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2019-2020 Catalog

Vision

Clark College inspires learners to excel, transforms lives, and strengthens our increasingly diverse community.

Mission

Clark College, in service to the community, guides individuals to achieve their educational and professional goals.

Core Themes

Academic Excellence

Facilitate student learning by providing the conditions for intellectual growth through scholarship, discovery, application, creativity, and critical thinking.

- Implement and institutionalize practices that increase academic performance, retention, and completion.
- Create and sustain an inclusive and dynamic curriculum and environment that reflect our diverse college community.
- Integrate active learning strategies within and across courses, disciplines, and programs with a global perspective.
- Create and advance accessible, integrated, and technology-enriched learning environments.
- Engage faculty, administrators, and staff in professional development experiences that enhance student learning.
- Align curriculum with learning outcomes and apply outcomes assessment evidence to continually advance student learning.

Social Equity

Facilitate student learning by providing the conditions that improve educational outcomes and eliminate systemic disparities among all groups.

- Create and sustain an accessible and inclusive environment by utilizing principles of universal design and social justice so that all students can achieve equitable outcomes.
- Demonstrate improved intercultural competency among employees and students through comprehensive professional development and curricular transformation.
- Institutionalize hiring and retention practices that challenge systems of power, privilege, and inequity.

Economic Vitality

Facilitate student learning by providing programs, services, and conditions that improve the economic well-being of the students, college, and community.

- Improve college affordability for students by expanding access to and information about financial resources, clarifying career and educational goals, providing pathways to success, improving college readiness, increasing financial literacy, and managing costs.
- Align program offerings with regional workforce needs to include technical and work-readiness skills.
- Align, expand, and enrich the relationships with regional industry leaders to increase internships, advisory committee participation, financial support for students' education and programs, hiring pipelines, grant partnerships, mentorships, and apprenticeships.

- Maximize the college's return on investment by responsibly allocating available resources.
- Leverage resources to create and sustain future innovations.

Environmental Integrity

Facilitate student learning by providing the conditions that continually improve the college's physical, virtual, and social environment.

- Incorporate environmental sustainability priorities into all college systems.
- Improve the college's physical and virtual environment to maximize access and appropriate use of space and technology.
- Integrate principles of mutual respect, collaboration, clear communication, and inclusivity in all interactions.

Values

- Social Justice: Institutional commitment to produce equitable outcomes and challenge systems of power, privilege, and inequity.
- Partnerships: Collaboration with individuals, organizations, and businesses to increase student success and improve the community.
- Innovation: Development and implementation of creative and agile strategies to enhance student learning and respond to market needs.
- Sustainability: Effective and efficient stewardship of all college resources.
- Continuous Improvement: Evaluation and enhancement of all college operations based on data-informed planning and resource allocation.
- Shared Governance: Clear communication, inclusive consultation, and respectful consideration of multiple perspectives guide decision-making throughout the college.

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/)

Locations

Main Campus

1933 Fort Vancouver Way
Vancouver, WA 98663

Columbia Tech Center

18700 SE Mill Plain Blvd.
Vancouver, WA 98683

Clark College at WSU Vancouver

14204 NE Salmon Creek Ave.

Vancouver, WA 98686

Disclaimer

The information in this catalog is effective as of summer term 2019. Clark College has made reasonable efforts to ensure the accuracy of the information throughout this catalog. However, the college reserves the right to make appropriate changes in procedures, policies, calendars, requirements, programs, courses, and fees. When feasible, changes will be announced prior to their effective dates, but the college assumes no responsibility for giving any particular notice of any such changes. Changes may apply not only to prospective students, but also to those who are currently enrolled. Nothing contained in this website shall be construed to create any offer to contract or any contractual rights. We encourage readers to contact the college or appropriate office to obtain current information.

ACADEMIC PLANS

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

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) (p. 8)
- Accounting (AAS) (p. 8)

Accounting Clerk (CP)

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

This Accounting Clerk Certificate of Proficiency is designed to prepare the student for an entry-level position as an accounting clerk or bookkeeper. The student records transactions and prepares the basic essential financial statements which contribute to vital operational policies and decisions. Student learning takes place in both manual and computerized environments.

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.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
BTEC 106 or ENGL&101	APPLIED OFFICE ENGLISH ENGLISH COMPOSITION I	3-5
Subtotal		3-5
<i>Computational Skills</i>		
BUS 102	BUSINESS MATH APPLICATIONS	5
Subtotal		5
<i>Human Relations</i>		
BTEC 148	BUSINESS PROFESSIONAL SELF DEVELOPMENT	3
Subtotal		3
Business Core Courses		
BUS 028	BASIC ACCOUNTING PROCEDURES	3
BUS& 101	INTRODUCTION TO BUSINESS	5
BTEC 100	KEYBOARDING	3
BTEC 150	COMPUTER BUSINESS APPLICATIONS	5
ECON 101	INTRODUCTION TO ECONOMICS	3
MGMT 101	PRINCIPLES OF MANAGEMENT	3
Major Area Requirements		
BUS 029	BASIC ACCOUNTING PROCEDURES	3
BUS 036	ACCOUNTING APPLICATIONS	3
BUS 130	COMPUTERIZED ACCOUNTING	3
BUS 199	COOPERATIVE WORK EXPERIENCE ¹	1-5
BTEC 135	10-KEY CALCULATOR	1

BTEC 169	INTRODUCTION TO EXCEL	3
CMST&220 or CMST&230	PUBLIC SPEAKING SMALL GROUP COMMUNICATION	5
Total Credits/Units		56-58

- ¹ Minimum of 5 credits/units must be earned in Cooperative Work Experience.
- ² Prior completion of BTEC 169 or instructor permission required. Funding sources do not pay for courses specifically called out as a requirement.

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/505A/Gedt.html>).

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)
- Accurately prepare, interpret, and analyze financial statements for service and merchandising businesses manually as well as using computer systems.
- Perform all steps of the accounting cycle, using both general and specialized journals.
- Accurately create and maintain payroll records required under federal and state laws.

Accounting (AAS)

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

The Accounting Associate of Applied Science degree is a two-year degree designed to provide knowledge in accounting to prepare the graduate for entry-level employment in private or public sectors as a bookkeeper or para-accountant. The student records, analyzes, and interprets transactions, including preparation of essential financial statements. In addition, the student will learn how to assist decision makers in understanding and applying payroll, tax, and legal rules and regulations. Student learning takes place in both manual and computerized environments.

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.

Completion of Certificate of Proficiency in Marketing, Small Business Management, Accounting Clerk or Supervisory Management accounts for 56-60 of necessary credits.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
CMST&220	PUBLIC SPEAKING	5
or CMST&230	SMALL GROUP COMMUNICATION	
<i>Health & Physical Education</i>		
Course Options (p. 322)		3
<i>Humanities</i>		
Course Options (p. 323)		3
<i>Natural Sciences</i>		
Course Options (p. 324)		3
<i>Human Relations</i>		
Satisfied in the CPs		
<i>Social Sciences</i>		
Satisfied in the CPs		
<i>Computational Skills</i>		
Satisfied in the CPs		
Major Area Requirements		
ACCT&201	PRINCIPLES OF ACCOUNTING I	5
ACCT&202	PRINCIPLES OF ACCOUNTING II	5
ACCT&203	PRINCIPLES OF ACCOUNTING III	5
BUS 130	COMPUTERIZED ACCOUNTING	3
BUS& 201	BUSINESS LAW	5
BUS 203	DESCRIPTIVE STATISTICS	3
BTEC 135	10-KEY CALCULATOR	1
BTEC 170	EXCEL FOR BUSINESS	3
Additional Major Area Electives		
Select a minimum of three to five additional credits/units from the following areas:		3-5
Accounting (ACCT) (p. 122)		
Business Administration (BUS) (p. 143)		
Economics (ECON) (p. 181)		
Supervisory Management (MGMT) (p. 216)		
Computer Applications (BTEC) (p. 145) ¹		
Complete as many General Elective (GE) courses as needed to reach the total of 90 credits required by the degree		
Total Credits/Units		90-102

¹ Six credit/unit maximum.

- 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)
- Accurately prepare, interpret, and analyze financial statements for service and merchandising businesses manually as well as using computer systems.
- Accurately analyze financial data and information to make business decisions.
- Provide accounting data and information for all types and sizes of businesses, including sole proprietorships, partnerships, and corporations.
- Accurately create and maintain payroll records required under federal and state laws.

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)

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) (p. 10)
- Addiction Counselor Education (AAS) (p. 11)
- Addiction Counselor Education (AA) (p. 11)

Addiction Counselor Education (CP)

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

The Certificate of Proficiency in Addiction Counselor Education equips members of the helping professions as well as other professions with knowledge of the addiction disorders and behaviors in order to assist them in the delivery of services to their clients and patients. Knowledge of addictive processes can greatly assist members of law enforcement, teachers, health care workers, corrections and social services workers, among others, in performing their jobs in a more comprehensive manner. This certificate is intended only for those students already holding an associate degree or above.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
Subtotal		5
<i>Human Relations</i>		

PSYC&100	GENERAL PSYCHOLOGY	5
Subtotal		5
<i>Computational Skills</i>		
Course Options (p. 322)		3
Subtotal		3
Major Area Requirements		
ACED 101	SURVEY OF ADDICTIONOLOGY ¹	3-5
or HSSA&101	INTRO TO ADDICTIVE DRUGS	
ACED 122	INTRODUCTION TO ADDICTIONS COUNSELING SKILLS	3
ACED 125	GROUP COUNSELING IN ADDICTIONS	3
ACED 132	INTRODUCTION TO COUNSELING FAMILY MEMBERS	3
ACED 136	LAW AND ETHICS IN ADDICTIONS COUNSELING	3
ACED 137	ADDICTIONS AND MENTAL ILLNESS	3
ACED 138	PREVENTION AND EDUCATION IN THE COMMUNITY	3
ACED 160	PHARMACOLOGY OF DRUGS OF ABUSE	3
ACED 164	ADOLESCENT ADDICTION ASSESSMENT & TREATMENT	3
ACED 170	AIR- AND BLOOD-BORNE PATHOGENS	3
ACED 201	THEORIES OF COUNSELING ¹	3
ACED 202	MULTI-CULTURAL ADDICTIONS COUNSELING	3
ACED 203	CASE MANAGEMENT IN ADDICTION MEDICINE	3
ACED 205	ADVANCED TECHNIQUES FOR ADDICTION COUNSEL	3
PSYC&200	LIFESPAN PSYCHOLOGY	5
Total Credits/Units		60-62

¹ For non-majors also.

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/437B/Gedt.html>).

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.

Addiction Counselor Education (AAS)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
ENGL&102	ENGLISH COMPOSITION II	5
Course Options (p. 321)		1
<i>Health & Physical Education</i>		
Course Options (p. 322)		3
<i>Computational Skills</i>		
MATH 092	APPLIED ELEMENTARY ALGEBRA (or any higher level Math course)	5
<i>Human Relations</i>		
PSYC&100	GENERAL PSYCHOLOGY ¹	5
<i>Humanities</i>		
Course Options (p. 323)		3
<i>Social Sciences</i>		
PSYC&200	LIFESPAN PSYCHOLOGY	5
<i>Natural Sciences</i>		
Course Options (p. 324)		3
Major Area Requirements		
ACED 101	SURVEY OF ADDICTIONOLOGY ²	3-5
or HSSA&101	INTRO TO ADDICTIVE DRUGS	
ACED 122	INTRODUCTION TO ADDICTIONS COUNSELING SKILLS	3
ACED 125	GROUP COUNSELING IN ADDICTIONS	3
ACED 132	INTRODUCTION TO COUNSELING FAMILY MEMBERS	3
ACED 136	LAW AND ETHICS IN ADDICTIONS COUNSELING	3
ACED 137	ADDICTIONS AND MENTAL ILLNESS	3
ACED 138	PREVENTION AND EDUCATION IN THE COMMUNITY	3
ACED 160	PHARMACOLOGY OF DRUGS OF ABUSE	3
ACED 164	ADOLESCENT ADDICTION ASSESSMENT & TREATMENT	3
ACED 170	AIR- AND BLOOD-BORNE PATHOGENS	3
ACED 201	THEORIES OF COUNSELING ²	3
ACED 202	MULTI-CULTURAL ADDICTIONS COUNSELING	3
ACED 203	CASE MANAGEMENT IN ADDICTION MEDICINE	3
ACED 205	ADVANCED TECHNIQUES FOR ADDICTION COUNSEL	3
ACED 210 & ACED 211	FIELD PLACEMENT I and FIELD PLACEMENT II	12

General Electives

Complete as many courses as necessary to reach 90 credits

Total **90**

- ¹ May count for both Human Relations or Social Science distribution.
- ² 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)
- 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.

Addiction Counselor Education (AA)

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

Students who earn Clark College's Associate in Arts degree qualify to transfer to most Washington colleges and universities with junior standing. Lower-division course requirements will vary depending on the transfer institution. Contact an advisor at the transfer institution to determine required coursework as soon as possible.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
Subtotal		5

Oral Communication

Course Options (p. 311)	5
Subtotal	5

Quantitative Skills

Course Options (p. 311)	5
Subtotal	5

Health & Physical Education

Course Options (p. 311)	3
Subtotal	3

Humanities

Course Options (p. 311) ¹	15
Subtotal	15

Social Sciences

PSYC&100 GENERAL PSYCHOLOGY	5
Select 10 additional credits/units from two other departments (p. 312)	10
Subtotal	15

Natural Sciences

Course Options (p. 312) ²	15
Subtotal	15

Major Area Requirements

ACED 101 SURVEY OF ADDICTIONOLOGY	3-5
or HSSA&101 INTRO TO ADDICTIVE DRUGS	
ACED 122 INTRODUCTION TO ADDICTIONS COUNSELING SKILLS	3
ACED 125 GROUP COUNSELING IN ADDICTIONS	3
ACED 136 LAW AND ETHICS IN ADDICTIONS COUNSELING	3
ACED 160 PHARMACOLOGY OF DRUGS OF ABUSE	3
ACED 201 THEORIES OF COUNSELING	3
PSYC&200 LIFESPAN PSYCHOLOGY ³	5
Additional Specified Electives	4
Total Credits/Units	90-92

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.

