completes the required work and the instructor submits an amended grade to the Enrollment Services office. If the instructor does not submit an amended grade within 90 (ninety) days,
• They have earned fifteen (15) credits/units at Clark College beyond the term to be set aside.
• They have a 2.50 GPA at Clark College for these credits/units.
• The work to be set aside is at least one (1) year old.

Petition forms are available at the Enrollment Services Office in Gaiser Hall or online.

Caution: Although Clark College makes provisions for setting aside past records, students should not assume that other colleges to which they transfer will compute their GPA in the same manner. Only the Clark College record can be set aside; the college cannot set aside records from other colleges. Financial aid students will still be subject to federal regulations that require all attempted credits/units be counted toward completion of an initial degree.

Grade Change/Error
Students who believe an error has been made in recording their grades should contact their instructor. Grade changes are made at the discretion of the instructor. The grade change must be submitted directly to Enrollment Services Office by the instructor. Grade changes and corrections made for veterans and financial aid recipients must also be reported to the Office of Veterans Affairs and/or the Financial Aid Office.

Grade changes must be made no later than the end of the second term following the term the student attended the class.

Grade Change/Academic Appeal Policy
An academic appeal refers to a claim by a student that a specific grade assigned to the student by an instructor is the result of an arbitrary or capricious application of otherwise valid standards of academic evaluation, or to a student’s claim that the instructor has made an arbitrary or capricious decision or taken an arbitrary or capricious action which adversely affects the student’s academic standing.

The student must file a written complaint within ninety (90) calendar days after termination of the course. The appropriate instructional dean or supervisor may suspend this rule only under exceptional circumstances such as extended illness, sabbatical leave, or absence of one or both parties involved in the complaint. Grade appeal process forms are available through the instructional deans’ offices or the Office of Instruction.

Students having complaints relative to academic performance evaluation should follow the steps below:

• Step 1: The student should complete a grade appeal process form and discuss the complaint with the instructor. If the complaint is not resolved, proceed to Step 2.
• Step 2: The student should speak to the appropriate division chair. The division chair must notify the student within fifteen (15) working days of the resolution after the meeting with the student. If the student is not satisfied with the resolution, the student should proceed to Step 3.
• Step 3: The student will provide a written statement describing the nature of the appeal to the instructional dean or supervisor. A meeting will then be scheduled with the student, the instructional dean or supervisor, and the instructor to discuss the appeal. The instructor will receive a copy of the student’s written material prior to the meeting. A decision by the dean or supervisor will be made within fifteen (15) days of the meeting. The decision by the dean or supervisor will be final and cannot be appealed further.

Confidentiality of Records
Clark College has adopted procedures in compliance with the Family Educational Rights and Privacy Act (FERPA) as amended and maintains confidentiality of student records. College employees are trained to comply with information release guidelines.

With few exceptions, parties outside of school officials will not have access to student records without the written consent of the student. Clark College will not release a student’s record to a parent/guardian without the student’s written request. This policy is in effect regardless of the student’s age or financial dependency upon the parent or guardian.

The college may release student directory information without student consent. Directory information includes student’s name, major field of study, enrollment status, dates of attendance, participation in recognized sports, degrees and certificates earned, term degrees and certificates awarded, and honors. In compliance with state law (SB5509), Clark College no longer uses the student’s Social Security number for the purpose of student identification. This law is intended to add additional protection to the student’s identity.

The college will assign all students a ctcLink Identification (ID). Students are required to use their assigned ctcLink ID to access their records, register for classes, pay tuition, etc. For a copy of SB5509 or for additional information regarding this process, students may contact the Enrollment Services Office.

Transcripts
A transcript of each student’s educational record is maintained in the Enrollment Services Office. An official transcript includes the Registrar’s signature, and the college seal. To obtain an official transcript, students are to order them online through Parchment (https://www.parchment.com/u/registration/34066/institution/). Transcripts may be sent electronically to any college, university or other agency upon receipt of the request within three to five (3-5) business days. There is a fee for all official transcripts. For current fee information please go to our website. Transcripts will not be faxed.

Students may obtain an unofficial transcript through the Clark College website, by logging into MyClark@ctcLink, select the Academic Records tile and choose “View Unofficial Transcripts” or by visiting the Enrollment Services Office in Gaiser Hall.

Vice President’s List
A Vice President’s List will be compiled at the end of each academic term to recognize outstanding student achievement at Clark College. To qualify for the list, a student must earn at least twelve (12) credits/units and a GPA of 3.75 or higher. A notation will be made on the student’s transcript under the term in which the student received the honor.

Special Instructional Programs and Locations
Transitional Studies
Career and Academic Preparation (CAP)
360-992-2741

These classes are available for persons sixteen (16) years or older (16- to 18-year-olds must have a high school release). Students can earn credit toward their HS+ diploma, prepare to take the GED test and improve their
reading, writing and math skills to transition to college-level coursework. There is a term tuition charge. Classes are held on campus and at other sites in the community.

**English as a Second Language**
360-992-2741

Classes are for non-native speakers who want to communicate more effectively in English. Classes are held at various times during the day and evening. There is a tuition charge to students each term. Most classes are held on Main and CTC campuses.

**Community and Continuing Education**
360-992-2939

Embark on a lifelong learning journey with Clark College Community and Continuing Education (CCE) – the pulse of innovation in Clark County. Welcoming over 4,000 individuals annually, CCE is your dynamic partner in non-credit programs. Our vision is to lead the region with contemporary classes, engaging seminars, and cutting-edge training opportunities. Whether you’re stepping into new skills or advancing existing ones, join us in shaping the future of Southwest Washington. CCE – where lifelong learning meets today’s dynamic world.

**Customized Training**
360-992-2356

Elevate your workforce with Clark’s Customized Training Program – your strategic ally in empowering employees with targeted skills aligned to your business objectives. Crafted for efficiency, our short-term, quick start training programs cater to your unique needs. Whether delivered onsite or at our location, we ensure a seamless fit for your team. With a proven track record across manufacturing, healthcare, nonprofits, and government sectors in Clark County, our programs are tailored for success. Connect with us and unlock the potential of tailored training for your business.

**Community Education**
360-992-2939

Community Education offers a wide variety of personal enrichment and lifelong learning opportunities to enhance quality of life and encourage the exploration of new interests. Non-credit courses, taught by talented instructors who are experts in their field, are offered for persons of all ages. New classes are offered each term, including topics such as yoga, dance, culinary classes and a variety of art classes. All Community Education courses reflect a commitment to building community and sustainability.

**Afternoon Academics**
360-992-2939

Welcome to Afternoon Academics – a dynamic learning experience for individuals seeking daytime enrichment! Our program is designed for anyone with afternoons free and a passion for knowledge. Embrace a relaxed atmosphere with no tests, grades, or homework, offering a diverse range of courses from art and writing to computers, science, history, and more. Attend classes at various convenient locations, including the main Clark College campus, Columbia Tech Center, downtown Vancouver, and community hubs. Afternoon Academics also offers exciting travel and excursions to culturally, scientifically, and naturally significant destinations.

**Student Orientation**

All new, transfer and returning students are required to complete a Student Orientation session (online or in person) or meet with an advisor before they are granted access to registration services. Students will gain valuable information about support resources, critical dates and policies, online tools and academic advising. For specific orientation requirements visit: https://www.clark.edu/enroll/admissions/ orientation/

**Student Success Programs**
360-992-2830
studentsuccess@clark.edu


The goal of Student Success Programs is to support the retention and success of all Clark College students, from the point of college entry to program completion. We provide targeted outreach and support for students facing challenges with academic progress, first-term students, and students moving from Transitional Studies to college-level coursework. We use proactive, reactive, and data-informed strategies to provide intensive, targeted outreach and intervention designed to meet students at their points of need. Student Success Programs staff and Student Success Coaches assist students with accessing and navigating the various spaces, resources, and strategies available at Clark and the surrounding community that are key for students to establish and achieve their academic goals.

Key services:

- Assistance to students with developing key critical thinking and problem-solving skills that will allow them to appropriately evaluate and respond to difficult academic, career, and life situations
- Assistance to struggling students with locating appropriate academic resources and making informed enrollment decisions
- Student Success Coaching (https://www.clark.edu/campus-life/student-support/diversity-and-equity/success-coaches/) to help students navigate and access appropriate support resources and strategies that meet their unique needs
- Reinstatement advising (https://www.clark.edu/enroll/advising-services/schedule.php) and support for students returning to the college (goal setting, course selection, and degree/certificate program planning)
- Training and support for students, staff, and faculty on the Academic Standards Policy (ASP)

**Veteran and Military**

**Veterans Center of Excellence:**
Penguin Union Building (PUB) 015
Phone: 360-992-2073
Email: veterans@clark.edu
The student's degree or certificate requirements. The individual must be prior military training is granted only for training that is applicable to academic credit for military training. The academic credit awarded for Clark College meets the requirements of RCW 28B.10.057 by awarding receipt.

Evaluations Department will evaluate all incoming military credits upon to discuss applying military credits to their degree plan. The Credential completion. Students should consult the Veterans Center of Excellence twenty-five (25) percent of total credits required for degree/certificate departments. Academic credit for military experience will be limited to gained through military participation. Credits will be conferred based Students can receive academic credits for experience and knowledge **Military experience: (consideration for academic credits)**

Clark College does not and will not provide any commission, bonus, or other incentive payment based directly or indirectly on success in securing enrollment or financial aid to any person or entities engaged in any student recruiting or admissions activities, or in making decision regarding the award of student financial assistance.

Selected programs of study at Clark College are approved by the Workforce Training and Education Coordinating Board's State Approving Agency (WTED/SAA) for enrollment of those eligible to receive benefits under Title 38 and Title 10, USC.

Veterans Credentials

The Veterans Administration requires all veteran students to submit official JST or CCAF transcripts to the college for review and awarding of relevant credit for students.

**Military experience: (consideration for academic credits)**

Students can receive academic credits for experience and knowledge gained through military participation. Credits will be conferred based on ACE credit recommendations, in consultation with academic departments. Academic credit for military experience will be limited to twenty-five (25) percent of total credits required for degree/certificate completion. Students should consult the Veterans Center of Excellence to discuss applying military credits to their degree plan. The Credential Evaluations Department will evaluate all incoming military credits upon receipt.