Refer to the Degree and Certificate Requirements section in the Clark College Catalog to identify the courses needed to satisfy the general education 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:

- 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.

ART

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) (p. 13)
- Graphic Design Concentration AA (p. 14)
- Studio Art (AFA) (p. 15)
- Studio Arts Concentration (p. 17)

Graphic Design (AFA)

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

The Art Department is offering this specialized, two-year degree intended to prepare students wishing to transfer into competitive-entry design programs at baccalaureate institutions. The degree may also well serve those looking to acquire a solid foundation in graphic design with the goal of seeking employment opportunities with just the associate degree, including those already holding a degree in another field who are looking to change careers.

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 Computer Graphics Technology (CGT) department's career and technical degrees in Web and Graphic Design, including an Associate of Applied Technology in Web and Graphic Design, the Graphic Design Certificate of Proficiency or the Web Design Certificate of Proficiency.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
<i>Quantitative Skills</i>		
Select one from the following:		5
MATH&107	MATH IN SOCIETY (recommended)	

Select five credits/untils from any college level Math class (p. 311)

<i>Health & Physical Education</i>		
Select one from the following:		3
HPE 258	FITNESS-WELLNESS	
or HPE 266	MIND BODY HEALTH	
OR		
Select two credits/units of Health and one credit/unit of Physical Education (p. 311)		
<i>Humanities</i>		
Choose one of the recommended courses: ¹		
ASL& 121	AM SIGN LANGUAGE I	5
or ASL& 122	AM SIGN LANGUAGE II	
or ASL& 123	AM SIGN LANGUAGE III	
CMST&102	INTRO TO MASS MEDIA	5
DRMA 154	INTRODUCTION TO CINEMA	5
ENGL 173	POPULAR CULTURE	5
JAPN&121	JAPANESE I	5
or JAPN&122	JAPANESE II	
or JAPN&123	JAPANESE III	
SPAN&121	SPANISH I	5
or SPAN&122	SPANISH II	
or SPAN&123	SPANISH III	
<i>Social Sciences</i>		5
CMST&230	SMALL GROUP COMMUNICATION	
<i>Natural Sciences</i>		
Select five credits/units from a lab science (p. 312)		5
Major Area Requirements		
<i>Fine Arts Foundations</i>		
ART 101	2D ART AND DESIGN	5
ART 103	DRAWING I	3
ART 104	OBSERVATIONAL DRAWING	4
or ART 203	THE HUMAN FIGURE I	
ART 110	CREATIVITY AND CONCEPT	3
<i>Digital Media Arts</i>		
DMA 101	PHOTOSHOP RASTER GRAPHICS	4
DMA 102	ILLUSTRATOR VECTOR GRAPHICS	4
<i>Graphic Design</i>		
ART 172	GRAPHIC DESIGN EXPLORATION	3
ART 173	GRAPHIC DESIGN STUDIO I	4
ART 174	TYPOGRAPHY I	3
ART 215	PORTFOLIO DEVELOPMENT	3
ART 270	PUBLICATION PRODUCTION	9
ART 271	TYPOGRAPHY II	5
ART 272	GRAPHIC DESIGN HISTORY	5
ART 273	GRAPHIC DESIGN STUDIO II	4
ART 274	GRAPHIC DESIGN STUDIO III	4
Choose 3 electives from the list below		
ART 105	CONTEMPORARY DRAWING PRACTICES	4
ART 118	TIME-BASED ART AND DESIGN	4
ART 120	INTRODUCTION TO PRINTMAKING	3
or ART 121	PRINTMAKING II	

ART 123	PHOTOGRAPHY I	5
or ART 124	PHOTOGRAPHY II	
ART 204	THE HUMAN FIGURE II	4
ART 208	DIGITAL PAINTING & ILLUSTRATION	4
ART 257	PAINTING I	5
or ART 258	PAINTING II	
ART 260	WATERCOLOR I	4
or ART 261	WATERCOLOR II	
DMA 104	MOTION GRAPHICS AND ANIMATION I	4
DMA 114	PROFESSIONAL PRACTICES AND PORTFOLIO I	4
DMA 199	COOPERATIVE WORK EXPERIENCE	4
DMA 201	VIDEO AND SOUND PRODUCTION I	4
DMA 202	VIDEO AND SOUND PRODUCTION II	4
DMA 204	MOTION GRAPHICS AND ANIMATION II	4
DMA 214	PROFESSIONAL PRACTICES AND PORTFOLIO II	4
DMA 215	PROFESSIONAL STUDIO EXPERIENCE	4
ENGL 128	GRAPHIC FICTION WRITING	5
ENGL 277	LITERARY PUBLICATION	5
Total		94-99

¹ World Languages 121, 122 or 123 recommended if you do not have two years of high school foreign language or equivalent.

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)

Graphic Design Concentration AA

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

Code	Title	Credits/ Units
General Education		
COLL 101	COLLEGE ESSENTIALS: INTRODUCTION TO CLARK	2
<i>Communication</i>		
ENGL&101	ENGLISH COMPOSITION I	5
ENGL&102	ENGLISH COMPOSITION II	5
<i>Quantitative/Symbolic Reasoning</i>		
MATH&107	MATH IN SOCIETY	5
<i>Social Sciences</i>		
CMST&230	SMALL GROUP COMMUNICATION	5
Choose Two more courses from recommended list		
GEOG&200	HUMAN GEOGRAPHY	5
SOC& 101	INTRO TO SOCIOLOGY	5
PSYC&100	GENERAL PSYCHOLOGY	5
WS 101	INTRODUCTION TO WOMEN'S STUDIES	5
<i>Natural Sciences</i>		
ENGR&104	INTRODUCTION TO DESIGN (recommended)	5
Course Options (p. 312)		10
<i>Health and Physical Education</i>		
HPE 258	FITNESS-WELLNESS	3
or HPE 266	MIND BODY HEALTH	
or 2 credits of Health plus 1 credit of Physical Education		
<i>Humanities</i>		
Chose one of the following recommended courses:		
ASL& 121	AM SIGN LANGUAGE I	5
or ASL& 122	AM SIGN LANGUAGE II	
or ASL& 123	AM SIGN LANGUAGE III	
CMST&102	INTRO TO MASS MEDIA	5
DRMA 154	INTRODUCTION TO CINEMA	5
ENGL 173	POPULAR CULTURE	5
JAPN&121	JAPANESE I	5
or JAPN&122	JAPANESE II	
or JAPN&123	JAPANESE III	
SPAN&121	SPANISH I	5
or SPAN&122	SPANISH II	
or SPAN&123	SPANISH III	
<i>Major Area Requirements</i>		
ART 101	2D ART AND DESIGN	5

ART 103	DRAWING I	3
ART 173	GRAPHIC DESIGN STUDIO I	4
ART 174	TYPOGRAPHY I	3
ART 272	GRAPHIC DESIGN HISTORY	5
DMA 102	ILLUSTRATOR VECTOR GRAPHICS	4
<i>Major Area Requirements</i>		
Complete enough courses to reach 90 credits		
ART 104	OBSERVATIONAL DRAWING	4
ART 105	CONTEMPORARY DRAWING PRACTICES	4
ART 110	CREATIVITY AND CONCEPT	3
ART 118	TIME-BASED ART AND DESIGN	4
ART 120	INTRODUCTION TO PRINTMAKING	3
ART 121	PRINTMAKING II	3
ART 123	PHOTOGRAPHY I	5
ART 124	PHOTOGRAPHY II	5
ART 172	GRAPHIC DESIGN EXPLORATION	3
ART 203	THE HUMAN FIGURE I	4
ART 204	THE HUMAN FIGURE II	4
ART 208	DIGITAL PAINTING & ILLUSTRATION	4
ART 215	PORTFOLIO DEVELOPMENT	3
ART 257	PAINTING I	5
ART 258	PAINTING II	5
ART 260	WATERCOLOR I	4
ART 261	WATERCOLOR II	4
ART 270	PUBLICATION PRODUCTION	9
ART 271	TYPOGRAPHY II	5
ART 273	GRAPHIC DESIGN STUDIO II	4
ART 274	GRAPHIC DESIGN STUDIO III	4
DMA 101	PHOTOSHOP RASTER GRAPHICS	4
DMA 104	MOTION GRAPHICS AND ANIMATION I	4
DMA 114	PROFESSIONAL PRACTICES AND PORTFOLIO I	4
or DMA 214	PROFESSIONAL PRACTICES AND PORTFOLIO II	
DMA 199	COOPERATIVE WORK EXPERIENCE	4
DMA 201	VIDEO AND SOUND PRODUCTION I	4
or DMA 202	VIDEO AND SOUND PRODUCTION II	
DMA 202	VIDEO AND SOUND PRODUCTION II	4
DMA 204	MOTION GRAPHICS AND ANIMATION II	4
DMA 214	PROFESSIONAL PRACTICES AND PORTFOLIO II	4
DMA 215	PROFESSIONAL STUDIO EXPERIENCE	4

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)

Studio Art (AFA)

Academic Plans, known as programs, include a overview description and a summary of program requirements. You can search the online catalog via the 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.

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.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
Subtotal		5
<i>Quantitative Skills</i>		
Course Options (p. 311)		5
Subtotal		5
<i>Social Sciences</i>		

Course Options (p. 312)	5
Subtotal	5
<i>Humanities</i>	
Select five credits/units from the AA distribution list of Humanities A-list classes (p. 311) ¹	5
Subtotal	5
<i>Natural Sciences</i>	
Course Options (p. 312) ²	5
Subtotal	5
<i>Health & Physical Education</i>	
Course Options (p. 311)	3
Subtotal	3
Major Area Requirements	
<i>Fine Art Foundations</i>	
ART 101 2D ART AND DESIGN	5
ART 103 DRAWING I	3
ART 110 CREATIVITY AND CONCEPT	3
ART 117 THREE-DIMENSIONAL DESIGN	4
ART 118 TIME-BASED ART AND DESIGN	4
ART 104 OBSERVATIONAL DRAWING	4
or ART 203 THE HUMAN FIGURE I	
or ART 105 CONTEMPORARY DRAWING PRACTICES	
ART 215 PORTFOLIO DEVELOPMENT	3
<i>Art History</i>	
Select two from List A and one more from either list A or B:	15
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 IN THE TWENTIETH CENTURY	
List B:	
ART 225 ART HISTORY: ASIAN ART	
ART 226 SURVEY OF NON-WESTERN ART	
ART 250 WOMEN ARTISTS THROUGH HISTORY	
ART 272 GRAPHIC DESIGN HISTORY	
<i>Studio Concentration</i>	
Select a minimum of 11 credits/units from one of the following studio concentration areas: ³	11
Metal Arts	
Photography	
Ceramics	
Drawing/Painting	
Illustration	
General Electives	7
Any additional courses of 100 level or higher may apply. Physical Education activity credits are limited to a maximum of three (3) credits regardless of distribution area in the DTA degree.	
Total	90-91

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

Studio Concentrations

Metal Arts

Code	Title	Credits/Units
ART 189	METAL ARTS I	4
ART 190	METAL ARTS II	4
ART 191	METAL ARTS III	4

Photography

Code	Title	Credits/Units
ART 123	PHOTOGRAPHY I	5
ART 124	PHOTOGRAPHY II	5
ART 125	PHOTOGRAPHY III	5

Ceramics

Code	Title	Credits/Units
ART 180	CERAMICS I	5
ART 181	CERAMICS II	5
ART 182	CERAMICS III	5

Drawing/Painting

Code	Title	Credits/Units
ART 104	OBSERVATIONAL DRAWING	4
ART 105	CONTEMPORARY DRAWING PRACTICES	4
ART 120	INTRODUCTION TO PRINTMAKING	3
ART 121	PRINTMAKING II	3
ART 122	PRINTMAKING III	3
ART 203	THE HUMAN FIGURE I	4
ART 204	THE HUMAN FIGURE II	4
ART 257	PAINTING I	5
ART 258	PAINTING II	5
ART 259	PAINTING III	5
ART 260	WATERCOLOR I	4
ART 261	WATERCOLOR II	4
ART 262	WATERCOLOR III	4

Illustration

Code	Title	Credits/Units
ART 105	CONTEMPORARY DRAWING PRACTICES	4
ART 208	DIGITAL PAINTING & ILLUSTRATION	4
ART 260	WATERCOLOR I	4

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)

Studio Arts Concentration

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the 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.

This pathway fulfills all the academic requirements of the general AA/DTA degree at Clark College, while still allowing students to gain a solid foundation in art practice and theory. The AA/DTA with a concentration in Studio Art may be the best pathway for students with a strong interest in art, and the intent to pursue their art practice through a related area such as business, education, or social services, for example. Students who earn Clark College's Associate in Arts (DTA) degree will normally be able to transfer to most Washington (and several Oregon) public colleges and universities with junior standing, having met all the lower-division (100- and 200- level) academic course requirements. This does not guarantee entry into a specific major area at the transfer school, however. Contact an advisor at the transfer institution to determine required coursework and specific entry requirements as early as possible.

Code	Title	Credits/ Units
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General Education Requirements

<i>Communication Skills</i>		10
ENGL&101	ENGLISH COMPOSITION I	5
ENGL&102	ENGLISH COMPOSITION II	5

Quantitative Skills

MATH&107	MATH IN SOCIETY (recommended)	5
or any qualifying college level math course		

<i>Health and Physical Education</i>		3
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Course Options (p. 311)

<i>Humanities</i>		10
ART 220	ART HISTORY: ANCIENT TO LATE ANTIQUE	5
or ART 221	ART HISTORY: MEDIEVAL-RENAISSANCE	
or ART 222	ART HISTORY: BAROQUE-MODERN	

5 credits of A-list Humanities (HA) from a department other than ART		5
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<i>Social Sciences</i>		15
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CMST&230	SMALL GROUP COMMUNICATION (recommend) ¹	5
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Course Options (p. 312)

<i>Natural Sciences</i>		15
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Course Options (p. 312)

<i>Additional Requirements</i>		
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COLL 101	COLLEGE ESSENTIALS: INTRODUCTION TO CLARK	2
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Code	Title	Credits/ Units
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Art CORE Courses: Drawing Focus		7
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ART 103	DRAWING I	3
ART 104	OBSERVATIONAL DRAWING	4
or ART 105	CONTEMPORARY DRAWING PRACTICES	
or ART 203	THE HUMAN FIGURE I	

AND

Code	Title	Credits/ Units
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Art CORE Courses: 2D Focus (choose a minimum of 5 credits from the following list)

ART 101	2D ART AND DESIGN	5
ART 110	CREATIVITY AND CONCEPT	3
ART 257	PAINTING I	5
ART 258	PAINTING II	5

OR

Code	Title	Credits/ Units
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Art CORE Courses: 3D-Focus (choose two of the following)

ART 117	THREE-DIMENSIONAL DESIGN	4
ART 180	CERAMICS I	5
ART 181	CERAMICS II	5
ART 189	METAL ARTS I	4
ART 190	METAL ARTS II	4

Code	Title	Credits/ Units
<i>Art Choice Courses</i>		
Choose any two additional ART-prefix classes. Cannot be classes used to satisfy other areas of this degree		6-10
<i>General Electives</i>		0-7
Any additional courses of 100 level or higher may apply. Physical Education activity credits are limited to a maximum of three (3) credits regardless of distribution area in the DTA degree.		
Total Credits		90

¹Fulfills Oral Communication (OC) requirement

ASSOCIATE IN ARTS (AA) - GENERAL TRANSFER

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 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.
- Maintain a minimum cumulative college-level GPA of 2.00 or higher.
- Thirty (30) credits minimum must be completed at Clark College to meet Academic Residency.
- Submit a graduation application by the appropriate deadline.

General Credit Restrictions

- Credit by Department: Ten (10) credits maximum from any single department can be used to fulfill Humanities, Social Sciences and Natural Sciences distribution requirements.
- World Language: Five (5) credits 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 maximum in PE activity can apply toward the degree.

Other Applicable Credit Options

- Advanced Placement (AP) and/or International Baccalaureate (IB): A maximum of sixty (60) credits 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 to be applied to a degree. Credits will be used to fulfill general elective requirements only.
- Course Challenge: Students may use credits earned from successful course challenges toward 25% of the degree or certificate. Credit by course challenge will meet academic residency requirements.
- 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. If Tech Prep/Direct Credit courses apply to a professional technical degree or certificate, there is no limit to the number of credits that can be applied.
- Cooperative Work Experience: No more than fifteen (15) credits may be applied to the associate degree.
- Special Projects: No more than fifteen (15) credits in Special Projects will be allowed toward the Associate in Arts degree.
- Military Experience: Credits may earned by previous military experience. Please contact the Veterans Affairs Office at Clark College for further information. Credit awarded for military experience may be granted for up to 25% of the degree and/or certificate.
- Pass/Fail Grading Option: Sixty (60) credits 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 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 by Challenge coursework will meet academic residency requirements.
- Associate in Arts - Direct Transfer (AA) (p. 19)

Associate in Arts - Direct Transfer (AA)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
Select an option:		10
Option One		

Option Two

Quantitative Skills/Symbolic Reasoning Skills¹

Choose from the courses below to complete the minimum of five (5) credits/units: 5

MATH 103	COLLEGE TRIGONOMETRY or MATH 103 COLLEGE TRIG WITH SUPPLEMENTAL INSTRUCTION
MATH 105	FINITE MATHEMATICS or MATH 105 FINITE MATH WITH SUPPLEMENTAL INSTRUCTION
MATH 111	COLLEGE ALGEBRA or MATH 111 COLLEGE ALGEBRA WITH SUPPLEMENTAL INSTRUCTION
MATH 122	MATH FOR ELEMENTARY TEACHERS
MATH 123	MATH FOR ELEMENTARY TEACHERS
MATH 124	MATH FOR ELEMENTARY TEACHERS
MATH 140	CALCULUS FOR LIFE SCIENCES
MATH 215	LINEAR ALGEBRA
MATH 221	DIFFERENTIAL EQUATIONS
MATH&107	MATH IN SOCIETY
MATH&146	INTRODUCTION TO STATISTICS
MATH&148	BUSINESS CALCULUS
MATH&151	CALCULUS I
MATH&152	CALCULUS II
MATH&153	CALCULUS III
MATH&254	CALCULUS IV
PHIL&117	TRADITIONAL LOGIC
PHIL&120	SYMBOLIC LOGIC

Health & Physical Education

Select an option: 3

Option One

Option Two

Oral Communications⁸

CMST&210	INTERPERSONAL COMMUNICATION	5
or CMST&220	PUBLIC SPEAKING	
or CMST&230	SMALL GROUP COMMUNICATION	

Additional Requirements

COLL 101	COLLEGE ESSENTIALS: INTRODUCTION TO CLARK	2
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Distribution Requirements**Humanities**

Course Options (p. 311)	2	15
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Social Sciences

Course Options (p. 312)	3	15
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Natural Sciences

Course Options (p. 312)	4	15
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Elective Requirements⁵**Specified Electives**

Course Options (p. 313)	6	12
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General Electives⁹

Course Options (p. 313)	7	3
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Total Credits/Units		90
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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 one subject area. You must include at least one lab science.

⁵ 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.

⁶ Approved courses that apply: C, Q, HA, HB, SS, NS, SE, HE, HPE, PE, OC.

A maximum of two (2) credits/units in PE activity can apply toward this area. Courses coded as HPE count as one (1) credit/unit of PE activity.

⁷ These courses may be vocational in nature from Career and Technical education courses. The transferability of the Career-Technical courses and any ENL 100-level courses is determined by the receiving baccalaureate institution.

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

⁸ Oral Communications courses may fulfill an additional distribution area.

⁹ COLL 101 can fulfill 2(two) credits/units of general electives

Communication Skills Options

Option One

Code	Title	Credits/Units
ENGL&101	ENGLISH COMPOSITION I	5
Select one from the following:		5
ENGL&102	ENGLISH COMPOSITION II	
ENGL&235	TECHNICAL WRITING	
ENGL 110	COMPOSITION FOR LITERATURE	
Total Credits/Units		10

Option Two

Code	Title	Credits/Units
ENGL 103	ADVANCED ENGLISH COMPOSITION	3
Select one from the following:		3-5

ENGL 108	WRITING ABOUT FILM	
ENGL 110	COMPOSITION FOR LITERATURE	
BUS 211	BUSINESS COMMUNICATIONS	
Select one from the following:		5
CMST&210	INTERPERSONAL COMMUNICATION	
CMST&220	PUBLIC SPEAKING	
CMST&230	SMALL GROUP COMMUNICATION	
Total Credits/Units		11-13

- 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)

Health & Physical Education Options

Option One

Code	Title	Credits/ Units
Select one from the following:		2-3
HLTH 100	FOOD AND YOUR HEALTH	
HLTH 101	HEALTH FOR ADULT LIVING	
HLTH 103	ENVIRONMENTAL HEALTH	
HLTH 104	WEIGHT AND YOUR HEALTH	
HLTH 108	HAPPINESS AND YOUR HEALTH	
HLTH 206	HUMAN SEXUALITY	
HLTH 207	WOMEN'S HEALTH	
HLTH 208	MEN'S HEALTH	
HLTH 210	MULTICULTURAL HEALTH	
HLTH 212	CANNABIS AND YOUR HEALTH	2
PE activity		
Total Credits/Units		4-5

Option Two

Code	Title	Credits/ Units
HPE 258	FITNESS-WELLNESS	3
or HPE 266	MIND BODY HEALTH	
Total Credits/Units		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:

- 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)

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
- Earth Science
- Environmental/Resources Sciences
- Geology
- Associate in Science Transfer - General (AST1) (p. 22)

Associate in Science Transfer - General (AST1)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
Select one from the following:		5
ENGL&101	ENGLISH COMPOSITION I	
College-Level Composition Course (p. 311)		
Subtotal		5
<i>Quantitatives Skills</i>		
MATH&151	CALCULUS I ¹	5
MATH&152	CALCULUS II ²	5
Subtotal		10
<i>Health & Physical Education</i>		
Select one option (p. 311)		3
Subtotal		3
<i>Humanities (HA) (HB) and Social Sciences (SS) course(s)</i>		
Humanities (HA) Course (p. 311)		5
Social Sciences (SS) Course (p. 312)		5
Select an additional five credits/units from Humanities (HA) or (HB) or Social Science (SS) courses (p. 311)		5
Subtotal		15
Pre-major Program Requirements ³		
<i>General Chemistry Sequence</i>		
CHEM&141	GENERAL CHEMISTRY I	4
CHEM&142	GENERAL CHEMISTRY II	4
CHEM&143	GENERAL CHEMISTRY III	4
CHEM&151	GENERAL CHEMISTRY LABORATORY I	1
CHEM&152	GENERAL CHEMISTRY LABORATORY II	1
CHEM&153	GENERAL CHEMISTRY LABORATORY III	2
<i>Additional Sequence</i>		

Select one sequence from the following:		15
Biology Sequence		
Physics Sequence (100 level)		
Physics Sequence (200 level)		
<i>Additional mathematics course(s) ⁴</i>		
MATH&153	CALCULUS III	5
or MATH&146 INTRODUCTION TO STATISTICS		
<i>Additional requirements for intended major ⁵</i>		
Select one from the following:		10-15
BIOL 101	ENVIRONMENTAL BIOLOGY	
BIOL 105	SMALL WORLD ANTIBIOTICS RESEARCH I	
BIOL 139	INTRODUCTION TO WILDLIFE	
BIOL 140	MAMMALS OF THE NORTHWEST	
BIOL 141	BIRDS OF THE PACIFIC NORTHWEST	
BIOL 142	FRESHWATER FISHES OF THE PACIFIC NORTHWEST	
BIOL 143	INTRODUCTION TO FORESTRY	
BIOL 145	REPTILES & AMPHIBIANS OF THE PACIFIC NW	
BIOL 167	HUMAN GENETICS	
BIOL 208	FIELD STUDIES IN BIOLOGY	
BIOL&221	MAJORS ECOLOGY/EVOLUTION	
BIOL&222	MAJORS CELL/MOLECULAR	
BIOL&223	MAJORS ORGANISMAL PHYS	
BIOL 224	FLOWERING PLANTS OF THE PACIFIC NORTHWEST	
BIOL&241	HUMAN ANATOMY AND PHYSIOLOGY I	
BIOL&242	HUMAN ANATOMY AND PHYSIOLOGY II	
BIOL&251	HUMAN A & P I	
BIOL&252	HUMAN A & P II	
BIOL&253	HUMAN A & P III	
BIOL&260	MICROBIOLOGY	
CHEM&241	ORGANIC CHEMISTRY I	
CHEM&242	ORGANIC CHEMISTRY II	
CHEM&243	ORGANIC CHEMISTRY III	
CHEM&251	ORGANIC CHEMISTRY LABORATORY I	
CHEM&252	ORGANIC CHEMISTRY LABORATORY II	
CHEM&253	ORGANIC CHEMISTRY LABORATORY III	
ENVS 218	INTRODUCTION TO ECOLOGICAL RESTORATION	
GEOL 102	INTRO TO GEOL II: EARTH'S SURFACE PROCESSES	
GEOL 218	FIELD STUDIES IN GEOLOGY	
GEOL&101	INTRO PHYSICAL GEOLOGY	
MATH 215	LINEAR ALGEBRA	
MATH 221	DIFFERENTIAL EQUATIONS	
MATH&254	CALCULUS IV	
PHYS&124	GENERAL PHYSICS LAB I	
PHYS&125	GENERAL PHYSICS LAB II	
PHYS&126	GENERAL PHYSICS LAB III	
PHYS&134	GENERAL PHYSICS I	
PHYS&135	GENERAL PHYSICS II	
PHYS&136	GENERAL PHYSICS III	
PHYS&231	ENGINEERING PHYSICS LAB I	
PHYS&232	ENGINEERING PHYSICS LAB II	

PHYS&233	ENGINEERING PHYSICS LAB III
PHYS&241	ENGINEERING PHYSICS I
PHYS&242	ENGINEERING PHYSICS II
PHYS&243	ENGINEERING PHYSICS III
Remaining Credits	
Sufficient additional college-level credits/units so that the total credits/units earned are at least 90 term credits/units ⁶	
Total Credits/Units	90

- ¹ MATH&151 (Calculus I) requires the successful completion of both MATH 103 (trigonometry) and MATH 111 (college algebra), 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-quarter sequence; check with chosen 4-year school regarding course selection to better prepare for major.
- 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.

Pre-Major Program Requirements

Biology Sequence

Code	Title	Credits/ Units
BIOL&221	MAJORS ECOLOGY/EVOLUTION	5
BIOL&222	MAJORS CELL/MOLECULAR	5
BIOL&223	MAJORS ORGANISMAL PHYS	5
Total Credits/Units		15

Physics Sequence (100 level)

Code	Title	Credits/ Units
PHYS&124	GENERAL PHYSICS LAB I	1
PHYS&125	GENERAL PHYSICS LAB II	1
PHYS&126	GENERAL PHYSICS LAB III	1
PHYS&134	GENERAL PHYSICS I	4
PHYS&135	GENERAL PHYSICS II	4
PHYS&136	GENERAL PHYSICS III	4
Total Credits/Units		15

Physics Sequence (200 level)

Code	Title	Credits/ Units
PHYS&231	ENGINEERING PHYSICS LAB I	1
PHYS&232	ENGINEERING PHYSICS LAB II	1
PHYS&233	ENGINEERING PHYSICS LAB III	1
PHYS&241	ENGINEERING PHYSICS I	4
PHYS&242	ENGINEERING PHYSICS II	4
PHYS&243	ENGINEERING PHYSICS III	4
Total Credits/Units		15

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.