Clark College meets the requirements of RCW 28B.10.057 by awarding academic credit for military training. The academic credit awarded for prior military training is granted only for training that is applicable to the student's degree or certificate requirements. The individual must be enrolled in Clark College and have successfully completed any military training course or program as part of the military service that is:

- Recommended for credit by a national higher education association that provides credit recommendations for military training programs
- Included in the individual's military transcript issued by any branch of the armed services
- Documented military training or experience that is substantially equivalent to any course or program offered by the institution of higher education.

Clark College enrolled students who are veterans of any branch of the United States armed services who wish to receive transfer credit must provide an official Joint Services Transcript (JST) through the armed services in which he/she served, from the Community College of the Air Force or any other college/university attended. Upon receipt of the official transcript the following actions will occur:

- The Credentials Evaluations Office will evaluate the transcript for reading, English, and mathematics placement and any academic (general education) credits earned, posting to the student record as applicable.
- Technical classes that require more review to determine a direct equivalency will be forwarded to appropriate program faculty along with the course description and the accompanying ACE (American Council on Education) course recommendation.
- Military credit recommendations that are direct equivalents to Clark course offerings may be articulated to that specific course. If direct course equivalents do not exist, elective credit (non-direct equivalent) will be awarded when possible. Both direct and non-direct equivalents must be applicable toward the veteran's program of study.
- The Credentials Evaluations Office will post the credit to the student record and then notify the student of credits accepted with directions on how to access their records so they may view credit applicability to their program of study.
- In the case of a change of program, the veteran must notify the Credential Evaluations Office so the transfer credit may be reevaluated and applied to the student record as applicable.
- Per the Veteran's Administration, all veteran student transfer credit must be evaluated within two (2) terms of program start. After the third term, if the student does not submit all transcripts, he/she may be decertified for how to access their records so they may view credit applicability to their program of study.
- Veteran students using education benefits are not permitted to opt out of transfer credit evaluation.

**Military credit will not be granted for:**

- Non-credit courses and workshops
- Remedial or college preparatory courses
- Sectarian religious studies

Tuition and Fees

Students receiving VA educational benefits are responsible for paying outstanding tuition and fees by the tuition due date when that aid does not cover the total cost. Students cannot use the 25% veterans tuition waiver to cover that cost if they are using VA benefits.
Veterans Tuition Waiver
For all veterans who are not using VA educational benefits and who were honorably discharged, the state of Washington offers a 25% tuition waiver at all public colleges and universities. Students must submit a copy of their DD214 to the Veterans Center of Excellence to qualify. Email veterans@clark.edu for more information.

In addition, veterans rated by the Veterans Administration as 100% totally and permanently disabled qualify for a 100% tuition waiver from the state of Washington. Students must live in the state of Washington, submit a copy of their DD214, and a copy of the VA disability rating letter to the Veterans Center of Excellence to qualify. Email veterans@clark.edu for more information.

Academic Residency for Military Associated Students

Veteran Education Resources
Veterans Readiness and Employment (formerly Vocational-Rehabilitation) (Chapter 31)
Veterans must apply for this program and get accepted by the VA. Student veterans are assigned a counselor who develops the student’s academic plan. Housing allowance (paid to student) and tuition and fee payment (to the college) are included with these benefits. Email veterans@clark.edu for more information.

Post 9/11 GI Bill (Chapter 33)
36 month maximum for benefits; benefits may range from 30% to 100% depending upon service completion. These benefits include a book allowance, housing allowance (paid to student), and tuition and fee payment (paid to school). Email veterans@clark.edu for more information.

Survivors and Dependents Educational Assistance Program (Chapter 35)
Dependents (spouse and eligible children) of VA-rated 100% totally and permanently disabled veterans are eligible for Chapter 35 benefits (stipend and book allowance paid to students) and possibly a State of Washington 100% tuition waiver. Washington State 100% tuition waivers and a small book stipend are provided to spouses and children of 100% totally and permanently disabled veterans who are attending Washington State colleges. Requirements for eligibility as well as a link to the RCW (Washington Law) that governs this waiver:

1. RCW link: https://app.leg.wa.gov/rcw/default.aspx?cite=26b.15.621
2. Disabled veteran must be a resident of Washington state
3. Child must be a resident of Washington state
4. Required documentation must be submitted to the Veterans Center of Excellence for processing:
   a. Veteran’s valid WA state issued ID or driver’s license or bill in veteran’s name with WA state address to verify residency
   b. Student’s valid WA state issued ID or driver’s license or bill in veteran’s name with WA state address to verify residency
   c. Birth certificate or marriage license
   d. Completed 100% waiver application
   e. A copy of the veteran’s 100% disability award letter from the VA
   f. A copy of the veteran’s DD-214
5. Email veterans@clark.edu for more information. https://www.clark.edu/campus-life/student-support/vrc/

Programs Eligible for VA Educational Benefits
All Clark academic (for credit) programs are eligible for VA Educational Benefits except the Emergency Medical Technician program and programs offered through the Office of Continuing and Community Education (non-credit programs).

First Week Attendance Policy
To comply with federal financial aid regulations, students must attend the first class meeting of a face-to-face class or must log into an online course the first day of class and complete any assignments by their due dates. Students who fail to attend 1 or more face-to-face classes sessions during the first week of class, may be dropped. Online students who do not complete first-week course assignments may be dropped from the class.

Student Attendance Status
VA regulations define the attendance status of veteran students:

Fall, Winter, and Spring Terms
Attendance Status = Credits Per Term
- Full-time student = 12 credits
- Three-quarter-time student = 9 - 11 credits
- Half-time student = 8 credits

Summer Term
Attendance Status = Credits Per Term
- Full-time student = 8 credits
- Three-quarter-time student = 6 - 7 credits
- Half-time student = 4 - 5 credits
- Less than half-time student = 3 credits

The attendance status of student determines the level of educational benefits paid by the VA.

Dropping a Class
Holds are placed on all veteran and military students to prevent them from dropping a class. The VA regulations require students who drop a class after the free add/drop period (first week of class) to reimburse the VA for the tuition and fees for the class and the amount of monthly housing allowance paid to the student after the class was dropped. Students need to contact the Veterans Center of Excellence once they decide to drop a class so the hold can be removed.

Withdrawing from all classes
Occasionally, students have personal issues that require them to withdraw from all classes after the free add/drop period (first week of class). When this occurs, students should contact the Veterans Center of Excellence for guidance. Email veterans@clark.edu for more information or call 360-992-2073.

Satisfactory Academic Progress
Website: (https://www.clark.edu/about/governance/policies-procedures/academic_standards/)

Academic concern: The first time the term grade point average (GPA) falls below 2.0, students will be placed on Academic Concern.
• The college will send an e-mail to students’ Clark e-mail accounts that offers information about the Academic Standards process and explains what happens at each stage.

• Students will receive a listing of college resources and a recommendation to take advantage of services.

Academic Intervention- The second time the term grade point average (GPA) falls below 2.0, students will be placed on Academic Intervention.

• By the third week of the subsequent term, students must attend a group workshop or meet with a designated staff member.

• Students must complete an academic success plan that outlines steps for improving academic performance.

• Students may lose the ability to carry a full course load.

• If students do not attend the workshop or meet with a designated staff member, they will be blocked from registering for classes.

One-Term Academic Dismissal

If students have previously been placed on Academic Concern and Academic Intervention statuses, and both their term and cumulative grade point averages (GPA) are below 2.0, they will be placed on One-Term Academic Dismissal.

• Students will be blocked from registering for classes while on One-Term Academic Dismissal status.

• Students may appeal One-Term Academic Dismissal.

• Students may appeal to the Academic Standards Committee for immediate reinstatement.

• The college will send an e-mail to students’ Clark e-mail accounts that outlines the appeal process. The Appeal Form for One-Term Dismissal is available online.

• Students must submit a personal statement and all documents requested, and any documentation that supports their statements. The Academic Standards Committee’s decisions will be made and communicated to students before the first day of classes. Factors considered in determining an appeal may include academic aptitude, change of major, extenuating circumstances, lapse of time, and relevant experience since suspension that will predict academic success.

• If students do not appeal, or if their appeals are denied, they will be administratively dropped from classes and paid tuition will be refunded.

• Students will receive information about how to return from One-Term Academic Dismissal. They must complete a Request to Return to College Form no later than three weeks before the first day of classes for the term in which they plan to return. Students will be notified about the process, expectations, and timeline to make an appointment with a designated staff member. Students must prepare a written plan in advance that includes the following items for discussion with the staff member:

  • Short-term educational goals

  • Specific plans to overcome barriers and improve your academic progress

  • A proposed course schedule

• The designated staff member will review the plan with the student and outline specific conditions he or she must meet for return from One-Term Academic Dismissal. Once the plan is finalized, the student will be placed on Return from One-Term Academic Dismissal status.

• Upon returning from One-Term Academic Dismissal, students must earn a term grade point average (GPA) of 2.0 or higher in order to be approved to register for the subsequent term. If they do not earn a term grade point average (GPA) of 2.0 or higher upon return from One-Term Academic Dismissal, they will be placed on Four-Term Academic Dismissal.

Four (4) Term Academic Dismissal

If students have previously been placed on Academic Concern, Academic Intervention, and One-Term Academic Dismissal statuses, and both their term and cumulative grade point averages (GPA) remain below 2.0, they will be placed on Four-Term Academic Dismissal.

• Students will be blocked from registering for classes while on Four-Term Academic Dismissal.

• There is no appeal process for Four-Term Academic Dismissal.

• Students will be administratively dropped from registered classes and paid tuition will be refunded.

• Students will receive information about how to return from Four-Term Academic Dismissal. They must complete a Request to Return to College Form no later than three weeks before the first day of classes for the term in which they plan to return. Students will be notified about the process, expectations, and timeline to make an appointment with a designated staff member. Students must prepare a written plan in advance that includes the following items for discussion with the staff member:

  • Short-term educational goals

  • Specific plans to overcome barriers and improve your academic progress

  • A proposed course schedule

• The designated staff member will review the plan with the student and outline specific conditions he or she must meet for return from Four-Term Academic Dismissal. Once the plan is finalized, the student will be placed on Return from Four-Term Academic Dismissal status.

Upon returning from Four-Term Academic Dismissal, students must earn a term grade point averages (GPA) of 2.0 or higher in order to be approved to register for the subsequent term. If they do not earn a term grade point average (GPA) of 2.0 or higher upon return from Four-Term Academic Dismissal, they will be placed on One-Term Academic Dismissal.

Disability services (DSS)

Students who take medications or have a health condition that can make it hard to complete exams within the time limit or take good notes in class may be eligible for some help or accommodations. Students can qualify for “accommodations” which are adjustments in your classes that can help you learn and complete your education. You do NOT have to have a VA rated disability or be using VR&E benefits to qualify for accommodations. In fact, the college’s Disability Support Services (DSS) helps all students with chronic pain, mental health conditions, temporary surgeries, learning disabilities and more receive accommodations in classes.
Active Duty (AD) Military

Active duty military stationed in the state of Washington, as well as their spouses and dependents, qualify as residents for tuition purposes. At the time spouses or dependent family members apply for admission, documentation such as a copy of the military ID card or other appropriate documents must be presented.

Military Tuition Assistance (TA)

Clark College participates with the US Department of Defense’s tuition assistance program for active duty military personnel. Here are the steps for using Tuition Assistance at Clark:

- Apply for college admission/ activate Clark student email account
- Complete assessment testing unless you are a transfer student or attended another college
- Submit transcripts from prior colleges you have attended
- Meet with an Academic Advisor to develop an Education Plan
- Submit Education Plan to military base contact
- Register in required classes based on your Education Plan.
- Submit a copy of your Education Plan and approved Tuition Assistance authorization to the Clark College Business Office, email businessoffice@clark.edu for more information.

Important Notes:

- Your Tuition Assistance Authorization will not cover college fees. Some fees are embedded in the Tuition Rate Schedule: https://www.clark.edu/enroll/registration/tuition-fees/index.php. After you send your TA authorization, the Business Office will calculate the costs that you will be responsible to pay along with the due date and payment information.
- If your service branch denies payment of the authorized TA funds due to grades, non-attendance or any other situation, you will be responsible for the costs and must make payment to Clark College. Failure to pay these costs will restrict further enrollment and access to academic records.
- If you change your major, you must provide a revised Education plan to your military base contact and the Business Office.
- Please notify the Business Office of your enrollment every quarter and your intent with utilizing tuition assistance. Please ensure that you are notifying the Business Office prior to the tuition due date to ensure that there is a protective hold placed on your account so that you are not dropped for non-payment. Please follow this link for tuition due dates: https://www.clark.edu/enroll/registration/tuition-fees/tuition_payment_process.php

You must submit a Graduation Application one quarter before completing your certificate or degree requirements and notify the Business Office of your anticipated graduation date. https://www.clark.edu/enroll/credential-evaluation/graduation-application.pdf

Additionally, Clark College, in partnership with the Department of Defense, wants you to be an informed consumer. Below are websites for your review.

Guard and Reserve

Resident Status: Washington National Guard members, as well as their spouses and dependents, qualify for resident tuition as long as they are domiciled in Washington.

Absences

A member of the Washington National Guard or any other military reserve component who misses any form of participation/attendance in a class due to being ordered to service for 30 days or less, or requiring medical treatment for that service, is entitled to make up academic assignments without prejudice to the final course grade or evaluation. Students must submit documentation before the absence. Email veterans@clark.edu for information.

Graduation

The college celebrates its graduates from the current year at its June Graduation Ceremony. Student participation is not required. If you wish to participate, file a graduation application and a cap and gown order by the deadline. Students completing their degree in the summer term may participate in Commencement in June before their final summer term. Once the graduation application is submitted, they are able to access the Cap and Gown order form. There is a charge for caps and gowns. Deadline dates are published on the Clark College website (web site link here). In May, after students have ordered caps and gowns, detailed information is sent to students about the participating in the ceremony and picking up cap and gowns.

Prospective Student Resources:

College Scorecard - http://collegecost.ed.gov/scorecard/

College Navigator - http://nces.ed.gov/collegenavigator/ - A tool that provides consistent information about tuition, fees, retention, graduation, and loan default rates by college.


Clark College Student Support Services


Advising, program/degree planning, Credentials/graduation application - http://www.clark.edu/enroll/advising-services/index.php - Academic Advisors are available to map education plans and provide college transfer information.

Additional Resources

Other Financial Resources Available

FAFSA - The Federal Pell Grant is awarded based on financial need to undergraduate students including veteran students. Veterans transitioning from the military or full-time jobs into full-time student status may need to file a “Change in Circumstances Form” with the Clark College Financial Aid office. See the Financial Aid section and website for more information.

State of Washington Opportunity Grant - The Opportunity Grant program serves low-income students who are pursuing professional/technical programs that lead to high-wage, high demand jobs. See the Financial Section of this catalog or the website.

Scholarships - Funding for scholarships is made possible through the generous support of individuals and organizations. The Clark College Foundation is one of the largest community college foundations in the country and offers many scholarships to Clark College students each year. (http://www.clark.edu/enroll/paying-for-college/scholarships/)

Clark College Financial Resources

Workforce Education Services (WES)

Workforce Education Services (WES) administers a variety of programs that are designed to support students who are seeking certificates and degree programs with an employment goal, including veterans. Eligibility, including eligible degree types, vary and are dependent on individual program requirements. Fill out the WES application to find out if you are eligible, https://apps.clark.edu/WESapplication (https://apps.clark.edu/WESapplication/).

Worker Retraining Program (WRT)

The Worker Retraining program serves students discharged from the military within the previous 4 years, and are pursuing career technical programs. Eligible students must live in Washington State and be enrolled in an approved program. Email veterans@clark.edu for more information. https://www.sbctc.edu/paying-for-college/worker-retraining-student (https://www.sbctc.edu/paying-for-college/worker-retraining-student/)

Basic Food Employment and Training (BFET)

FACULTY AND ADMINISTRATION

• Board of Trustees (p. 307)
• Executive Cabinet (p. 308)
• Administration (p. 308)
• Faculty (p. 312)
• Foundation (p. 319)

Board of Trustees
Clark College Board of Trustees

Jeanne Bennett, 2019-2026
B.S. Portland State University

Retired CEO of Workforce Southwest Washington, a Vancouver resident, and a longtime community leader. She began her career working as a congressional staff member, first for Oregon Congresswoman Elizabeth Furse and then for Congressman Brian Baird in Washington. After that, she moved on to leadership positions in Evergreen School District 112’s Youth Workforce Program, the Mount St. Helens Institute, and finally Workforce Southwest Washington, where she managed local investments of more than $10 million annually in individuals’ workforce skills training and development.

In her retirement, Bennett remains active in her community, including serving as Board Chair for Columbia Play Project. Community activities include:

• Mount St. Helens Institute
• Mount Adams Institute
• Empower Women + Girls

Cristhian A. Canseco Juarez, 2021-2026 (Chair)
B.A. Washington State University Vancouver

First-generation college graduate, as well as an immigrant and an alumnus of Washington State University Vancouver. He is deeply involved in community service in Vancouver, providing resources for those who have historically been under-represented.

Canseco earned his Bachelor of Arts in Business Administration from Washington State University Vancouver and graduated from Hudson’s Bay High School in Vancouver. He and his family have lived in Vancouver for 25 years, having emigrated from Mexico to the United States in 1991. Community activities include:

• Board of Directors for Lighthouse Community Credit Union
• Council member, St. John the Evangelist Catholic Church
• Treasurer, Southwest Washington LULAC Council
• 2019-2020 Clark College Presidential Search Committee

Suzanne Donaldson, 2023-2028
AA—Centralia College
Pre-Law – University of Puget Sound and Washington State University

EO of Donaldson Consulting LLC, a national consulting firm, has over 21 years of experience in the Architectural, Engineering and Construction Industry as a Diversity Consultant Practitioner working with large general contracting and engineering firms, small minority owned firms and government agencies.

Donaldson is a member of the Kinswa Family (Ike Kinswa State Park is named after her great grandfather). She is a current and former elected member of Cowlitz Indian Tribe Tribal Council. She served as Chair of The Cowlitz Indian Tribe Pow Wow Committee for many years, served as Vice Chair of The Cowlitz Indian Tribe Education Committee, The Cowlitz Canoe Family, The Cowlitz Drum Group, Elders Program Volunteer, Pathways to Healing Volunteer, and served as Event Planner for tribal Celebrations. In addition to designing and making regalia she is a Native American dancer, singer, drummer and artist. Community activities include:

• Community activities include:
  • Port of Portland’s Mentor Protégé Program
  • The Providence Cancer Foundation Steering Committee
  • The City of Portland’s Minority Evaluator Program
  • SafeBuild Alliance
  • Former board member of the Oregon Native American Chamber (ONAC)
  • An alternate on PILR Portland Indian Leaders Roundtable

Denise Gideon, 2021-2024 (Vice Chair)
A.A. Berkeley City College
B.A. Patten University
M.B.A. John F. Kennedy University

A seasoned healthcare leader with an extensive record of service to communities. She is currently the System Vice President of Operations & Program Integration at PeaceHealth, based in Vancouver, Washington, where she also serves as the executive sponsor for the Black and Allies Network Group.

Previously, Gideon’s professional career spanned leadership roles at UCSF Benioff Children’s Hospital in Oakland and at Children’s Hospital & Research Center Oakland, as well as at the Alameda Alliance for Health. She is the former co-chair of the Board of Directors of St. Martin De Porres Catholic School and is active in faith communities wherever she lives and works. Gideon served as a Licensed Practical Nurse in the U.S. Army during Desert Storm. Community activities include:

• Educational Opportunities for Children & Families of Southwest Washington
• Joyce Finley Foundation
• National Association for the Advancement of Colored People
• Rebuild Together Portland

Marilee Scarbrough, 2023-2028
B.S. Whitman College
J.D. University of Oregon School of Law

An experienced educational professional in both K-12 and higher education. Since 2011, she has served as in-house Legal Counsel for Vancouver Public Schools.