ASSOCIATE IN SCIENCE – TRACK 2 (AST2)

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

AST - Concentration Options:

- Atmospheric Science
- Computer Science
- Engineering
- Physics

- Associate in Science – General (AST2) (p. 24)

Associate in Science – General (AST2)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
Subtotal		5
<i>Quantitative Skills/Symbolic Reasoning Skills</i>		
MATH&151	CALCULUS I ¹	5
MATH&152	CALCULUS II ²	5
Subtotal		10
<i>Health & Physical Education</i>		
Select one option (p. 311)		3
Subtotal		3
<i>Humanities & Social Sciences</i>		
Humanities (HA) Course Options (p. 311)		5
Social Sciences (SS) Course Options (p. 312)		5
Select an additional five credits/units from Humanities (HA) or (HB) or Social Science (SS) courses (p. 311) ³		5
Subtotal		15
<i>Additional Math Courses</i>		
MATH&153	CALCULUS III	5
or MATH&146 INTRODUCTION TO STATISTICS		
Subtotal		5
Pre-Major Program Requirements		
Select one sequence from the following: ⁴		25
Engineering		
Non-Engineering		
Elective Requirements		
Select one from the following:		32
Engineering Major		

Non-Engineering Major		90
Total Credits/Units		
¹	MATH&151 (Calculus I) requires the successful completion of both MATH 103 (trigonometry) and MATH 111 (college algebra), 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 from math courses that have MATH&152 as a prerequisite.	
³	A maximum of five (5) credits/units of Humanities B (HB) coursework may be applied.	
⁴	All students planning to earn the Associate in Science – Track 2 degree are required to complete the following course sequences. Please note that there are different sequences for Engineering and Non-engineering majors. The sequences taken are dependent on the major of the student. Sequences should be started and finished at the same institution to ensure proper transfer. Students MUST consult with faculty or advising staff to pick the correct sequences.	

Pre-Major Program Requirements

Engineering Major

Code	Title	Credits/ Units
CHEM&141	GENERAL CHEMISTRY I	4
CHEM&151	GENERAL CHEMISTRY LABORATORY I	1
PHYS&231	ENGINEERING PHYSICS LAB I	1
PHYS&232	ENGINEERING PHYSICS LAB II	1
PHYS&233	ENGINEERING PHYSICS LAB III	1
PHYS&241	ENGINEERING PHYSICS I	4
PHYS&242	ENGINEERING PHYSICS II	4
PHYS&243	ENGINEERING PHYSICS III	4
Total Credits/Units		20

Non-Engineering Major

Complete one of the Physics sequences — Consult with the baccalaureate institution to see which sequence is required.

Sequence One

Code	Title	Credits/ Units
PHYS&124	GENERAL PHYSICS LAB I	1
PHYS&125	GENERAL PHYSICS LAB II	1
PHYS&126	GENERAL PHYSICS LAB III	1
PHYS&134	GENERAL PHYSICS I	4
PHYS&135	GENERAL PHYSICS II	4
PHYS&136	GENERAL PHYSICS III	4

Non-Engineering Additional MATH Courses

MATH&153	CALCULUS III	5
Total Credits/Units		20

Sequence Two

Code	Title	Credits/ Units
PHYS&231	ENGINEERING PHYSICS LAB I	1
PHYS&232	ENGINEERING PHYSICS LAB II	1
PHYS&233	ENGINEERING PHYSICS LAB III	1

PHYS&241	ENGINEERING PHYSICS I	4
PHYS&242	ENGINEERING PHYSICS II	4
PHYS&243	ENGINEERING PHYSICS III	4
CHEM&141	GENERAL CHEMISTRY I	4
CHEM&151	GENERAL CHEMISTRY LABORATORY I	1
Non-Engineering Additional MATH Courses		
MATH&153	CALCULUS III	5
Total Credits/Units		25

Elective Requirements

Engineering Major

Code	Title	Credits/ Units
Select 32 credits/units from the following:		32
CHEM&142	GENERAL CHEMISTRY II	
CHEM&143	GENERAL CHEMISTRY III	
CHEM&152	GENERAL CHEMISTRY LABORATORY II	
CHEM&153	GENERAL CHEMISTRY LABORATORY III	
CHEM&241	ORGANIC CHEMISTRY I	
CHEM&242	ORGANIC CHEMISTRY II	
CHEM&243	ORGANIC CHEMISTRY III	
CHEM&251	ORGANIC CHEMISTRY LABORATORY I	
CHEM&252	ORGANIC CHEMISTRY LABORATORY II	
CHEM&253	ORGANIC CHEMISTRY LABORATORY III	
CSE 101	ENGINEERING AND COMPUTER SCIENCE ORIENTATION	
CSE 120	INTRO TO ELECTRICAL/COMPUTING	
CSE 121	INTRODUCTION TO C	
CSE 215	DISCRETE STRUCTURES	
CSE 222	INTRODUCTION TO DATA STRUCTURES	
CSE 223	DATA STRUCTURES & OBJECT-ORIENTED PROGRAMMING	
CSE 224	PROGRAMMING TOOLS	
CSE 290	SPECIAL PROJECTS	
ENGR&104	INTRODUCTION TO DESIGN	
ENGR&215	DYNAMICS	
ENGR&224	THERMODYNAMICS	
ENGR&225	MECHANICS OF MATERIALS	
ENGR 101	ENGINEERING AND COMPUTER SCIENCE ORIENTATION	
ENGR 107	INTRO TO AEROSPACE ENGINEERING	
ENGR 109	INTRODUCTION TO ENGINEERING	
ENGR 113	ENGINEERING SKETCHING AND VISUALIZATION	
ENGR 115	GEOMETRIC DIMENSIONING AND TOLERANCING	
ENGR 120	INTRO TO ELECTRICAL/COMPUTER SCI & ENGINEERING	
ENGR 121	FIELD SURVEY I	
ENGR 150	BASIC SOLIDWORKS	
ENGR 208	FUNDAMENTALS OF FLIGHT	
ENGR 221	MATERIALS SCIENCE	
ENGR 239	MANUFACTURING PROCESSES	
ENGR 240	APPLIED NUMERICAL METHODS FOR ENGINEERS	
ENGR 250	DIGITAL LOGIC DESIGN	

ENGR 252	ELECTRICAL CIRCUITS AND SIGNALS	
ENGR 253	SIGNALS AND SYSTEMS	
ENGR 270	DIGITAL SYSTEMS AND MICROPROCESSORS	
ENGR 280	SELECTED TOPICS	
MATH&254	CALCULUS IV	
MATH 215	LINEAR ALGEBRA	
MATH 221	DIFFERENTIAL EQUATIONS	
Total Credits/Units		32

Non-Engineering Major

Code	Title	Credits/ Units
Select 32 credits/units from the following:		32
BIOL&100	SURVEY OF BIOLOGY	
BIOL&221	MAJORS ECOLOGY/EVOLUTION	
BIOL&222	MAJORS CELL/MOLECULAR	
BIOL&223	MAJORS ORGANISMAL PHYS	
BIOL&251	HUMAN A & P I	
BIOL&252	HUMAN A & P II	
BIOL&253	HUMAN A & P III	
BIOL&260	MICROBIOLOGY	
BIOL 101	ENVIRONMENTAL BIOLOGY	
BIOL 164	HUMAN BIOLOGY	
BIOL 165	HUMAN BIOLOGY LAB	
BIOL 167	HUMAN GENETICS	
BIOL 208	FIELD STUDIES IN BIOLOGY	
BIOL 224	FLOWERING PLANTS OF THE PACIFIC NORTHWEST	
CHEM&142	GENERAL CHEMISTRY II	
CHEM&143	GENERAL CHEMISTRY III	
CHEM&152	GENERAL CHEMISTRY LABORATORY II	
CHEM&153	GENERAL CHEMISTRY LABORATORY III	
CHEM&241	ORGANIC CHEMISTRY I	
CHEM&242	ORGANIC CHEMISTRY II	
CHEM&243	ORGANIC CHEMISTRY III	
CHEM&251	ORGANIC CHEMISTRY LABORATORY I	
CHEM&252	ORGANIC CHEMISTRY LABORATORY II	
CHEM&253	ORGANIC CHEMISTRY LABORATORY III	
CSE 120	INTRO TO ELECTRICAL/COMPUTING	
CSE 121	INTRODUCTION TO C	
CSE 215	DISCRETE STRUCTURES	
CSE 222	INTRODUCTION TO DATA STRUCTURES	
CSE 223	DATA STRUCTURES & OBJECT-ORIENTED PROGRAMMING	
CSE 224	PROGRAMMING TOOLS	
CSE 290	SPECIAL PROJECTS	
ENGR&104	INTRODUCTION TO DESIGN	
ENGR&215	DYNAMICS	
ENGR&224	THERMODYNAMICS	
ENGR&225	MECHANICS OF MATERIALS	
ENGR 101	ENGINEERING AND COMPUTER SCIENCE ORIENTATION	
ENGR 107	INTRO TO AEROSPACE ENGINEERING	

ENGR 109	INTRODUCTION TO ENGINEERING
ENGR 113	ENGINEERING SKETCHING AND VISUALIZATION
ENGR 115	GEOMETRIC DIMENSIONING AND TOLERANCING
ENGR 120	INTRO TO ELECTRICAL/COMPUTER SCI & ENGINEERING
ENGR 121	FIELD SURVEY I
ENGR 150	BASIC SOLIDWORKS
ENGR 221	MATERIALS SCIENCE
ENGR 239	MANUFACTURING PROCESSES
ENGR 240	APPLIED NUMERICAL METHODS FOR ENGINEERS
ENGR 250	DIGITAL LOGIC DESIGN
ENGR 252	ELECTRICAL CIRCUITS AND SIGNALS
ENGR 253	SIGNALS AND SYSTEMS
ENGR 270	DIGITAL SYSTEMS AND MICROPROCESSORS
ENGR 280	SELECTED TOPICS
ENVS&101	INTRODUCTION TO ENVIRONMENTAL SCIENCE
ENVS 109	INTEGRATED ENVIRONMENTAL SCIENCE
ENVS 218	INTRODUCTION TO ECOLOGICAL RESTORATION
MATH&153	CALCULUS III
MATH&254	CALCULUS IV
MATH 103	COLLEGE TRIGONOMETRY
MATH 111	COLLEGE ALGEBRA
MATH 215	LINEAR ALGEBRA
MATH 221	DIFFERENTIAL EQUATIONS
PHYS&231	ENGINEERING PHYSICS LAB I
PHYS&232	ENGINEERING PHYSICS LAB II
PHYS&233	ENGINEERING PHYSICS LAB III
PHYS&241	ENGINEERING PHYSICS I
PHYS&242	ENGINEERING PHYSICS II
PHYS&243	ENGINEERING PHYSICS III

Total Credits/Units

32

*Check with chosen 4-year school

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

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 Dealer 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.

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

- T-TEN Automotive (CP) (p. 27)
- T-TEN Automotive (AAT) (p. 27)
- HiTECC Automotive Technology (CP) (p. 28)
- HiTECC Automotive Technology (AAT) (p. 29)

T-TEN Automotive (CP)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
BTEC 106	APPLIED OFFICE ENGLISH ¹	3
Subtotal		3
<i>Computational Skills</i>		
Course Options (p. 322)		3
Subtotal		3
<i>Human Relations</i>		
Course Options (p. 322)		3

Subtotal		3
Major Area Requirements		
AUTO 150	INTRODUCTION TO TOYOTA	7
AUTO 151	TOYOTA ELECTRICAL I	7
AUTO 152	TOYOTA ELECTRICAL II	7
AUTO 153	TOYOTA BRAKES	7
AUTO 154	TOYOTA INTERNSHIP I	8
AUTO 155	TOYOTA STEERING AND SUSPENSION	7
AUTO 156	TOYOTA ENGINE PERFORMANCE I	7
AUTO 157	TOYOTA ENGINE PERFORMANCE II	7
AUTO 250	TOYOTA CLIMATE CONTROL	7
AUTO 251	TOYOTA INTERNSHIP II	4
AUTO 252	TOYOTA ENGINE MECHANICAL	7
AUTO 253	TOYOTA MANUAL TRANSMISSION	7
AUTO 254	AUTOMATIC TRANSMISSIONS	7
Total Credits/Units		98

¹ Recommended.

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/712A/Gedt.html>).

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.

T-TEN Automotive (AAT)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		

ENGL&101	ENGLISH COMPOSITION I ¹	5
Subtotal		5
<i>Computational Skills</i> ²		
Select one from the following:		5
MATH 103	COLLEGE TRIGONOMETRY ¹	
MATH&107	MATH IN SOCIETY ¹	
Subtotal		5
<i>Human Relations</i>		
SOC& 101	INTRO TO SOCIOLOGY ¹	5
Subtotal		
Major Area Requirements		
AUTO 150	INTRODUCTION TO TOYOTA	7
AUTO 151	TOYOTA ELECTRICAL I	7
AUTO 152	TOYOTA ELECTRICAL II	7
AUTO 153	TOYOTA BRAKES	7
AUTO 154	TOYOTA INTERNSHIP I	8
AUTO 155	TOYOTA STEERING AND SUSPENSION	7
AUTO 156	TOYOTA ENGINE PERFORMANCE I	7
AUTO 157	TOYOTA ENGINE PERFORMANCE II	7
AUTO 250	TOYOTA CLIMATE CONTROL	7
AUTO 251	TOYOTA INTERNSHIP II	4
AUTO 252	TOYOTA ENGINE MECHANICAL	7
AUTO 253	TOYOTA MANUAL TRANSMISSION	7
AUTO 254	AUTOMATIC TRANSMISSIONS	7
Total Credits/Units		104

¹ Recommended.

² College-Level Math 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)
- 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.