Prior to her tenure in Vancouver Public Schools, she was employed as Policy and Legal Services Director for the Washington State School Directors’ Association; Counsel for the Washington State House of Representatives – Higher Education Committee-Office of Program Research; Staff Attorney for Pierce County Teamchild; and staff attorney
for the Pierce County Public Defenders’ Office. Community activities include:

- American Leadership Forum Board of Directors - Past Chair and Selection Committee
- Bellarmine Preparatory Board
- Girls Scouts Pacific Peaks Council
- State Executive Ethics Board - Past Chair
- Tacoma School Board - Past President
- Tacoma City Council

Executive Cabinet

Brad Avakian (2021)
Vice President of Human Resources
J.D., Northwestern School of Law of Lewis and Clark College
B.S. Oregon State University - Corvallis

Michele Cruse (2020)
Vice President of Student Affairs
MPA Portland, OR
PhD - Portland, OR

Karin Edwards (2020)
President
MS, Educational Administration, SUNY Albany, NY
Ed.D, Educational Leadership, Johnson & Wales University, RI

Sudha Frederick (2023)
Vice President of Information Technology
MBA, George Fox University
MA, Multnomah University
MA, Madurai Kamraj University, Madurai

Vanessa Neal (2022)
Vice President of Diversity, Equity and Inclusion
B.A. University of New Mexico
Master’s University of Denver

Calen Oullette (2023)
Chief Executive Officer
B.A. Washington State University
M.B.A. University of Southern California Marshall School of Business

Sabra Sand (2014)
Vice President of Operations
B.A. Washington State University

Tina Redd (2023)
Interim Vice President of Instruction
B.A. University of Missouri, St. Louis
M.A. Southern Illinois University at Edwardsville
Ph.D. University of Washington

Megan Anderson (2022)
Educational Planner
B.A. Colorado Christian University
M.Ed. University of Washington

Jorge Argueta (2018)
Educational Planner
B.A., M.A. California State Polytechnic University Pomona

Julie Austad (2021)
Dean of Clark Libraries and Academic Success Services
B.A. Linfield College
M.L.S. Emporia State University

B

Margit Brumbaugh (2016)
Nursing Clinical Placement Manager
B.A. University of Washington
M.Ed. Concordia University

Cathleen "Cath" Busha (2016)
Dean of Student Engagement
B.S. Millersville University
M.S.W. Arizona State University

Jay Busher (2021)
Environmental Health and Safety Manager
B.A. Warner Pacific University

Evelyn Buschur (2021)
Advanced Medical Practitioner
B.S. University of Maine
N.D. National University of Natural Medicine

C

Aaron Campbell (2023)
Associate Director of Advising Services
B.A. University of Vermont
M.A. Lewis & Clark College

Ann Campbell (2022)
Director of Community, Continuing Education and Customized Training
B.S. University of Oregon

Christy Campbell (2014)
Assistant Director of Business Services
B.S. Washington State University

April Cannon (2017)
Educational Planner
B.S. Oregon State University
M.A. Eastern Michigan University

Maureen Chan-Hefflin (2023)
Director of Communications
B.A., M.P.A. Washington State University

Kimberley Coles (2024)
Title III Project Manager
B.A. University of California, San Diego
M.A. American University
Ph.D. University of California, Irvine

Michele Cruse (2020)
Vice President of Student Affairs  
PhD, Education Oregon State University  

D  
Adele Dandeneau (2024)  
Risk Manager  
A.A. & A.A.S. Clark College  
B.S. Washington State University  

Kevin Damore (2018)  
Director of Marketing  
B.S. Northern Arizona University  

Carl Douglas (2021)  
Director of Center of Excellence - Semiconductor and Electronics Manufacturing  
AAST Clark College  
B.S. University of Phoenix  

E  
Lindsey Earl (2023)  
Educational Planner  
B.S. Walla Walla University  
M.A. Gonzaga University  

F  
Darci Feider (2021)  
Interim Senior Executive to the President  

Wendé Fisher (2015)  
Educational Planner - Professional/Technical  
A.A.S. Clark College  
B.A. Washington State University  
M.S. Oregon State University  

Ronnieasha Ford-Spears (2023)  
Enrollment System Analyst  
B.S. Humbolt State University  

Hudson Fox (2022)  
Accommodation and Retention Specialist  
A.A. Clark College  
B.A. Western Washington University  

Traneesa Frazier (2019)  
Executive Assistant to the Vice President of Administrative Services  
A.A. Los Angeles Harbor Community College  
B.S. Warner Pacific College  

G  
Gerald Gabbard (2022)  
Director of Labor and Compliance  
B.Mus. Lawrence University  
M.S. University of Wisconsin - Milwaukee  
Ph.D. Capella University  

Glendi Gaddis (2021)  
Associate Dean of Financial Aid  
B.A. Whitworth University  

Carrie Ann Gallagher (2019)  
Public Records Officer  

Records Management Coordinator  
B.A. University of Portland  

Marcy Gilchrist (2017)  
Educational Planner  
B.A. Central Washington University  

Michelle L. Golder (2007)  
Special Projects and Activities Manager  
B.S. University of Portland  

Sarah K. Gruhler (2010)  
Director of Student Life  
B.A. Western Washington University  
M.Ed. Seattle University  

Erin Guidarelli (2023)  
Certified Athletic Trainer  
B.S. Humbolt State University  
M.S. Pacific University  

Das Gupta (2020)  
Director of Information Technology - Client Services  
B.B.A. Walsh College  

Trisha Haakonstad (2019)  
Career Advisor  
B.A. University of San Diego  
M.S. Portland State University  

Degundrea Harris (2019)  
Executive Assistant  
A.A. Clark College  
B.S. Warner Pacific  

Jessica Hash (2022)  
Educational Planner  
A.A. Clark College  
B.A. Washington State University  

Bradford Hawkins (2022)  
Assistant Athletic Director  
B.A. Washington State University  

Scot Headley (2023)  
Dean of Business and Health Sciences  
B.A. Colorado State University  
M.Ed. Colorado State University  
Ph.D. Ohio State University  

Diane Hernandez (2024)  
Educational Planner, Academic Advisor  
B.A. Arizona State University  
M.A. Arizona State University  

Csendi Hopp (2019)  
International Admissions Manager  
B.A. Southern Oregon University  

Shannon Jackson (2024)  
Associate Director of Workforce Education Services
B.A., M.S. Portland State University

Kate Jacky (2015)
Associate Director of Financial Aid
B.A. Washington State University

Megan Jasurda (2015)
Director of Disability Support Services & ADA Compliance Officer
B.A. University of Wisconsin
M.Ed. Portland State University

Joseph Jenkins (2016)
Educational Planner - College Prep and Transfer
A.A. Clark College
B.A. Washington State University
M.S. Portland State University

Rhianna Johnson (2021)
Director of Guided Pathways and Partnerships
M.S. Portland State University

K

Tanya Kerr (2017)
Director of Business Services
B.A. University of Washington

Alexandra Kison (2022)
Workforce and Student Engagement Navigator
B.S. Eastern Washington University

Rebecca Kleiva (2018)
Associate Director of Workforce Education Services
A.A. Clark College

Monica L. Knowles (1998)
Bookstore and Production Printing Manager
A.A. Brooks College

Theo Koupelis (2023)
Dean of WPTE and STEM
B.S. – Aristotle University, Thessaloniki, Greece
M.A. – University of Rochester
Ph.D. – University of Rochester

L

Román Lara Alvarado (2023)
Director of MESA Program
B.A. Washington State University

Donna Larson (2022)
Associate Director of the Veteran Center of Excellence
B.A. Rhode Island College
M.S. Troy State University
Ph.D. Texas Tech University

Michael Law (2022)
Associate Director of Student Equity and Inclusion
A.A. Spoon River Community College
B.A. University of Illinois
M.A. Loyola University - Chicago

Heather Leasure (2021)
Student Communication and Retention Manager
A.A. Clark College

B.A. Washington State University
M.S. Ed University of Wisconsin - La Crosse

Laura LeMasters (2019)
Director of Athletics
B.A. Washington State University
M.A. California State University - Long Beach

Troy Lester (2021)
Grounds Manager
MBA Marylhurst University

Yanneng (Maggie) Li (2023)
International Admissions Manager
B.A. Nanchang Hangkong University

Yingcong Li (2020)
Research Associate
B.S. Portland State University

Kelly Love (2023)
Associate Dean of Transitional Studies
B.A. Reed College
M.S. Portland State University

Kimberly Love (2022)
Associate Director of Nursing Outcomes, Inclusion and Support
B.S. Warner Pacific University
M.Ed. City of University of Seattle
RN, Foothills School of Nursing, Calgary AB

M

Caitlin Malvar (2024)
Basic Needs Navigator
B.A. Northern Arizona University
M.Ed. Northern Arizona University

Cecelia Martin (2023)
Associate Vice President of Planning and Effectiveness
B.S. University of South Alabama
M.A. University of South Alabama
Ed.D. University of South Alabama

Lance McIntire (2017)
Environmental Health and Safety Manager
B.S. Missouri State University
M.P.H. Des Moines University

Sherri Meadors (2016)
Payroll Manager
A.A. Clark College

Emily Meoz (2022)
Director of Advising and Career Services
B.A. University of Washington
M.A., Ed. California Polytechnic State University

N

Vanessa Neal (2023)
Vice President of Diversity, Equity, and Inclusion
B.A. University of New Mexico
M.A. University of Denver
Jennifer Obbard (2017)
Associate Dean of Health Science
B.S.N., M.N. Oregon Health Sciences University

Shelley R. Ostermiller (2018)
Associate Registrar
A.A. Clark College
B.A. Washington State University, Vancouver
M.S. Warner Pacific College

Eriko Otsuka (2012)
Senior Manager of IT App Dev. & Data Services/Sr. Software Engineer
B.S., M.S. Washington State University, Vancouver

Bryan Pettis (2022)
Custodial Services Manager
A.A. Climate Control Institute
B.S. University of Phoenix
M.B.A. Baker University

Gaby Posteauca (2023)
Admissions Recruiter
A.A. Mt. Hood Community College

Tina Redd (2023)
Interim Vice President of Instruction
Dean of Social Sciences and Fine Arts
B.A. University of Missouri, St. Louis
M.A. Southern Illinois University at Edwardsville
Ph.D. University of Washington

Julie L. Robertson (2013)
Director of Grant Development
B.S. Lewis & Clark College
M.S., M.S.W. Portland State University

Rocio Rodriguez (2021)
Executive Assistant to the Vice President of Instruction
B.A. University of Texas - Brownsville
M.A. Concordia University- Portland

Nicole Rogers-Marcum (2018)
Director of Instructional Finance and Operational Support
B.S. Western Oregon University
M.B.A. Washington State University

Chris Samuels (2022)
Director of Facilities
B.A. University of Oregon

Sabra Sand (2014)
Vice President of Operations
B.A. Washington State University

Thao Schmidt (2022)
Director of Employment Services
A.A. Clark College

Michael See (2017)
Director of Safety & Security
B.S. College of Professional Studies
M.S. Kaplan University

Sara Seyller (2019)
Instructional Operations Analyst
B.A., M.P.A. Washington State University

Jody Shulnak (2019)
Associate Director of International Programs
B.S. Northern Arizona University
M.S. Portland State University

Grace Spadaro (2022)
Educational Planner
B.A. California Lutheran University
M.Ed. University of Vermont

Heidi Summers (2018)
Dean of BEECH
B.S. Oregon State University
M.A. Ed. Virginia Tech

Julie F. Taylor (2005)
Administrative Secretary

Kevin Thomas (2019)
Director of Workforce Education Services
B.A. Washington State University

Cole Timpone (2022)
Admissions Recruiter
M.A. University of St. Andrews

Tasaday Turner (2015)
Associate Director of Advising
A.A.S. Clark College
B.A. Washington State University
M.S. Portland State University

Jacquelynn Vigeon (2015)
Clinical Placement Manager
B.A., M.A. The University of New Mexico

Michele Volk (2015)
Director of Services for Children and Families
A.A.S. Portland Community College
B.S. Warner Pacific

Alyssa Voyles (2019)
Associate Director of Employee Equity, Outreach and Engagement
B.S. University of Oregon
M.Ed. Oregon State University

Construction Project Manager
Faculty

B.A. New College

Vanessa Watkins (2015)
Director of Entry Services
B.S. Oregon State University
M.S. Portland State University

Christi Williams (2022)
Associate Director of Student Care, Conduct and Complaints
A.A. Clark College
B.S. Portland State University
M.S.W. Portland State University

Carley Willis (2018)
Educational Planner
B.S.W. George Fox University
M.S.E. Capella University

Y

Feddiena "Feddie" Young (2022)
Research Associate-Institutional Effectiveness
A.A. Clark College
B.A. Central Washington University

M.S. Northeast Missouri State University
Certified Strength and Conditioning Specialist

Patricia A. Atkinson (2015)
Economics
B.A. Marist
M.S. Portland State University
Ed.D. Washington State University

B

Angie Bailey (2009)
Nursing
B.S.N., M.N., D.N.P. Washington State University

Karl L. Bailey (2006)
Chemistry
B.S. California Polytechnic State University
Ph.D. University of California, Davis

Kristine T. Barker (1993)
Mathematics
B.A. Willamette University
M.A. University of Oregon

Kayoko Y. Barnhill (1994)
Mathematics
B.A.S. University of California, Davis
M.A. California State University, Sacramento

Christina "Tina" Colby Barsotti (1992)
Engineering
B.S., M.S. Washington State University

Rheannin Becke (2016)
Transitional Studies
M.S. Marquette University
M.A University of Alaska Southeast

Gene Biby (2011)
Drama
B.S., M.S. Murray State University
Ph.D. Southern Illinois University

Aaron S. Bingham (1994)
Mathematics
B.A. University of California, Los Angeles
M.A. California State University, Sacramento

Sarah Blanchette (2023)TT
Addiction Counseling Education
B.A.S., A.A. Science College of the Redwoods
B.A. University of California Davis
M.S.W Western Washington University

Mark E. Bolke (2000)
Biology
B.S., M.S. Portland State University

Halina Brant-Zawadzki (2022)TT
Nursing
BS Lewis and Clark College
BSN, MSN University of Portland
PhD University of Washington

TT indicates that the degree is in途中
Amy Bratton (2017)
Communication Studies
B.A. University of Memphis
M.S. Portland State University

Veronica P. Brock (1995)
Health and Physical Education
B.S. Eastern Washington University
M.S. East Stroudsburg University

Amy Castellano (2016)
Phlebotomy
B.S. University of Arizona
N.D. National College of Natural Medicine

Paul A. Casillas (1990)
Mathematics
A.B. Augustana College, Illinois
M.A. University of Iowa
M.S. University of Oregon

Catherine Crosby (2016)
Biology
B.S. Western Washington University
M.S., Ph.D. Washington State University

Anthony J. Chennault (2008)
Biology
B.A. University of Puget Sound
M.S. Portland State University

Lindsay Christopher (2014)
English
B.A. Mercyhurst University
M.A. University of Buffalo
Ph.D. University of Denver

David Clark (2011)
Biology
B.A. Linfield College
M.A. Lewis and Clark College
M.S. Portland State University

Valerie S. Cline (2011)
Nursing
A.D.N. Clark College
B.S.N. Washington State University, Vancouver
M.S.N. Walden University

Cara Cocchiarella (2016)
Health and Physical Education
B.A., M. S., Ed.D. University of Montana

Adam Coleman (2011)
Computer Technology
A.A.S. Clark College
B.S. Eastern Washington University

Shayna Collins (2012)
Counseling/Human Development
B.A., M.S. Minnesota State University, Mankato

Art
B.F.A. University of Michigan
M.F.A. Louisiana State University

Kathryn "Kate" Cook (2014)
Mathematics
B.A. Principia College
M.S. California State University

Amanda Crochet (2011)
Chemistry
B.S. Tulane University
Ph.D. University of California, Berkeley

English
B.A. Oregon State University
M.A. Portland State University

Kushlani de Soyza (2013)
Women's Studies
B.S. Northwestern University
M.Ed. University of Cincinnati
M.A. Portland State University
M.F.A. Oregon State University

Tanya Diaz-Kozlowski (2020)
Women Studies
B.S. The University of Wisconsin Parkside
M.S. Eastern Illinois University
Ph.D. The University of Illinois at Urbana Champaign

Marylynne Diggs (1998)
English
B.A. University of Alabama
M.A., Ph.D. University of Oregon

Alison Dolder (2017)
Baking and Pastry Arts
Elizabeth Donley (2011)
English
B.A. DePaul University
M.A., M.F.A. Chapman University

Kendra Duncan (2023)
Early Childhood Education
B.S., Creighton University
M.S., Doctorate, The University of Memphis

Allen "Mark" Eddinger (2018)
Mathematics
B.S. DeVry Institute of Technology
M.S. Western Washington University

Kevin Edwards (2023)
Technical Services and Systems Librarian
M.L.I.S., M.F.A. University of Washington
B.A. Southern Oregon University

Bruce Elgort (2020)
Computer Technology
B.S. Stevens Institute of Technology
M.S. New York University – Polytechnic Institute

Rebecca Engel (2017)
American Sign Language
B.S. Oregon State University
M.Ed. Western Oregon University

Mary E. Evens (2000)
Business Technology
B.A. Central Washington University
M.A. Pepperdine University

Amy Ewing-Johnson (2018)
Dental Hygiene
A.S., B.S., MSEd. Indiana University

Jason "Jay" Fancher (2022)
Anthropology
B.A. Humboldt State University
Ph.D. Washington State University

Nadine L. Fattaleh (2002)
Chemistry
B.A. Scripps College
M.S. Carnegie Mellon University

Melissa Favara (2018)
English
B.A. Western Michigan University
M.A. The Pennsylvania State University

Heidi Fay (2009)
Pharmacy
CP, A.A. Clark College

Caron Ford (2015)
Transitional Studies
A.S. Bakersfield College
B.A. San Francisco State University
M.A California State University

Nicholas C. Forrest (1996)
Political Science
B.A. St. Joseph’s College
M.A., Ph.D. Northwestern University

Van A. Forsyth (1995)
History
B.A. University of California, Berkeley
M.A. San Francisco State University

Tyler Frank (2019)
Transitional Studies
B.A. University of Michigan
M.A. University of Arizona

Robert "Earl" Frederick (2017)
Culinary
A.A.S. Johnson & Wales University
B.S. Warner Pacific College

Jacob Funk (2016)
Music
B.S. John Brown University
M.M. University of British Columbia
D.M.A. University of Missouri - Kansas City

Sara L. Gallow (1999)
English as a Second Language
B.A. Michigan State University
M.A. Ball State University

Michael A. Godson (1995)
Automotive Technology
A.A.S. Clark College
A.S.E. Master Automotive Technician

Deena M. Godwin (2008)
Communication Studies
B.A. Dana College
M.S. South Dakota State University

Donald M. Gonser (1994)
Diesel
A.S. Oregon Institute of Technology
A.S.E. Master Medium/Heavy Truck Technician

Zachary M. Grant (2006)
Library
B.A. Oregon State University
M.L.S. Emporia State University

Garrett C. Gregor (2002)
Mathematics
B.S. University of Utah
M.S. Humboldt State University

Physics
B.S. (Physics) University of Utah
B.S. (Chemistry) University of Utah
B.S. (Mathematics) University of Utah
M.S. California Institute of Technology
Ph.D. University of Wisconsin, Madison

Aaron Guerra (2017)
Culinary
A.O.S. Le Cordon Bleu Culinary College

Marilyn Hale (2010)
Transitional Studies
B.S. University of Montana-Western
M.Ed. Montana State University

Kathrena L. Halsinger (2001)
Art/Graphic Design
B.A. Western Washington University

Adnan A. Hamideh (2002)
Business Administration
B.A., B.S., Ed.D. Portland State University
M.B.A. California State University

Douglas Harris (2018)
Music
B.A. University of Florida
M.M., D.A. University of Northern Colorado

William Hausinger (2018)
Welding
GTAW, GMAW, FCAW-G, FCAW-S, SMAW, SAW Certifications

Melanie Hendry (2019)
Baking

Rebecca Herman (2015)
Dental Hygiene
A.S. Clark College
B.S., M.Ed. Concordia University

Alejandra Herring (2020)
Business Technology
A.A. Clark College

Grant N. Hottle (2013)
Art
B.F.A. University of Oklahoma
M.F.A. University of Oregon

Christina Howard (2018)
Biology/Anatomy & Physiology
B.S., M.S. Portland State University

Garrett L. Hoyt (2013)
Health and Physical Education
B.S., PhD. Brigham Young University
M.S. Colorado State University

Carol C. Hsu (2010)
Engineering
B.S., M.S. The University of Texas, Austin

Dwight W. Hughes (2003)
Network Technology
B.S. Northern Arizona University
M.A. University of Phoenix
Certifications in A+, Network+, MCP, CCAI, CCNA

Hannah Jackson (2016)
Mathematics
B.S. Willamette University
M.S. Syracuse University

Debra R. Jenkins (2000)
Early Childhood Education/Psychology
A.A.S Clark College
B.A., M.A. Pacific Oaks College
M.S., Ph.D. University of Phoenix

Tina Jenkins (2023)
Mechatronics
A.A., A.A.T, A.A.T Clark College
B.S. Eastern Washington University

Elizabeth Jochim (2022)
Allied Health
M.A. Grand Canyon University
B.S. Seattle University
Certifications R.N.