HiTECC Automotive Technology (CP)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog

via the the Academic Plan links on the right for a desired program or a specific course information.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
BTEC 106	APPLIED OFFICE ENGLISH ¹	3
Subtotal		3
<i>Computational Skills</i>		
Course Options (p. 322)		3
Subtotal		3
<i>Human Relations</i>		
Course Options (p. 322)		3
Subtotal		3
Major Area Requirements		
AUTO 160	INTRODUCTION TO DEALERSHIP OPERATIONS	7
AUTO 161	ELECTRICAL I	7
AUTO 162	ELECTRICAL II	7
AUTO 163	BRAKES	7
AUTO 164	INTERNSHIP I	8
AUTO 165	STEERING AND SUSPENSION	7
AUTO 166	ENGINE PERFORMANCE I	7
AUTO 167	ENGINE PERFORMANCE II	7
AUTO 260	CLIMATE CONTROL	7
AUTO 261	INTERNSHIP II	4
AUTO 262	ENGINE MECHANICAL	7
AUTO 263	MANUAL TRANSMISSION	7
AUTO 264	AUTOMATIC TRANSMISSIONS	7
Total Credits/Units		98

¹ Recommended.

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/712D/Gedt.html>).

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.

HiTECC Automotive Technology (AAT)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I ¹	5
Subtotal		5
<i>Computational Skills</i>		
Course Options (p. 322)		5
Subtotal		5
<i>Human Relations</i>		
SOC& 101	INTRO TO SOCIOLOGY ¹	5
Subtotal		5
Major Area Requirements		
AUTO 160	INTRODUCTION TO DEALERSHIP OPERATIONS	7
AUTO 161	ELECTRICAL I	7
AUTO 162	ELECTRICAL II	7
AUTO 163	BRAKES	7
AUTO 164	INTERNSHIP I	8
AUTO 165	STEERING AND SUSPENSION	7
AUTO 166	ENGINE PERFORMANCE I	7
AUTO 167	ENGINE PERFORMANCE II	7
AUTO 260	CLIMATE CONTROL	7
AUTO 261	INTERNSHIP II	4
AUTO 262	ENGINE MECHANICAL	7
AUTO 263	MANUAL TRANSMISSION	7
AUTO 264	AUTOMATIC TRANSMISSIONS	7
Total Credits/Units		104

¹ 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)
- 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.

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 of Health-Physical Education coursework.

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 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) (p. 30)

Bioengineering and Chemical Engineering (AST2)

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

Clark College Equivalents

Code	Title	Credits/ Units
Communication Skills		
ENGL&101	ENGLISH COMPOSITION I	5
Mathematics ¹		
MATH&151	CALCULUS I ²	5
MATH&152	CALCULUS II	5
MATH&153	CALCULUS III	5
MATH 221	DIFFERENTIAL EQUATIONS ³	5
Physics		
Complete the following Physics sequences with the required concurrent enrollment:		
<i>Sequence One</i>		
PHYS&241	ENGINEERING PHYSICS I ⁴	4

PHYS&231	ENGINEERING PHYSICS LAB I	1
<i>Sequence Two</i>		
PHYS&242	ENGINEERING PHYSICS II ⁵	4
PHYS&231	ENGINEERING PHYSICS LAB I	1
<i>Sequence Three</i>		
PHYS&243	ENGINEERING PHYSICS III ⁶	4
PHYS&233	ENGINEERING PHYSICS LAB III	1
Chemistry with Lab		
CHEM&141 & CHEM&151	GENERAL CHEMISTRY I and GENERAL CHEMISTRY LABORATORY I	5
CHEM&142 & CHEM&152	GENERAL CHEMISTRY II and GENERAL CHEMISTRY LABORATORY II	5
CHEM&143 & CHEM&153	GENERAL CHEMISTRY III and GENERAL CHEMISTRY LABORATORY III	6
CHEM&241 & CHEM&251	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY LABORATORY I	5
Select one from the following:		5
CHEM&242 & CHEM&252	ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY LABORATORY II	
BIOL&221	MAJORS ECOLOGY/EVOLUTION	
Total Credits/Units		95

- 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 094.
- ⁵ Requires concurrent enrollment in PHYS 095.
- ⁶ Requires concurrent enrollment in PHYS 096.

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.
- Acquire scientific and technological information from appropriate sources to examine issues, claims or situations.

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.

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.

- Biological Sciences (AST1) (p. 32)
- Biology DTA/MRP (AA) (p. 33)

Biological Sciences (AST1)

Academic Plans, known as programs, include a overview description and a summary of program requirements. You can search the online catalog via the 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 major study in Biological Sciences. Lower-division course requirements will vary depending on the transfer institution. Contact an advisor at the transfer institution to determine required coursework as early as possible.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
Subtotal		5
<i>Quantitative Skills</i>		
MATH&151	CALCULUS I	5
MATH&152	CALCULUS II	5
Subtotal		10
<i>Health & Physical Education</i>		

Course Options (p. 311)		3
Subtotal		3
<i>Humanities & Social Sciences</i>		
Select one from the following:		5
CMST&220	PUBLIC SPEAKING	
CMST&230	SMALL GROUP COMMUNICATION	
CMST&210	INTERPERSONAL COMMUNICATION	
Select 10 credits/units from the following: ¹		10
Humanities Course Options (p. 311)		
Social Sciences Course Options (p. 312)		
Subtotal		5
Pre-Major Requirements		
BIOL&221	MAJORS ECOLOGY/EVOLUTION	5
BIOL&222	MAJORS CELL/MOLECULAR	5
BIOL&223	MAJORS ORGANISMAL PHYS	5
CHEM&141	GENERAL CHEMISTRY I	4
CHEM&142	GENERAL CHEMISTRY II	4
CHEM&143	GENERAL CHEMISTRY III	4
CHEM&151	GENERAL CHEMISTRY LABORATORY I	1
CHEM&152	GENERAL CHEMISTRY LABORATORY II	1
CHEM&153	GENERAL CHEMISTRY LABORATORY III	2
Select one from the following:		5-6
MATH&146	INTRODUCTION TO STATISTICS	5
MATH&153	CALCULUS III	
PHYS&124 & PHYS&134	GENERAL PHYSICS LAB I and GENERAL PHYSICS I	5
PHYS&125 & PHYS&135	GENERAL PHYSICS LAB II and GENERAL PHYSICS II	5
PHYS&126 & PHYS&136	GENERAL PHYSICS LAB III and GENERAL PHYSICS III	5
Science Electives		
BIOL 101	ENVIRONMENTAL BIOLOGY	5
BIOL 208	FIELD STUDIES IN BIOLOGY	1-10
or BIOL 224	FLOWERING PLANTS OF THE PACIFIC NORTHWEST	
BIOL 139	INTRODUCTION TO WILDLIFE	3
Select one from the following:		3
BIOL 140	MAMMALS OF THE NORTHWEST ²	
BIOL 141	BIRDS OF THE PACIFIC NORTHWEST	
BIOL 143	INTRODUCTION TO FORESTRY	
BIOL 145	REPTILES & AMPHIBIANS OF THE PACIFIC NW	3
Total Credits/Units		90

¹ Minimum of five (5) credits/units of coursework in both Humanities and Social Sciences with the additional five (5) credits/units from either Humanities or Social Sciences.

² Check with chosen 4-year school.

Code	Title	Credits/ Units
Recommended Science and Composition Electives		
CHEM&241	ORGANIC CHEMISTRY I	4
CHEM&242	ORGANIC CHEMISTRY II	4
CHEM&243	ORGANIC CHEMISTRY III	4
CHEM&251	ORGANIC CHEMISTRY LABORATORY I	1

CHEM&252	ORGANIC CHEMISTRY LABORATORY II	1
CHEM&253	ORGANIC CHEMISTRY LABORATORY III	2
Select one from the following:		5
ENGL&102	ENGLISH COMPOSITION II ¹	

¹ Check with chosen 4-year school.

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.

Biology DTA/MRP (AA)

Academic Plans, known as programs, include a overview description and a summary of program requirements. You can search the online catalog via the 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's degree majors in Biology. Many students transfer to baccalaureate institutions after completing the Associate Degree Direct Transfer Agreement (DTA); this pathway does not alter that agreement or the possibility that students may continue to follow this path. This Biology MRP streamlines and facilitates preparation for upper-division coursework in Biology across the state.

This document represents an agreement between the following baccalaureate institutions offering bachelor's degrees in Biology or a related field and the community and technical college system. Baccalaureate institutions party to this agreement include: Central Washington University; Eastern Washington University; The Evergreen State College; University of Washington Seattle; Washington State

University Pullman; Western Washington University; Saint Martin's University; Seattle University; and Whitworth University.

Where the degree below allows for choice in courses, students are urged to contact potential transfer institutions to ensure that the courses chosen are best for the pathway.

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:

- Clark requires 3 credits of Health-Physical Education coursework, and
- As of Fall 2011, Clark requires a course in Oral Communication, and
- 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.

Generic DTA Requirement

Code	Title	Credits/ Units
Basic Requirements		
<i>Communications Skills</i>		
Course Options (p. 311) ¹		10
<i>Quantitative/Symbolic Reasoning</i>		
Course Options (p. 311) ²		5
Distribution Requirements		
<i>Humanities</i>		
Course Options (p. 311) ³		15
<i>Social Sciences</i>		
Course Options (p. 312) ⁴		15
<i>Natural Sciences</i>		
Course Options (p. 312)		15
Total Credits/Units		60

¹ Select Communication Skills (C) courses as identified and approved in the General AA DTA; may be individualized based on transfer intent.

² Intermediate algebra proficiency is required.

³ Consistent with the requirements in all DTA degrees - no more than 10 credits/units per discipline area, 5 credits/units maximum in world languages or ASL. No more than 5 credits/units of performance/skills (HB) classes are allowed.

⁴ Select coursework from at least two (2) areas of discipline; no more than 10 credits/units per discipline area.

MRP Requirements

Code	Title	Credits/ Units
Basic Requirements		
<i>English Composition</i>		

Course Options (p. 311) ¹	10
Mathematics or Statistics	
Calculus I	5
Distribution Requirements	
Humanities	
Course Options (p. 311) ²	15
Social Sciences	
Course Options (p. 312) ³	15
Chemistry/Biology	
Select 30 term credits/units from the following:	
General Chemistry Sequence	
Select 16 credits/units from the following:	16
CHEM&141 GENERAL CHEMISTRY I	
CHEM&142 GENERAL CHEMISTRY II	
CHEM&143 GENERAL CHEMISTRY III	
CHEM&151 GENERAL CHEMISTRY LABORATORY I	
CHEM&152 GENERAL CHEMISTRY LABORATORY II	
CHEM&153 GENERAL CHEMISTRY LABORATORY III	
Biology Sequence	
Select 15 credits/units from the following:	15
BIOL&221 MAJORS ECOLOGY/EVOLUTION	
BIOL&222 MAJORS CELL/MOLECULAR	
BIOL&223 MAJORS ORGANISMAL PHYS	
Electives	
Select additional term credits/units (p. 313) ⁴	13-15
Total Credits/Units	89-91

- ¹ Select Communication Skills (C) courses as identified and approved in the General AA DTA; may be individualized based on transfer intent.
- ² Consistent with the requirements in all DTA degrees - no more than 10 credits/units per discipline area, 5 credits/units maximum in world languages or ASL. No more than 5 credits/units of performance/skills (HB) classes are allowed.
- ³ Select coursework from at least two (2) areas of discipline; no more than 10 credits/units per discipline area.
- ⁴ Students should consult with their advisor and/or intended transfer institution to select appropriate electives to reach the 90 credit/unit minimum credits/units needed for degree completion.

Clark College Equivalents

Code	Title	Credits/Units
Basic Requirements		
Communication Skills		
ENGL&101	ENGLISH COMPOSITION I	5
ENGL&102	ENGLISH COMPOSITION II	5
Quantitative/Symbolic Reasoning Requirement		
Select one from the following:		5-6
MATH&151	CALCULUS I	
MATH&146	INTRODUCTION TO STATISTICS ¹	
MATH&148	BUSINESS CALCULUS	
MATH 140	CALCULUS FOR LIFE SCIENCES	
Distribution Requirements		

Humanities		
Course Options (p. 311)		15
Social Sciences		
Course Options (p. 312)		15
Natural Sciences		
BIOL&221	MAJORS ECOLOGY/EVOLUTION	5
BIOL&222	MAJORS CELL/MOLECULAR	5
BIOL&223	MAJORS ORGANISMAL PHYS	5
CHEM&141	GENERAL CHEMISTRY I	4
CHEM&142	GENERAL CHEMISTRY II	4
CHEM&143	GENERAL CHEMISTRY III	4
CHEM&151	GENERAL CHEMISTRY LABORATORY I	1
CHEM&152	GENERAL CHEMISTRY LABORATORY II	1
CHEM&153	GENERAL CHEMISTRY LABORATORY III	2
Electives		
Select 14 additional term credits/units ²		14
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.

Notes

Basic Requirements

- May be individualized based on baccalaureate college of choice.
- 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.
- Intermediate Algebra proficiency may be demonstrated by successful completion of a Calculus and/or Statistics course for which Intermediate Algebra is a prerequisite.

Distribution Requirements

- 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.
- 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.
- A full year sequence at a single college is the best preparation for the baccalaureate biology degree.

Electives

- 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.

* Check with transfer institution to see if MATH 147 will also be necessary

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.

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) (p. 36)
- Business DTA/MRP (AA) (p. 37)

Business Administration (AAS)

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

This program is designed for the student who wishes to complete a general, broad-based program. This degree requires a balanced core of business courses to introduce professional careers in business, with additional courses that can be structured to meet a student's individual needs. This program enables a student to acquire skills for entry-level positions in both the profit and non-profit sectors.

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.