Andrew B. Johnson (2013)
Business and Technology
B.A. George Fox University
M.A. University of Phoenix

Brandon Johnson (2022)
Automotive
A.S.E. Master Automotive Technician
A.A.S. Universal Technical Institute

Catherine E. Johnston (2007)
English as a Second Language
B.A. DePaul University
M.A. University of San Francisco

Yusufu Kamara (2015)
Economics
B.S. University of Sierra Leone
M.A., Ph.D. University of Kansas

Mark L. Keats (2020)
English
A.A. Howard Community College
B.A., M.F.A. University of Maryland-College Park
Ph.D. Texas Tech University

Sally J. Keely (1996)
Mathematics
B.S., M.S. Portland State University

Darcy Kennedy (2019)
Chemistry
M.S. University of Washington

Computer Science and Engineering
B.S., M.S. Iowa State University
M.B.A. University of Oregon

Travis T. Kibota (1994)
Biology
B.S. University of California, Los Angeles
M.S., Ph.D. University of Oregon

Raymond T. Korpi (2000)
English
B.S., M.A. University of Nebraska
Ph.D. Washington State University

David L. Kosloski (1998)
Communication Studies
Speech B.A. Georgia State University, Atlanta
M.A. Central Michigan University

Sarah Kuzera (2017)
Medical Assisting
A.S., B.S., Everest College
M.B.A., Bryan University
Ed.D. Capella University

Jesse Kysar (2020)
Engineering
B.S., M.S., Washington State University

M

Molly Lampros (2022)
Communication Studies
M.A. Pacific University
B.A., M.A. Portland State University

Bo Li (2023)
Nursing
Bachelor’s and Master’s, Nanchang University
Doctorate, Jasonville University

Julie Lemmond (2016)
Business Administration
B.S., M.B.A. Marylhurst University

Josephine "Josie" Lesage (2022)
Environmental Sciences
B.S. University of California, Santa Barbara
M.A., Ph.D. University of California, Santa Cruz

Xiunu "Sophie" Lin (2016)
Physics
B.S. Xiamen University
Ph.D. University of Washington

Mackenzie Loyet (2021)
Biology
B.A. Knox College
M.A., M.S. Indiana University Bloomington

Kenneth S. Luchini (2013)
Mechatronics

A.S. Diablo Valley College
B.S. California State University, Chico

Dianne Lucia (2022)
Nursing
B.S.N. University of Portland
M.S.N. Western Governors University

Donald Ludwig (2015)
Sociology
A.A Spokane Community College
B.A. Whitworth College
M.S. Princeton Theological Seminary
M.S. Rutgers University
Ph.D. International University of Graduate Studies

Michael Ludwig (2014)
Dental Hygiene
A.A.S. Clark College
B.S. Eastern Washington University
M.Ed. Concordia University

Nicholas Luisi (2019)
Nursing
A.A.S. Raritan Valley Community College
M.S.N. Capella University

Sarah M. Luther (2013)
Mathematics
B.A., M.A. Lewis and Clark College
M.S. Texas A&M University

Meredith Lynch (2016)
Transitional Studies
B.A., M.A. University of Washington

Olga Lyubar (2019)
Health Information Management
B.S. University of Washington

Nicholas Macias (2017)
Computer Science and Engineering
B.S., M.S. George Washington University
M.A. Duke University
Ph.D. Virginia Polytechnic University

Michelle D. Mallory (2008)
Family Life/Early Childhood Education
B.S. Western Oregon State College
M.S. Portland State University

Helen Martin (2007)
Business
B.A.S. Clark College
M.B.A. Georgia State University
Doctorandus, Leiden University

Rebecca L. Martin (2000)
Biology
B.A. Vassar College
M.A. Antioch University
M.S. Washington State University
Mika Maruyama (2013)  
Psychology  
B.A. Utah State University  
M.S., Ph.D. Portland State University

Kanchan Mathur (2005)  
Mathematics  
B.A. Delhi University  
M.S., Ph.D. Indian Institute of Technology

Samuel May-Varas (2016)  
Transitional Studies  
B.A. University of South Florida  
M.A.T. City University of Seattle  
Ed.D. Lewis & Clark College

Heather J. McAfee (2013)  
Geography  
B.A. University of Colorado, Colorado Springs  
M.A. University of Oregon

Brian McVay (2014)  
Welding  
Certified Welding Educator  
Certified Welding Inspector  
Journeyman Ironworker

Natalie R. Miles (2013)  
Adult Basic Education  
B.S., M.S. Valley City University

Christopher E. Milner (2007)  
Mathematics  
B.S. University of Puget Sound  
M.S. Oregon State University

Mathematics  
B.Sc., M.Sc. University College Dublin

April E. Mixon (2005)  
Chemistry  
B.S. Shippensburg University  
M.S. Oregon State University

Brian Miyake (2022)  
Surveying and Geomatics  
B.A. University of Wyoming

Victor Morales (2022)  
Philosophy  
B.A. California State University, Northridge  
M.A. California State University, Los Angeles  
M.A., Ph.D. University of California, Riverside

Marisol Moreno-Ortiz (2020)  
Library  
B.A. Oregon State University  
M.A. Portland State University  
M.L.I.S. Louisiana State University

Jesse Morse (2022)  
English  
B.A. Oberlin College  
M.F.A. Naropa University

Ph.D. University of Denver

Nicole Mottier (2023)  
History  
B.A. University of Illinois  
M.A. University of Oxford  
Doctorate, University of Chicago

Laura Nagel (2015)  
Library  
B.A. Pacific Lutheran University  
M.A. University of Wisconsin - Madison

Erika L. Nava (2008)  
Spanish  
B.A. Oregon State University  
M.A. University of Oregon

Tracy J. Nehnevaj (1992)  
Mathematics  
B.A., M.S. Eastern Washington University

Alexis Nelson (2014)  
English  
B.A. University of California  
M.A. Portland State University

Julian Nelson (2005)  
English  
B.A., M.A. San Francisco State University  
Ph.D. University of California, Davis

English as a Second Language  
B.A. Dartmouth College  
Ed.M. Oregon State University  
TESL Seattle University School of TESL

Michiyo Okuhara (2010)  
Japanese  
A.A. Seisen Women’s Junior College  
A.A. Clackamas Community College  
B.S., M.E. Portland State University

Thomas Olsen (2020)  
Digital Media Arts  
B.S. University of Oregon  
Certificate Film Program, NW Film Center  
M.F.A. Chapman University

Kathleen M. Perillo (1999)  
Biology  
B.A. University of Delaware  
M.S. University of New Haven

Tobias Peterson (2014)  
English  
B.A. Texas State University  
M.A. George Mason University
M.F.A. Texas University

**Valentina Pishchchanskaya-Cayanan** (2019)  
Counseling  
B.A., M.S. University of Nevada Las Vegas

**Joseph P. Pitkin** (2000)  
English  
B.A. Utah State University  
M.A. New Mexico State University  
M.S. Washington State University

**Kristl Plinz** (1999)  
Digital Media Arts  
B.S. California Polytechnic State University  
M.S. Rochester Institute of Technology

**K**  

**Heather Reynolds** (2021)  
Nursing  
BSN University of Washington  
MSN Western Governors University

**Janine Rieck** (2022)  
Health Information Management  
A.A.S. Central Oregon Community College  
B.S., M.S. University of Cincinnati

**Leslie J. Rivera** (1997)  
English as a Second Language  
B.A. University of Portland  
M.A. San Francisco State University

**Gail R. Robinson** (1993)  
English  
B.A. Miami University, Ohio  
M.A. Portland State University

**Marcia R. Roi** (2000)  
Chemical Dependency  
B.S., M.S. Oklahoma State University  
Ph.D. Oregon State University

**Michele Roth** (2016)  
English as a Second Language  
B.A. Reed College  
M.A.T. University of Washington

**Bevyn Rowland** (2011)  
Counseling/Human Development  
B.A. University of Portland  
M.A., PsyD. Pacific University

**Jeff Rush** (2023)  
Diesel Technology  
A.A.S., MHCC, Mount Hood Community College

**S. Layne Russell** (2006)  
Business  
B.A. University of Memphis  
J.D. College of William and Mary, Marshall Wythe School of Law

**S**  

**Katherine D. Sadler** (2005)  
History  
B.A. Portland State University  
M.A., Ph.D. University of California, Los Angeles

**Richa Sharma** (2019)  
Communications  
M.B.A. Lal Bahadur Shastri Institute of Management  
M.S. Portland State University

**Nicoleta Sharp** (2008)  
Physics  
B.S., M.S. Universitatea Alexandru Ioan Cuza

**Kristin Sherwood** (2018)  
College 101  
B.A. Lewis & Clark College  
M.P.A. Portland State University

**Dawn M.U. Shults** (2009)  
Pharmacy  
C.Ph.T. Clark College

**Chris Smith** (2021)  
English  
B.A. McDaniel College  
M.A. University of Utah

**Gerard M. Smith** (1991)  
English  
B.S. Bowling Green State University  
M.A. University of Toledo  
Ph.D. Bowling Green State University

**Suzanne Southerland** (2011)  
Communication Studies  
B.S. University of Portland  
M.S. Portland State University

**Erin Staples** (2011)  
Health & Physical Education  
B.S. University of North Texas  
M.P.H. Portland State University

**Senseney L. Stokes** (2007)  
Art/Photography  
B.F.A. Rhode Island School of Design  
M.F.A. University of New Mexico

**Michelle Stoklosa** (2016)  
Geology  
B.A. Franklin & Marshall College  
M.S., Ph.D. University of Wisconsin - Madison

**Kimberly A. Sullivan** (1992)  
English  
B.A. Belhaven College  
M.A. Mississippi State University

**Natasja Swartz** (2022)  
Chemistry  
B.S., B.A. University of California at Santa Barbara  
Ph.D. Portland State University
Kristina Taylor (2010)
Dental Hygiene
A.A.S. Clark College
B.S. Eastern Washington University
M.S. Portland State University

Sarah J. Theberge (2000)
Early Childhood Education/Family Studies
A.A.S. Clark College
B.A., M.A. Pacific Oaks College

Cydney Topping (2022)TT
English
B.A. Eastern Oregon University
M.A. DePaul University

Elizabeth R. Torgerson (2010)
Nursing
A.A. Clackamas Community College
B.S.N. OHSU School of Nursing
M.S.N. Washington State University, Vancouver