Completion of Certificate of Proficiency in Marketing, Small Business Management, Accounting Clerk or Supervisory Management accounts for 56-60 of necessary credits.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
CMST&220	PUBLIC SPEAKING	5
or CMST&230	SMALL GROUP COMMUNICATION	
Subtotal		5
<i>Health & Physical Education</i>		
Course Options (p. 322)		3
Subtotal		3
<i>Natural Sciences</i>		
Course Options (p. 324)		3

Subtotal		3
<i>Humanities</i>		
Course Options (p. 323)		3
Subtotal		3
<i>Computational Skills</i>		
Satisfied in the CPs		
Subtotal		0
<i>Human Relations</i>		
Satisfied in the CPs		
Subtotal		0
<i>Social Sciences</i>		
Satisfied in the CPs		
Subtotal		0
Major Area Requirements		
BUS 029	BASIC ACCOUNTING PROCEDURES	3
BUS 036	ACCOUNTING APPLICATIONS	3
BUS 110	CUSTOMER SERVICE	3
BUS& 201	BUSINESS LAW	5
BUS 211	BUSINESS COMMUNICATIONS	3
BUS 260	PRINCIPLES OF MARKETING	5
Additional Major Area Electives		
Select a minimum of eight to nine additional credits/units from the following areas:		8-9
Accounting (ACCT) (p. 122)		
Business Administration (BUS) (p. 143)		
Economics (ECON) (p. 181)		
Supervisory Management (MGMT) (p. 216)		
Computer Applications (BTEC) (p. 145) ¹		
Complete as many General Elective (GE) courses as needed to reach the total of 90 credits/units required by the degree		
Total Credits/Units		90-94

¹ Six credit/unit maximum.

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)

- Demonstrate customer skills (internal and external) to establish a customer-centered business organization.
- Identify and demonstrate professional traits and behaviors that apply to job performance in real-world environments.
- Use micro- and macroeconomic concepts to analyze domestic and global business situations.
- Communicate effectively, using business terminology in written and verbal language.
- Analyze a target market and develop product, pricing, promotion, and distribution strategies to meet customers' needs at a profit.

Business DTA/MRP (AA)

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 (Humanities, Social Science, and Business Law or Introduction to Law) and for electives. 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,
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.

Generic DTA Requirements

Code	Title	Credits/ Units
Basic Requirements		
<i>Communications Skills</i>		
	Course Options (p. 311)	10
<i>Quantitative/Symbolic Reasoning Requirement</i>		
	Course Options (p. 311) ¹	5
Distribution Requirements		
<i>Humanities</i>		
	Course Options (p. 311)	15
<i>Social Sciences</i>		
	Course Options (p. 312)	15
<i>Natural Sciences</i>		
	Course Options (p. 312)	0
Major Requirements		
<i>Business Courses</i>		
Electives		

Elective courses (p. 313)	
Total Credits/Units	45

- ¹ Intermediate algebra proficiency is required.

MRP Requirements

Code	Title	Credits/ Units
Basic Requirements		
<i>English Composition</i>		
	Course Options (p. 311)	10
<i>Quantitative/Symbolic Reasoning Requirement</i>		
	Course Options (p. 311) ¹	10
Distribution Requirements		
<i>Humanities</i>		
	Course Options (p. 311) ²	15
<i>Social Sciences</i>		
	Microeconomics	5
	Macroeconomics	5
	Additional social science - not economics (p. 312)	5
<i>Natural Sciences</i>		
	Statistics ⁴	5
	Course Options (p. 312) ⁵	10
Major Requirements		
<i>Business Courses</i>		
	Financial Accounting	5
	Financial Accounting II	5
	Managerial Accounting	5
	Business Law or Introduction to Law	5
Electives		
	Course Options (p. 313)	5
Total Credits/Units		90

- ¹ Must include five credits/units of business calculus, calculus one or a higher level math that included calculus as a prerequisite. May include finite math or precalculus prerequisites for calculus or other courses to prepare for business calculus.
- ² Consistent with the requirements in all DTA degrees - no more than 10 credits/units per discipline area, five credits/units maximum in world languages or ASL. No more than five credits/units of performance/skills classes are allowed.
- ³ Physical, biological, and/or earth science, including at least one lab course
- ⁴ business statistics preferred
- ⁵ Physical, biological, and/or earth science, including at least one lab course

Clark College Equivalents

Code	Title	Credits/ Units
Basic Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
ENGL&102	ENGLISH COMPOSITION II	5

or ENGL&235 TECHNICAL WRITING	
<i>Quantitative/Symbolic Reasoning</i>	
Course 1:	
Select one from the following:	5
MATH&148 BUSINESS CALCULUS	
MATH&151 CALCULUS I	
MATH&152 CALCULUS II	
MATH&153 CALCULUS III	
MATH 215 LINEAR ALGEBRA	
MATH 221 DIFFERENTIAL EQUATIONS	
MATH&254 CALCULUS IV	
Course 2:	
MATH 102 COLLEGE TRIG WITH SUPPLEMENTAL INSTRUCTION	5
or MATH 103 COLLEGE TRIGONOMETRY	
or MATH 104 FINITE MATH WITH SUPPLEMENTAL INSTRUCTION	
or MATH 105 FINITE MATHEMATICS	
MATH 110 COLLEGE ALGEBRA WITH SUPPLEMENTAL INSTRUCTION	5
or MATH 111 COLLEGE ALGEBRA	
Select one from the following:	5
MATH&152 CALCULUS II	
MATH&153 CALCULUS III	
MATH 215 LINEAR ALGEBRA	
MATH 221 DIFFERENTIAL EQUATIONS	
MATH&254 CALCULUS IV	
Distribution Requirements	
<i>Humanities</i>	
Select 15 term credits/units of Humanities (p. 311) ¹	15
<i>Social Sciences</i>	
ECON&201 MICRO ECONOMICS	5
ECON&202 MACRO ECONOMICS	5
Select a Social Science from outside Economics (p. 312)	5
<i>Natural Sciences</i>	
BUS 203 DESCRIPTIVE STATISTICS ²	3
BUS 204 INFERENTIAL STATISTICS ²	3
Select Natural Science coursework, including one lab as defined by Clark College (p. 312)	9-10
Major Requirements	
<i>Business Courses (for all schools except UW)</i>	
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. 313)	5
Total Credits/Units	100-101

¹ CMST&220 is strongly recommended.

² Students can apply up to six credits/units in statistics coursework toward the natural sciences requirement.

Notes

Basic Requirements

Communication Skills

ENGL&102 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 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)

Total Required Credits: 90 Minimum 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)

BUSINESS/APPLIED MANAGEMENT

The Bachelor of Applied Science (BAS) in Applied Management is a two-year, 90-credit 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) degree (90 credits or higher) or higher from an accredited domestic college or university, or international equivalent, with a minimum cumulative GPA of 2.0.
- Complete the following preliminary courses with a 2.0 grade point average or above:
 1. Communication skills
 - a. English Composition (ENGL&101), 100 college-level or higher
 - b. Oral Communications (CMST&210, CMST&220, CMST&230)
 2. College-level Math (5 credits required)
 - a. Introduction to Statistics (MATH&146) or equivalent math course(s)
- 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 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 (<http://www.clark.edu/academics/programs/basam/>).

- Bachelor of Applied Science in Applied Management (BAS) (p. 40)

Bachelor of Applied Science in Applied Management (BAS)

Academic Plans, known as programs, include a overview description and a summary of program requirements. You can search the online catalog via the 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.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
CMST 310	ORGANIZATIONAL COMMUNICATION	5
Subtotal		5
<i>Human Relations</i>		
SOC 315	ORGANIZATIONAL BEHAVIOR	5
Subtotal		5
<i>Social Sciences</i>		
ECON 405	MANAGERIAL AND GLOBAL ECONOMICS	5
Subtotal		5
<i>Humanities</i>		
PHIL 420	ETHICS IN MANAGEMENT	5
Subtotal		5
<i>Natural Science</i>		
ENVS 430	SUSTAINABILITY & ENVIRONMENTAL PRACTICES	5
Major Area Requirements		
BASAM301	FOUNDATIONS OF MANAGEMENT	5
BASAM305	SOCIAL MEDIA IN BUSINESS	5
BASAM320	BUSINESS RESEARCH APPLICATIONS	5
BASAM325	BUSINESS PRINCIPLES	5
BASAM330	ACCOUNTING PRINCIPLES FOR MANAGERS	5
BASAM335	LEGAL ISSUES IN MANAGEMENT	5
BASAM340	MARKETING FOR MANAGERS	5
BASAM400	HUMAN RESOURCE MANAGEMENT	5
BASAM410	PRINCIPLES OF PROJECT MANAGEMENT	5
BASAM415	FINANCIAL MANAGEMENT	5
BASAM425	OPERATIONS AND LOGISTICS	5
BASAM440	CAPSTONE: STRATEGIC MANAGEMENT & POLICY	5
BASAM450	APPLIED MANAGEMENT INTERNSHIP	5
Total ¹		90

¹ Please note that in addition to the 90 credits required in upper division courses a student must have completed 90 additional credits from an associate degree for a total of 180 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:

- 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.

BUSINESS/SUPERVISORY MANAGEMENT

The supervisory manager has the important role of getting work completed by leading, managing, and motivating people. Clark College offers a comprehensive training program that leads to a Certificate of Achievement in Supervisory Management and provides a major base for the Associate in Applied Science degree. Courses deal with solutions to supervisory problems regularly encountered on the job. This program provides an opportunity for current and potential supervisors to increase and broaden their performance levels and to advance into more responsible positions.

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.

- Supervisory Management (CP) (p. 42)
- Supervisory Management (AAS) (p. 42)

Supervisory Management (CP)

The Supervisory Management Certificate presents concepts that help the student understand various management theories, management functions and their interrelationships, and the competitive strategies that a business needs to establish and maintain. The student will learn and apply the concepts of planning, organizing, leading, and controlling as well as other topics essential to the structure of this basic management certificate. Additionally, the student learns the essentials of human resource management, teamwork, consensus building, technology and information management, decision making, leading change, and the value of ethics and social responsibility.

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.

Code	Title	Credits/ Units
General Education Requirements		
Communication Skills		
BTEC 106 or ENGL&101	APPLIED OFFICE ENGLISH ENGLISH COMPOSITION I	3
Computational Skills		
BUS 102	BUSINESS MATH APPLICATIONS	5
Human Relations		
BTEC 148	BUSINESS PROFESSIONAL SELF DEVELOPMENT	3
Business Core Courses		
BUS 028	BASIC ACCOUNTING PROCEDURES	3
BUS 029	BASIC ACCOUNTING PROCEDURES	3
BUS& 101	INTRODUCTION TO BUSINESS	5
BTEC 100	KEYBOARDING	1-3

BTEC 150	COMPUTER BUSINESS APPLICATIONS	5
ECON 101	INTRODUCTION TO ECONOMICS	3
MGMT 101	PRINCIPLES OF MANAGEMENT	3
Major Area Requirements		
MGMT 103	APPLIED MANAGEMENT SKILLS	3
MGMT 110	CREATIVE PROBLEM SOLVING	3
MGMT 128	HUMAN RESOURCES MANAGEMENT	3
MGMT 199	COOPERATIVE WORK EXPERIENCE ¹	1-5
Additional Area Requirements		
Select a minimum of nine credits/units from the Management courses		9
Total Credits/Units		59

¹ Minimum of five credits/units must be earned in Cooperative Work Experience.

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/545A/Gedt.html>).

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 and institutional goals.
- Understand and apply managerial techniques for decision making, problem solving, and managing change.
- Apply the understating of human resources issues and functions, identifying applicable laws.

Supervisory Management (AAS)

The Supervisory Management Associate of Applied Science degree emphasizes the important role required of supervisory managers of getting work completed by leading, managing, and motivating people. This comprehensive training program includes courses that deal with solutions to supervisory problems regularly encountered on the job. Current and potential supervisors learn and apply the basic principles of business management to increase and broaden their on-the-job performance levels and to advance into more responsible career positions.

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.

Completion of Certificate of Proficiency in Marketing, Small Business Management, Accounting Clerk or Supervisory Management accounts for 56-60 of necessary credits

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
CMST&220	PUBLIC SPEAKING	5
or CMST&230	SMALL GROUP COMMUNICATION	
Subtotal		5
<i>Health and Physical Education</i>		
Course Options (p. 322)		3
Subtotal		3
<i>Humanities</i>		
Course Options (p. 323)		3
Subtotal		3
<i>Natural Sciences</i>		
Course Options (p. 324)		3
Subtotal		3
<i>Computational Skills</i>		
Satisfied in the CPs		
Subtotal		0
<i>Human Relations</i>		
Satisfied in the CPs		
Subtotal		0
<i>Social Science</i>		
Satisfied in the CPs		
Subtotal		0
Major Area Requirements		
BUS 029	BASIC ACCOUNTING PROCEDURES	3
BUS& 201	BUSINESS LAW	5
BUS 211	BUSINESS COMMUNICATIONS	3
or MGMT 107	SUPERVISORY COMMUNICATION I, WRITTEN	
MGMT 103	APPLIED MANAGEMENT SKILLS	3
MGMT 126	PROJECT MANAGEMENT	4
MGMT 128	HUMAN RESOURCES MANAGEMENT	3
MGMT 133	PRODUCTION AND OPERATIONS MANAGEMENT	3
Additional Major Area Electives		
Complete a minimum of five to six additional credits/units from the following areas:		5-6
Accounting (ACCT) (p. 122)		
Business Administration (BUS) (p. 143)		
Economics (ECON) (p. 181)		
Supervisory Management (MGMT) (p. 216)		
Computer Applications (BTEC) (p. 145) ¹		
Complete as many General Elective (GE) courses as needed to reach the total of 90 credits/units required by the degree		
Total Credits/Units		91-98

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)
- Design a comprehensive management project with given criteria, using software.
- Describe the U.S. legal system and the legal environment of business by outlining the basic principles of law that apply to business transactions.
- Apply the understanding of human resource issues and functions, identifying applicable laws.
- Communicate effectively using business terminology in written and verbal language.
- Effectively manage people and resources to meet organizational and institutional goals.
- Apply techniques to improve production and to decrease waste.

¹ Six credits/units maximum.

CHEMISTRY

Chemistry is the study of the properties of materials and the changes that materials undergo. One of the joys of learning chemistry is seeing how chemical principles operate in all aspects of daily life, from everyday activities like lighting a match to more far-reaching matters like the development of drugs to cure cancer or reduce environmental hazards.

People who have degrees in chemistry hold a variety of positions in industry, government, and academia. Those who work in the chemical industry find positions as laboratory chemists, carrying out experiments to develop new products (research and development), analyzing materials (quality control), or assisting customers in using products (sales and services). Analytical and control chemists usually have at least a bachelor's degree. Those with more experience or training may work as managers or company directors. They may also embark in the medical fields or the environmental sciences.

Clark College's Chemistry Department offers a multifaceted curriculum designed to meet a variety of needs – from those of students pursuing a health-related Applied Science Degree to requirements for earning an Associate in Science in Chemistry, Biology, Engineering, or Physics.

- Chemistry (AST1) (p. 44)

Chemistry (AST1)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the 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 major study in chemistry. Lower-division course requirements will vary depending on the transfer institution. Contact an advisor at the transfer institution to determine required coursework as early as possible. Courses in computer applications are recommended for all students. Additional courses are needed to satisfy graduation requirements for the Associate in Science.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
Subtotal		5
<i>Quantitative Skills</i>		
MATH&151	CALCULUS I	5
MATH&152	CALCULUS II	5
Subtotal		10
<i>Health & Physical Education</i>		
Course Options (p. 311)		3
Subtotal		3
<i>Humanities & Social Sciences</i>		
Select one from the following:		5
CMST&210	INTERPERSONAL COMMUNICATION	
CMST&220	PUBLIC SPEAKING	
CMST&230	SMALL GROUP COMMUNICATION ¹	
Course Options (p. 311)		10
Subtotal		15

Pre-Major Program Requirements

CHEM&141	GENERAL CHEMISTRY I	4
CHEM&142	GENERAL CHEMISTRY II	4
CHEM&143	GENERAL CHEMISTRY III	4
CHEM&151	GENERAL CHEMISTRY LABORATORY I	1
CHEM&152	GENERAL CHEMISTRY LABORATORY II	1
CHEM&153	GENERAL CHEMISTRY LABORATORY III	2
PHYS&241 & PHYS&231	ENGINEERING PHYSICS I and ENGINEERING PHYSICS LAB I	5
PHYS&242 & PHYS&232	ENGINEERING PHYSICS II and ENGINEERING PHYSICS LAB II	5
PHYS&243 & PHYS&233	ENGINEERING PHYSICS III and ENGINEERING PHYSICS LAB III	5

Science Electives

CHEM&241	ORGANIC CHEMISTRY I	4
CHEM&242	ORGANIC CHEMISTRY II	4
CHEM&243	ORGANIC CHEMISTRY III	4
CHEM&251	ORGANIC CHEMISTRY LABORATORY I	1
CHEM&252	ORGANIC CHEMISTRY LABORATORY II	1
CHEM&253	ORGANIC CHEMISTRY LABORATORY III	2

Other Electives

Select one from the following:		5
ENGL&102	ENGLISH COMPOSITION II	
ENGL&235	TECHNICAL WRITING	
MATH 111	COLLEGE ALGEBRA	5
MATH 221	DIFFERENTIAL EQUATIONS	5
MATH&254	CALCULUS IV	5
Foreign Language ²		
Total Credits/Units		100

¹ CMST&230 would count as a social science; otherwise, the third course needs to be a social science.

² Please check with the transfer institution regarding foreign language 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:

- 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.

COMPUTER SCIENCE

Computers are an integral part of most human activities and professions. Therefore, a wide variety of career opportunities are available to the computer science professionals who are commonly referred to as computer scientists.

Computer scientists are responsible for analyzing requirements, planning, developing high-level design, writing, and testing the program that delivers the expected results. Computer scientists may be involved with support and maintenance of the solutions.

Computer scientists are employed in all industries such as manufacturing, finance, service, retail, gaming, and others. Typically, computer scientists work with other professionals in order to develop solutions that meet business and customer requirements.

Computer science specialties include:

- Artificial intelligence
- Computer vision
- Database
- Graphics and animation
- Embedded systems
- Networking
- Operating Systems
- Program languages and compilers
- Robotics
- Computer Science (AST2) (p. 46)

Computer Science (AST2)

Academic Plans, known as programs, include a overview description and a summary of program requirements. You can search the online catalog via the 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 a four-year Computer Science program. These lower-division course requirements will vary depending on the math and English placement at Clark College, and on the requirements of the four-year institution to which you transfer. It is critical that you work with a Computer Science and Engineering faculty advisor to ensure your program will give you the maximum benefit when you transfer. Additional courses may be needed to satisfy graduation requirements for the Associate in Science degree (<https://catalog.clark.edu/academic-plans/track-2-ast2/general/>).

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
Subtotal		5
<i>Quantitative Skills</i>		
MATH&151	CALCULUS I	5
MATH&152	CALCULUS II	5
Subtotal		10
<i>Health & Physical Education</i>		

Course Options (p. 311)		3
Subtotal		3
Humanities & Social Science		
Select 15 credits/units from the following: ¹		15
Humanities Course Options (p. 311)		
Social Science Course Options (p. 312)		
Subtotal		15
Pre-Major Program Requirements		
MATH&153	CALCULUS III	5
PHYS&241	ENGINEERING PHYSICS I	5
& PHYS&231	and ENGINEERING PHYSICS LAB I	
PHYS&242	ENGINEERING PHYSICS II	5
& PHYS&232	and ENGINEERING PHYSICS LAB II	
PHYS&243	ENGINEERING PHYSICS III	5
& PHYS&233	and ENGINEERING PHYSICS LAB III	
Additional Science		5
Computer Science Electives		
Complete as many courses as needed to reach the total 90 credits required by the degree:		
CSE 120	INTRO TO ELECTRICAL/COMPUTING	5
CSE 121	INTRODUCTION TO C	5
CSE 222	INTRODUCTION TO DATA STRUCTURES	5
CSE 223	DATA STRUCTURES & OBJECT-ORIENTED PROGRAMMING	5
CSE 224	PROGRAMMING TOOLS	5
ENGR&204	ELECTRICAL CIRCUITS	5
ENGR 250	DIGITAL LOGIC DESIGN	5
ENGR 270	DIGITAL SYSTEMS AND MICROPROCESSORS	5
MATH 215	LINEAR ALGEBRA	5
Total Credit/Units		90

¹ HA, HB, SS

Requirements vary by school and program. See an Engineering faculty advisor regarding proper selection.

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)
- 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)

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) (p. 48)
- Web Development (CP) (p. 48)
- Computer Support (AAT) (p. 49)
- Web Development (AAT) (p. 50)

Information Technology Skills (CP)

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

The IT Skills Certificate is designed for those who wish to pursue a career as a computer support technician providing services and support for a company or organization. Support specialists install, configure and maintain hardware and software as well as diagnose, troubleshoot, and resolve computer-related problems. The Information Technology Skills Certificate of Proficiency (IT Skills CP) is a one year program where students gain knowledge and basic skills and customer service to support users of information technology.

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills (3 credits required)</i>		
ENGL&101	ENGLISH COMPOSITION I	5
or PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING	
<i>Computational Skills (3 credits required)</i>		
PTCS 110	PROFESSIONAL TECHNICAL COMPUTATIONAL SKILLS	5
Or completed MATH course with 'C' or better where prerequisites are MATH 092 or higher		
<i>Human Relations (3 credits required)</i>		
CTEC 104	IT SUPPORT	3
or HDEV 200	PROFESSIONAL DEVELOPMENT	
Code	Title	Credits/ Units
Major Area Requirements		
BTEC 149	COMPUTER APPLICATIONS ESSENTIALS	3
CTEC 106	INFORMATION TECHNOLOGY FUNDAMENTALS	5
CTEC 111	POWERSHELL FUNDAMENTALS	3
CTEC 115	INTERNET RESEARCH AND LIVING ONLINE	3
CTEC 130	MICROSOFT WINDOWS OS FUNDAMENTALS	3
CTEC 131	MICROSOFT NETWORKING FUNDAMENTALS	3
CTEC 205	INTRODUCTION TO MANAGED INFORMATION SYSTEMS	5
CTEC 213	COMPTIA A+ FUNDAMENTALS	4
CTEC 214	COMPTIA A+ OPERATING SYSTEMS & NETWORKING	4
NTEC 103	IP SUBNETTING	3
Total		49-51

Web Development (CP)

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

The Web Design Certificate prepares students to create web graphics, integrate media, and design websites. The program provides a foundation of aesthetic and technical skills through the study of visual design concepts, multimedia technologies and web design practices. Essential skills are developed through practical hands-on experience, real client project work, a focus on professional skills and building a portfolio of work. Graduates can seek employment as a freelance web designer, production artist, web content designer, e-marketing assistant, or other web-related production and support roles within a business.

Code	Title	Credits/ Units
<i>Term One</i>		
PTCS 110	PROFESSIONAL TECHNICAL COMPUTATIONAL SKILLS	5
COLL 101	COLLEGE ESSENTIALS: INTRODUCTION TO CLARK	2
CTEC 122	HTML FUNDAMENTALS	4
CTEC 165	BUSINESS WEB PRACTICES	4

Term Two		
CTEC 112	PROGRAMMING ESSENTIALS	5
or CTEC 121	INTRO TO PROGRAMMING & PROBLEM SOLVING	
CTEC 160	WORDPRESS I	5
ENGL&101	ENGLISH COMPOSITION I	5
or PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING	
Term Three		
CTEC 117	USER EXPERIENCE DESIGN	4
CTEC 270	WEB AND INTERFACE DESIGN I	4
DMA 101	PHOTOSHOP RASTER GRAPHICS	4
Term Four		
CTEC 126	JAVASCRIPT	5
CTEC 166	WEB CONTENT AND SOCIAL MEDIA	5
CTEC 271	WEB AND INTERFACE DESIGN II	4
Total Credits/Units		56

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/524B/Gedt.html>).

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 fine art theory and design purposeful projects relevant to audience needs.
- 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.

Computer Support (AAT)

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

The Computer Support AAT expands on the skills one learns in our one year IT Skills Certificate of Proficiency. In addition to their skills in

configuring, installing trouble shooting and supporting IT users, students in this program learn how to further interact and support networks with an emphasis on providing and maintaining network security. Students gain practical help desk experience and customer service skills as a part of their curricular studies.

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

Please see Degree Corrections Page (<https://catalog.clark.edu/corrections/degrees-certificate-corrections/>) for updated information

Code	Title	Credits/ Units
General Education Requirements		
Communication Skills		
ENGL&101	ENGLISH COMPOSITION I	5
or PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING	
Computational Skills		
PTCS 110	PROFESSIONAL TECHNICAL COMPUTATIONAL SKILLS	5
or completed MATH course with 'C' or better where prerequisite requirements are MATH 096 or higher		
Human Relations		
CTEC 104	IT SUPPORT	3
COLL 101	COLLEGE ESSENTIALS: INTRODUCTION TO CLARK	2
or HDEV 200	PROFESSIONAL DEVELOPMENT	
Code	Title	Credits/ Units
Major Area Requirements		
BTEC 149	COMPUTER APPLICATIONS ESSENTIALS	3
CTEC 106	INFORMATION TECHNOLOGY FUNDAMENTALS	5
CTEC 115	INTERNET RESEARCH AND LIVING ONLINE	3
CTEC 111	POWERSHELL FUNDAMENTALS	3
CTEC 112	PROGRAMMING ESSENTIALS	5
or CTEC 121	INTRO TO PROGRAMMING & PROBLEM SOLVING	
CTEC 130	MICROSOFT WINDOWS OS FUNDAMENTALS	3
CTEC 131	MICROSOFT NETWORKING FUNDAMENTALS	3
CTEC 133	MICROSOFT SECURITY FUNDAMENTALS	3
CTEC 134	MICROSOFT DATABASE ADMIN	5
CTEC 200	HELP DESK TECHNICIAN I	3
CTEC 201	HELP DESK TECHNICIAN II	3
or CTEC 199	COOPERATIVE WORK EXPERIENCE	
CTEC 205	INTRODUCTION TO MANAGED INFORMATION SYSTEMS	5
CTEC 213	COMPTIA A+ FUNDAMENTALS	4
CTEC 214	COMPTIA A+ OPERATING SYSTEMS & NETWORKING	4
CTEC 233	COMPTIA SECURITY+	5
CTEC 235	COMPTIA CYBERSECURITY	5
NTEC 103	IP SUBNETTING	3
NTEC 132	WINDOWS MTA SERVER ADMINISTRATION FUNDAMENTALS	3
NTEC 142	CLOUD COMPUTING FUNDAMENTALS	3

NTEC 151	LINUX ESSENTIALS	6
Total		94

Web Development (AAT)

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

The Web Development AAT degree provides students with a foundational and employable skill set in web programming and development technologies as well experience and skills in web design and media associated with the World Wide Web. Essential skills are developed through practical hands-on experience, real client project work, a focus on professional skills and building a portfolio of work.