Ruth Trejo (2011)
Chemistry
B.S., M.S. University of California, San Diego

Michael Tucker (2022)TT
Cybersecurity
B.S., M.S. National University

Elizabeth C. Ubiergo (2008)
Spanish
B.A., M.A. University of Oregon

Amy VahnDijk (2019)
Nursing
A.D.N. Clark College
B.S.N., D.N.P Washington State University

Edna Villa (2023)TT
Nursing
Bachelor’s West Coast University
Master’s, Western Governors University

Michelle Walty (2018)
Mathematics
B.S. George Fox University
M.S., Ph.D. Texas Tech University

Robert Weston (2015)
Mathematics
B.S. Oregon State University
M.A. The City College of New York

Jim Wilkins-Luton (2000)
English
B.A Whitworth University
M.A. Gonzaga University

Caleb N. White (2013)
Advanced Manufacturing
A.O.S. Universal Technical Institute

Alan Wiest (2012)
Health & Physical Education
A.S. Lane Community College
B.S., M.S. University of Oregon

Tess Yevka (2015)
Psychology
B.S. Marylhurst University

David Zonana (2023)TT
Biology
B.S. Bowdoin College
Doctorate University of Colorado

Tenure Track is indicated by TT

Foundation

Dominick Allen (2020)
Director of Research
B.S. Portland State University
Certificate in nonprofit fundraising, WVDO & Portland State University

Brittanie Castrey (2023)
Executive Associate to CEO & Foundation Board of Directors
A.A. Pierce Community College
B.A. Eastern Washington University

Chandra Chase (2019)
Associate Vice President, Alumni Relations & Community Engagement
A.A. Clark College
B.A. Washington State University

Kathy Chennault, GPC (2017)
Director, Development, Corporate & Foundation Relations
A.A. Riverside Community College
B.A. California State University, San Bernardino

Corey Dobbs (2017)
Associate Director, Data Management & Analytics
A.A. Clark College

G

Lynne Groom (2021)
Director, Annual Giving
B.B.A. University of North Texas

Dion Gutkind (2017)
Gift Entry and Records Manager
A.A., Bryant & Stratton College

H

Michelle Harrington (2017)
Accounting Manager
A.A. Clark College

M

Vivian Cheadle Manning, CFRE (2010)
Director, Development & Gift Planning
B.A. Southern Methodist University
C.F.M. IUPUI/School of Philanthropy

Kristina Martin, M.A. (2020)
Director of Stewardship
B.A., M.A. Pacific University, Oregon

O

Melissa O'Dea (2024)
Deployment Associate
A.A. College of DuPage
B.A. Northern Illinois University

Calen Ouellette, M.B.A. (2022)
Chief Executive Officer, Vice President, Advancement & External Relations
B.A. Washington State University
M.B.A. University of Southern California Marshall School of Business

P

Andy Palmquist, M.A. (2019)
Director of Partner Development
Grant Writing Certificate, Willamette Valley Development Officers
M.A. University of Maryland, College Park
B.A. Pacific Lutheran University

Dan Palow (2018)
Associate Vice President, Advancement Operations
B.B.A. University of Alaska, Fairbanks
Certificate Leadership and Management, University of Vermont
Certificate Data Analytics, Clark College

Chris Plamondon (2000)
Controller
B.A. Washington State University

W

Ruth Wikler (2023)
Director, Development and Partner Engagement
B.A. Barnard College
M.A. Hunter College

Chief Financial Officer, Associate Vice President, Foundation Operations
B.A. Washington State University
A.A. Brigham Young University, Idaho

Shirley Schwartz (1999)
Director, Scholarships
A.A., B.A. West Coast Christian College
M.A. Multnomah University

Justin Stokes (2023)
Associate Director, Development and Partner Management
B.A. Grandview University
D.C. Palmer College of Chiropractic

Angela Torretta (2019)
Associate Vice President, Development
B.A. University of Oregon

Ruth Wikler (2023)
Director, Development and Partner Engagement
B.A. Barnard College
M.A. Hunter College

Morgana Ricardo (2023)
Office Manager
A.A. Clark College

Daniel Rogers, CPA (2010)
CORRECTIONS

- Catalog Corrections (p. 321)
- Course Corrections (p. 321)
- Degrees and Certificate Corrections (p. 321)

Catalog Corrections

Course Corrections

Distribution Updates

ART
https://catalog.clark.edu/course-descriptions/art/

ART 172 fulfills HA not HB.

ESL
https://catalog.clark.edu/course-descriptions/cap/ (https://catalog.clark.edu/course-descriptions/cap/)

Requisites removed from the following courses:

ESL 11 – Beginning Oral Communication Level 1
ESL 12 – Beginning Written Communication Level 1
ESL 13 – Foundations Written Communication Levels 2-3
ESL 15 – Foundations Oral Communication Levels 2-3
ESL 71 – English for Life and Work Levels 1-3
ESL 74 – English for Life and Work Levels 4-6

Education
https://catalog.clark.edu/course-descriptions/educ/

EDUC& 115 fulfills both GE and SE.

Degrees and Certificate Corrections

Automotive Programs

https://catalog.clark.edu/academic-plans/automotive-technology/

Clarified graduation requirements: As part of the Automotive program, students must successfully complete a minimum of 3 ASE technician certifications to graduate from the program and complete their degree. This is part of our third-party national accreditation standards. These standards were recommended and approved by our Automotive Advisory Committees.
CATALOG ARCHIVES

• 2023-2024 Catalog (https://catalog.clark.edu/archives/2023-2024/)
• 2022-2023 Catalog (https://catalog.clark.edu/archives/2022-2023/)
• 2021-2022 Catalog (https://catalog.clark.edu/archives/2021-2022_Catalog_.pdf)
• 2020-2021 Catalog (https://catalog.clark.edu/archives/2020-2021/)
• 2017 - 2018 Catalog (http://www.clark.edu/academics/catalog/2017/)
  • 2017 - 2018 Corrections (http://www.clark.edu/academics/catalog/2017/corrections/)
• 2016 – 2017 Catalog (http://www.clark.edu/academics/catalog/2016/)
  • 2016 – 2017 Corrections (http://www.clark.edu/academics/catalog/2016/catalog-corrections/)
• 2015 – 2016 Catalog (http://www.clark.edu/academics/catalog/2015/)
  • 2015 – 2016 Corrections (http://www.clark.edu/academics/catalog/2015/catalog-corrections/)
• 2014 – 2015 Catalog (http://www.clark.edu/academics/catalog/2014/)
• 2013 – 2014 Catalog (http://www.clark.edu/academics/catalog/2013/)
• 2012 – 2013 Catalog (http://www.clark.edu/academics/catalog/2012/)
  • 2012 – 2013 Corrections (http://www.clark.edu/academics/catalog/2012/2012corrections.pdf)
• 2011 - 2012 Catalog (http://www.clark.edu/academics/catalog/2011/)
INDEX

#
2024-2025 Catalog ............................................................. 5

A
Academic Calendar ......................................................... 275
Academic Plans .................................................................. 6
Academic Retention Concern (ARC) ................................. 276
Academic Standards Policy ................................................ 276
Accounting ........................................................................ 7
Accounting (AAS)(Plan Code: ATBACAPT) .................... 7
Accounting (ACCT/ACCT&)) ........................................... 111
Accounting Clerk (CP)(Plan Code: ATBACC45) ............... 7
Accreditation ..................................................................... 254
Addiction Counselor Education ........................................... 9
Addiction Counselor Education (AA)(Plan Code: LASACAA) .. 10
Addiction Counselor Education (AAS)(Plan Code: SAAACAPT) 10
Addiction Counselor Education (ACED) ......................... 112
Addiction Counselor Education (CP)(Plan Code: SAAACC45) .. 9
Administration .................................................................... 308
Advising ............................................................................ 277
Allied Health (AH) .............................................................. 114
American Sign Language (ASL/ASL&)) .......................... 115
Anthropology (ANTH/ANTH&)) ....................................... 116
Applied Management (BAS) ............................................. 12
Applied Management (BAS)(Plan Code: BAMSMBAS) ........ 12
Art ...................................................................................... 14
Art (ART/ART&)) ............................................................... 117
Associate in Arts (AADTA) and Concentrations ............... 17
Associate in Arts (AADTA)(Plan Code: LASDTAA) ........... 18
Associate in Music DTA/MRP (Plan Code: MUSMUAA) .... 84
Associate in Science – General (AST2)(Plan Code: PHST2AS) 29
Associate in Science – Track 1 (AST1) ............................. 24
Associate in Science – Track 2 (AST2) ............................. 29
Associate in Science Transfer - General (AST1)(Plan Code: LRST1AS) ..................................................... 24
Associates in Nursing DTA/MRP (Plan Code: RENDTAA) ... 90
Astronomy (ASTR&)) .......................................................... 121
Automotive Technology .................................................... 34
Automotive Technology (AUTO) ....................................... 122

B
Bachelor of Applied Sciences ............................................. 260
Baking and Pastry Arts Fundamentals (CA)(Plan Code: BPABPC20) .... 46
BAS Applied Management (BASAM) .................................... 126
BAS Human Services (BASHS) ........................................... 128
BAS Teacher Education .................................................... 129
Bioengineering and Chemical Engineering ........................ 36
Bioengineering and Chemical Engineering (AST2/MRP)(Plan Code: CHEBCAS) ................................................. 36
Biological Sciences ........................................................... 38
Biology (BIOL/BIOL&)) ................................................... 131
Biology DTA/MRP (Plan Code: GEBBIAS) ....................... 38
Board of Trustees ............................................................ 307
Business Administration ................................................... 40
Business Administration (AAS)(Plan Code: BAMBUAPT) .... 40
Business Administration (BUS/BUS&)) ............................ 134
Business Administration (DTA/MRP)(Plan Code: BUCBUAA) .. 41

C
Career and Technical Degrees and Certificates Distribution List ......... 269
Career and Technical Overview ........................................... 268
Career Services ............................................................... 277
Catalog Archives ................................................................ 322
Catalog Corrections .......................................................... 321
Chemistry (CHEM/CHEM&)) ......................................... 136
Cisco Technician (CA)(Plan Code: TETCTC20) .................. 86
Clark CARES: Collaborate, Assess, Resource, and Engage Students .... 255
College and Academic Preparation (CAP/CCAP) .............. 139
College Assessment ......................................................... 255
College Information ........................................................ 254
College Life ......................................................................... 277
College Preparatory (COLL) ............................................. 144
Communication Studies (CMST/CMST&)) ........................ 145
Computer Science & Engineering (CSE) .......................... 146
Computer Support Specialist (AAT)(Plan Code: MIACTAPT) .. 44
Computer Technology ..................................................... 44
Computer Technology (CTEC) ............................................ 149
Concentration in Aeronautical Engineering (AST2/ MRP)(Plan Code: MEEMCAS, Subplan: AERENGR) ................................. 75
Concentration in Agroecology (AADTA)(Plan Code: LASDTAA, Subplan Code: AGROECOLGY) ........................................... 19
Concentration in Biological Sciences (AST1)(Plan Code: LRST1AS) .......................... 25
Concentration in Chemistry (AST1)(Plan code: LRST1AS, Subplan Code: CHEMISTRY) ........................................... 25
Concentration in Civil Engineering (AST2/MRP)(Plan Code: MEEMCAS, Subplan: CIVILENGR) ........................................... 76
Concentration in Computer Engineering (AST2)(Plan Code: EECEAS, Subplan Code: COMPTENGR) ........................................... 62
Concentration in Computer Science (AST2)(Plan Code: PHST2AS, Subplan Code: COMPUTRSCI) .................................................. 31
Concentration in Electrical Engineering (AST2/MRP)(Plan Code: EECEAS, Subplan Code: ELECTENGR) ........................................... 61
Concentration in Elementary Education (AADTA) (Plan Code: LASDAA, Subplan Code: ELMNTRYEDU) ........................................... 19
Concentration in Environmental Science (AST1) (Plan Code: LRST1AS, Subplan Code: ENVIROSCI) .................................................. 26
Concentration in Geology (AST1)(Plan Code: LRST1AS, Subplan Code: GEOLOGY) .............................................................. 27
Concentration in Graphic Design (Plan Code: LASDAAA, Subplan Code: GRAPHICDNS) .......................................................... 20
Concentration in Mechanical Engineering (AST2/MRP)(Plan Code: MEEMCAS, Subplan Code: MECHENGR) ........................................... 77
Concentration in Physics (AST2)(Plan Code: PHST2AS, Subplan Code: PHYSICS) ................................................................. 32
Concentration in Power, Privilege, and Inequity (Plan Code: LASDAAA, Subplan Code: PWRPRVINEQ) ............................................. 21
Concentration in Studio Arts (Plan Code: LASDAAA, Subplan Code: STUDIOART) .............................................................. 21
Concentration in Women’s Studies (Plan Code: LASDAAA, Subplan Code: WOMENSSTDY) ......................................................... 22
Concentration in World Languages (AADTA)(Plan Code: LASDAAA, Subplan Code: WORLDLANG) .................................................. 23
Consumer Information .................................................................................................................. 255
Corrections ................................................................................................................................. 321
Course Corrections ...................................................................................................................... 321
Course Descriptions ................................................................................................................... 109
Credential Evaluations .............................................................................................................. 283
Credit Hours and Credit Load ................................................................................................... 273
Cuisine (CUIS) ........................................................................................................................................ 153
Cuisine Fundamentals (CA)(Plan Code: CACCFC20) ................................................................. 47
Cuisine Management (AAT)(Plan Code: CACCMAPT) ............................................................... 48
Culinary Arts .................................................................................................................................. 46
Cybersecurity (BAS) .................................................................................................................... 49
Cybersecurity (BAS)(Plan Code: CISCYBAS) .............................................................................. 49

D

Degree & Certificate Requirements .............................................................................................. 259
Degrees and Certificate Corrections ............................................................................................ 321
Dental Hygiene (BAS) .................................................................................................................. 50
Dental Hygiene (BAS)(Plan Code: DEHDHBAS) ........................................................................ 50
Dental Hygiene (DH) .................................................................................................................... 156
Diesel Technician (CP) (Plan Code: DMTDTCS0) ................................................................. 52
Diesel Technologies (AAS)(Plan Code: DMTDTAPT) .............................................................. 52
Diesel Technology ....................................................................................................................... 52

E

Early Childhood Education ........................................................................................................ 55
Early Childhood Education (AAS)(Plan Code: ECCECAPT) .................................................. 58
Early Childhood Education (ECE) ............................................................................................ 163
Early Childhood Education (ECED/ECED&)... ........................................................................ 165
Economics (ECON/ECON&) .................................................................................................... 166
Education (EDUC/EDUC&)... .................................................................................................. 167
eLearning .................................................................................................................................... 289
Electrical and Computer Engineering ...................................................................................... 60
Electrical and Computer Engineering (AST2/MRP)(Plan Code: EECEAS) .......................... 60
Emergency Medical Services .................................................................................................... 64
Emergency Medical Technician Accelerated (CC)(Plan Code: EMAETC01) ......................... 64
Emergency Medical Technician (EMT) .................................................................................... 168
Engineering (ENGR/ENGR&) ................................................................................................ 169
English as a Second Language (ESL) ...................................................................................... 176
English (ENGL/ENGL&) ........................................................................................................ 172
Enrollment, Aid and College Life ............................................................................................. 276
Enrollment Services .................................................................................................................. 286
Environmental Science (ENVS/ENVS&)... ............................................................................. 178
Equity in Athletics .................................................................................................................... 255
Executive Cabinet ..................................................................................................................... 308

F

Faculty ........................................................................................................................................ 312
Faculty and Administration ........................................................................................................ 307
Financial Aid ............................................................................................................................... 290
Flux Core Arc Welding (CA)(Plan Code: WETFCC20) ........................................................ 104
Foundation .................................................................................................................................. 319

G

Gas Metal Arc Welding (CA)(Plan Code: WETGMC20) ..................................................... 104
Gas Tungsten Arc Welding (CA)(Plan Code: WETGTC20) .................................................. 105
General Information .................................................................................................................. 259
Geography (GEOG/GEOG&) .................................................................................................. 180
Geology (GEOL/GEOL&) ........................................................................................................ 182
Graduation Rates ....................................................................................................................... 255
Mechatronics Fundamentals (CC)(Plan Code: ETEMFC01) ........................................... 79

H

Health & Physical Education (HPE) .................................................. 183
Health (HLTH) ........................................................................... 184
Health Information Management / Medical Billing and Coding .......... 65
Health Information Management (AAT)(Plan Code: MICMCAPT) .... 66
Health Information Management (HIM) ......................................... 185
History ..................................................................................... 254
History (HIST/HIST& .................................................................. 187
HiTECC Automotive Technology (AAT)(Plan Code: AUMHAAPT) ..... 34
Honors (HONS) ........................................................................... 189
Human Services (BAS) ............................................................... 67
Human Services (BAS)(Plan Code: HSTHS BAS) ......................... 67
Human Services Substance Abuse (HSSA&) .................................. 190

I

Information Technology Skills (CP)(Plan Code: MIAISC45) .......... 44
Intensive English Language Program (IELP) .................................... 191

J

Japanese (JAPNJAPN&) ................................................................. 193
Journalism (JOUR) ..................................................................... 194

L

Limitation of Liability ................................................................ 256
Locations and Campuses ............................................................ 256

M

Management (MGMT) ................................................................ 196
Marketing .................................................................................. 68
Marketing (AAS)(Plan Code: SALMAAPT) ................................... 68
Marketing (CP)(Plan Code: SALMAC45) ...................................... 68
Materials Science ....................................................................... 70
Materials Science (AST2/MRP)(Plan Code: MEEMSAS) ............... 70
Math Education ................................................................. 72
Math Education (DTA/MRP) (Plan Code: METMEAS) ................. 72
Mathematics (MATH/MATH&) ................................................... 197
Mechanical and Instrumentation Automation (AAT)(Plan Code: ETEmiAAPT) ........................................................................ 80
Mechanical and Instrumentation Automation (CA)(Plan Code: ETEmAC20) ........................................................................ 79
Mechanical, Civil Aeronautical Engineering (AST2/MRP)(Plan Code: MEEMCAS) ................................................................. 74
Mechanical, Civil & Aeronautical Engineering .................................. 74
Mechatronics ............................................................................. 79
Mechatronics Fundamentals (CC)(Plan Code: ETEMFC01) ......... 79

Mechatronics (MTX) .................................................................... 200
Medical Assistant ........................................................................ 81
Medical Assistant (CP)(Plan Code: MLAMAC45) ......................... 81
Medical Assistant with Phlebotomy or Business Option (AAT)(Plan Code: MLAMSAPT) ................................................................. 82
Medical Assisting (MA) ............................................................... 203
Medical Billing/Coding Specialist (CP)(Plan Code: MCMCC45) ...... 65
Meteorology (METR) ................................................................. 205
Microsoft Technician (CA)(Plan Code: CSTMTC20) ..................... 86
Music ....................................................................................... 84
Music (MUSC/MUSC&MUSCA) .................................................. 206

N

Network Technologies (AAT)(Plan Code: CSTNAPT) ................. 87
Network Technology ................................................................... 86
Network Technology (NTEC) ...................................................... 216
Non-Traditional Credit ............................................................... 273
Nondiscrimination and Equity ..................................................... 256
Notification of Students' Rights Under the Family Educational Rights and Privacy Act .............................................................. 257
Nursing ...................................................................................... 88
Nursing (NURS) ......................................................................... 219
Nutrition (NUTR/NUTR&) ......................................................... 221

O

Oceanography (OCEA&) .............................................................. 222

P

Pharmacy (PHAR) .................................................................... 223
Pharmacy Technician ................................................................. 92
Pharmacy Technician (CP)(Plan Code: PTAPTC45) ................. 92
Pharmacy Technician Leadership (AAT)(Plan Code: PTAPHTAPT) ........................................................................ 93
Philosophy (PHIL/PHIL&) .......................................................... 225
Phlebotomy ............................................................................... 95
Phlebotomy (CA)(Plan Code: PHLPHC20) ................................... 95
Phlebotomy (PHLE) ................................................................... 226
Phone Directory ........................................................................ 275
Physical Education Dance (PEDNC) ........................................... 232
Physical Education Exercise Science (PEEXS) ......................... 234
Physical Education Martial Arts (PEMAR) .................................... 235
Physical Education (PE) .............................................................. 227
Physical Science (PHSC) ............................................................ 236
Physics (PHYS/PHYS&) ............................................................. 237
Political Science (POLS/POLS&) ............................................... 239
Pre-Nursing (DTA/MRP)(Plan Code: RENPNAS) ......................... 88