Code	Title	Credits/ Units
<i>Term One</i>		
PTCS 110	PROFESSIONAL TECHNICAL COMPUTATIONAL SKILLS ¹	5
CTEC 122	HTML FUNDAMENTALS	4
CTEC 165	BUSINESS WEB PRACTICES	4
COLL 101	COLLEGE ESSENTIALS: INTRODUCTION TO CLARK ³	2
<i>Term Two</i>		
CTEC 160	WORDPRESS I	5
PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING ²	5
or ENGL&101	ENGLISH COMPOSITION I	
CTEC 112	PROGRAMMING ESSENTIALS	5
or CTEC 121	INTRO TO PROGRAMMING & PROBLEM SOLVING	
<i>Term Three</i>		
CTEC 270	WEB AND INTERFACE DESIGN I	4
CTEC 117	USER EXPERIENCE DESIGN	4
DMA 101	PHOTOSHOP RASTER GRAPHICS	4
<i>Term Four</i>		
CTEC 271	WEB AND INTERFACE DESIGN II	4
CTEC 126	JAVASCRIPT	5
CTEC 166	WEB CONTENT AND SOCIAL MEDIA	5
<i>Term Five</i>		
CTEC 127	PHP WITH SQL I	5
CTEC 134	MICROSOFT DATABASE ADMIN	5
CTEC 145	WEB SERVER TECHNOLOGY	5
DMA 201	VIDEO AND SOUND PRODUCTION I	4
<i>Term Six</i>		
CTEC 227	PHP WITH SQL II	5
CTEC 265	APPLIED WEB DEVELOPMENT	5
or CTEC 135	MICROSOFT SOFTWARE DEVELOPMENT WITH C#	
CTEC 293	WEB SKILLS PORTFOLIO	3
HDEV 200	PROFESSIONAL DEVELOPMENT ³	2
Total Credits/Units		90

- ¹ Fulfills Computational Requirements
- ² Fulfills Communication Requirement
- ³ Fulfills HR Component

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)

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) (p. 51)
- Professional Baking & Pastry Arts Management (AAT) (p. 51)
- Cuisine Fundamentals (CA) (p. 52)
- Cuisine Management (AAT) (p. 52)

Baking and Pastry Arts Fundamentals (CA)

Academic Plans, known as programs, include a overview description and a summary of program requirements. You can search the online catalog via the 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.

Code	Title	Credits/ Units
Major Area Requirements		
PBAK 110	ARTISAN BREADS	9
PBAK 111	EARLY MORNING PRODUCT	5
PBAK 120	VIENNOISERIE	9
PBAK 121	COOKIES, BROWNIES, BARS AND QUICK BREADS	5
PBAK 130	CAKES, DESSERTS AND TORTES	9
PBAK 131	RETAIL OPERATIONS AND BARISTA	5
Total Credits/Units		42

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/847F/Gedt.html>).

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

Professional Baking & Pastry Arts Management (AAT)

Academic Plans, known as programs, include a overview description and a summary of program requirements. You can search the online catalog via the 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.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING	5
Subtotal		5
<i>Computational Skills</i>		
PTCS 110	PROFESSIONAL TECHNICAL COMPUTATIONAL SKILLS	5
Subtotal		5
<i>Human Relations</i>		
Course Options (p. 322)		5
Subtotal		5
Major Area Requirements		
PBAK 110	ARTISAN BREADS	9
PBAK 111	EARLY MORNING PRODUCT	5
PBAK 120	VIENNOISERIE	9
PBAK 121	COOKIES, BROWNIES, BARS AND QUICK BREADS	5
PBAK 130	CAKES, DESSERTS AND TORTES	9
PBAK 131	RETAIL OPERATIONS AND BARISTA	5
PBAK 200	APPLIED PROFESSIONAL DEVELOPMENT	9
PBAK 210	PRODUCTION BAKING	9

PBAK 211	CHOCOLATE LAB	5
PBAK 220	PASTRY CHEF/RESTAURANT BAKING	9
PBAK 221	RETAIL/MERCHANDISING, INVENTORY/ PURCHASING	5
PBAK 230	CAPSTONE PROJECT	6
PBAK 231	INDUSTRY INTERNSHIP	4
Total Credits/Units		104

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.

Cuisine Fundamentals (CA)

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

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

Code	Title	Credits/ Units
Major Area Requirements		
CUIS 110	CULINARY FUNDAMENTALS I	5
CUIS 111	PROFESSIONAL COOKING I	8
CUIS 120	CULINARY FUNDAMENTALS II	5
CUIS 121	PROFESSIONAL COOKING II	8
CUIS 130	CULINARY FUNDAMENTALS III	5
CUIS 131	PROFESSIONAL COOKING III	8
Subtotal		39
Specialized Short courses		
Select a minimum of four credits/units from the following:		4
CUIS 140	CLASSIC AND MODERN SOUPS AND SAUCES	
CUIS 141	MEAT CUTTING AND FABRICATION	
CUIS 142	WINE, BEER, SPIRITS AND FOOD PAIRINGS	
CUIS 143	RESTAURANT BAKING	

CUIS 144	BANQUET AND BUFFET PLANNING AND EXECUTION	
CUIS 145	WINE APPRECIATION	
CUIS 147	BARBEQUE BASICS	
CUIS 148	ADVANCED GARDE MANGER	
Total Credits/Units		43

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/850D/Gedt.html>).

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 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.

Cuisine Management (AAT)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the 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.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING	5
Subtotal		5
<i>Computational Skills</i>		

PTCS 110	PROFESSIONAL TECHNICAL COMPUTATIONAL SKILLS	5
Subtotal		5
<i>Human Relations</i>		
Course Options (p. 322)		5
Subtotal		5
Major Area Requirements		
CUIS 110	CULINARY FUNDAMENTALS I	5
CUIS 111	PROFESSIONAL COOKING I	8
CUIS 120	CULINARY FUNDAMENTALS II	5
CUIS 121	PROFESSIONAL COOKING II	8
CUIS 130	CULINARY FUNDAMENTALS III	5
CUIS 131	PROFESSIONAL COOKING III	8
CUIS 200	APPLIED PROFESSIONAL DEVELOPMENT	9
CUIS 210	ADVANCED CULINARY FUNDAMENTALS	5
CUIS 211	ADVANCED CULINARY PRACTICES	8
CUIS 220	MANAGEMENT AND BANQUET THEORY	5
CUIS 221	MANAGEMENT PRACTICES	8
CUIS 230	CUISINE CAPSTONE	6
CUIS 231	INDUSTRY INTERNSHIP	4
Specialized Short Courses		
Select a minimum of six credits/units from the following:		6
CUIS 140	CLASSIC AND MODERN SOUPS AND SAUCES	
CUIS 141	MEAT CUTTING AND FABRICATION	
CUIS 142	WINE, BEER, SPIRITS AND FOOD PAIRINGS	
CUIS 143	RESTAURANT BAKING	
CUIS 144	BANQUET AND BUFFET PLANNING AND EXECUTION	
CUIS 145	WINE APPRECIATION	
CUIS 147	BARBEQUE BASICS	
CUIS 148	ADVANCED GARDE MANGER	
Total Credits/Units		105

- 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 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.

DENTAL HYGIENE

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 Firstenberg 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.

The Dental Hygiene Program Guide is posted on the Dental Hygiene website at: <http://www.clark.edu/academics/programs/health-care-and-biosciences/dental/index.php> (<http://www.clark.edu/academics/programs/health-care-and-biosciences/dental/>)

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) (p. 54)

Dental Hygiene (BAS)

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.

Code	Title	Credits/ Units
Preliminary Coursework Required for Acceptance ¹		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I ²	5
ENGL&102	ENGLISH COMPOSITION II	5
Humanities		
Select 10 credits/units from the following:		10
CMST&210	INTERPERSONAL COMMUNICATION	
	or CMST&220 PUBLIC SPEAKING	
	or CMST&230 SMALL GROUP COMMUNICATION	
<i>Course Options (p. 311)</i>		
Social Sciences		
PSYC&100	GENERAL PSYCHOLOGY	5
SOC& 101	INTRO TO SOCIOLOGY	5
<i>College-level Math</i>		
MATH&146	INTRODUCTION TO STATISTICS (recommended)	5
<i>Natural Sciences ³</i>		
Select one from the following:		10-15
BIOL&251	HUMAN A & P I	
& BIOL&252	and HUMAN A & P II	
& BIOL&253	and HUMAN A & P III	
BIOL&241	HUMAN ANATOMY AND PHYSIOLOGY I	
& BIOL&242	and HUMAN ANATOMY AND PHYSIOLOGY II	
BIOL&260	MICROBIOLOGY	5
CHEM&121	INTRO TO CHEMISTRY: PRE-HEALTH	5
CHEM&131	INTRO TO ORGANIC/BIOCHEM	5
NUTR&101	NUTRITION	3
<i>Physical Education</i>		
Select one fitness/activity course (p. 311)		1
Junior Year		
<i>Fall Term</i>		
DH 282	PHARMACOLOGY I	1
DH 283	CLINICAL DENTAL HYGIENE TECHNIQUES I	6
DH 284	ORAL MEDICINE	2
DH 285	PERIODONTICS I	3
DH 286	DENTAL ANATOMY	3
DH 292	INTRODUCTION TO DIGITAL MANAGEMENT SYSTEMS	1
<i>Winter Term</i>		
DH 303	HEAD AND NECK ANATOMY	3
DH 313	CLINICAL DENTAL HYGIENE TECHNIQUES II	6
DH 323	ORAL RADIOLOGY I	3

DH 353	ETHICS AND THE PROFESSION	1
DH 373	CARIOLOGY	2
DH 383	PHARMACOLOGY II	1
<i>Spring Term</i>		
DH 304	EDUCATIONAL THEORY AND APPLICATION	2
DH 314	CLINICAL DENTAL HYGIENE TECHNIQUES III	6
DH 324	ORAL RADIOLOGY II	1
DH 344	GENERAL AND ORAL PATHOLOGY	3
DH 364	LOCAL ANESTHESIA & PAIN CONTROL	4
DH 384	PHARMACOLOGY III	1
Senior Year		
<i>Summer Term</i>		
DH 301	INTRODUCTION TO DENTAL MATERIALS/ ASSISTING	3
DH 321	CLINICAL DENTAL HYGIENE TECHNIQUES IV	4
DH 331	ORAL RADIOLOGY III	2
DH 431	RESTORATIVE DENTISTRY I	2
DH 451	SPECIAL NEEDS POPULATIONS I	1
DH 471	NITROUS OXIDE SEDATION	1
<i>Fall Term</i>		
DH 402	DENTAL PUBLIC HEALTH - RESEARCH METHODS I	2
DH 412	CLINICAL DENTAL HYGIENE TECHNIQUES V	9
DH 432	RESTORATIVE DENTISTRY II	5
DH 452	SPECIAL NEEDS POPULATIONS II	1
DH 472	PERIODONTICS II	2
<i>Winter Term</i>		
DH 403	DENTAL PUBLIC HEALTH - RESEARCH METHODS II	2
DH 413	CLINICAL DENTAL HYGIENE TECHNIQUES VI	9
DH 433	RESTORATIVE DENTISTRY III	4
DH 453	SPECIAL NEEDS POPULATIONS III	1
DH 473	PERIODONTICS III	2
<i>Spring Term</i>		
DH 404	DENTAL PUBLIC HEALTH - RESEARCH METHODS III	1
DH 414	CLINICAL DENTAL HYGIENE TECHNIQUES VII	9
DH 434	RESTORATIVE DENTISTRY IV	3
DH 484	CAPSTONE	3
Total Credits/Units		181-184

- Integrate the roles of clinician, educator, advocate, manager, and researcher to prevent oral diseases and promote health.
- Communicate effectively and professionally, using verbal, non-verbal, and written language with patients, colleagues, the public, diverse populations, 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, evidence-based, and patient-centered dental hygiene care.
- Successfully complete all licensing exams.
- Demonstrate the skills necessary to stay current in the profession with a rigorous and robust emphasis on the study of current research.

¹ All preliminary courses must be completed with a 2.0 or above and obtain minimum applicable and science grade point averages (GPA) of 2.60

² Must be completed by end of winter term of application year.

³ 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:

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) (p. 56)
- Diesel Technologies (AAS) (p. 56)
- Diesel Technologies (AAT) (p. 57)

Diesel Technician (CP)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING (recommended)	5
<i>Computational Skills</i>		
PTCS 110	PROFESSIONAL TECHNICAL COMPUTATIONAL SKILLS (recommended)	5
<i>Human Relations</i>		
Course Options (p. 322)		3
Major Area Requirements		
DIES 111	DIESEL FUNDAMENTALS	5
DIES 112	DIESEL PROCEDURES	10
DIES 113	DIESEL ENGINES/FUEL SYSTEMS	5
DIES 114	DIESEL PROCEDURES	10
DIES 115	DRIVE TRAINS	5
DIES 116	DIESEL PROCEDURES	10
DIES 120	BASIC ELECTRICAL	3
DIES 121	ELECTRONIC ENGINE MANAGEMENT SYSTEMS	3

DIES 122	ELECTRONIC VEHICLE CONTROL SYSTEMS	3
DIES 221	ELECTRICAL/ELECTRONIC SYSTEMS	5
DIES 222	DIESEL PROCEDURES	6
DIES 223	HYDRAULIC SYSTEMS	5
DIES 224	DIESEL PROCEDURES	10
DIES 225	BRAKES, STEERING, AND SUSPENSION	5
DIES 226	DIESEL PROCEDURES	10
Total Credits/Units		108

Code	Title	Credits/ Units
Suggested Extra Courses for Preparation into the Trade		
BUS 110	CUSTOMER SERVICE	3
DIES 096	CUMMINS ENGINES	3

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/775A/Gedt.html>).

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)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i> ¹		
PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING	5
Course Options (p. 321)		1
<i>Health & Physical Education</i>		
Course Options (p. 322)		3
<i>Computational Skills</i>		

PTCS 110	PROFESSIONAL TECHNICAL COMPUTATIONAL SKILLS	5
<i>Human Relations</i>		
CMST&230 or CMST&210	SMALL GROUP COMMUNICATION INTERPERSONAL COMMUNICATION	5
<i>Humanities</i>		
Course Options (p. 323)		3
<i>Social Sciences</i>		
Course Options (p. 323)		3
<i>Natural Sciences</i>		
Course Options (p. 324)		3
Major Area Requirements		
DIES 111	DIESEL FUNDAMENTALS	5
DIES 112	DIESEL PROCEDURES	10
DIES 113	DIESEL ENGINES/FUEL SYSTEMS	5
DIES 114	DIESEL PROCEDURES	10
DIES 115	DRIVE TRAINS	5
DIES 116	DIESEL PROCEDURES	10
DIES 120	BASIC ELECTRICAL	3
DIES 121	ELECTRONIC ENGINE MANAGEMENT SYSTEMS	3
DIES 122	ELECTRONIC VEHICLE CONTROL SYSTEMS	3
DIES 221	ELECTRICAL/ELECTRONIC SYSTEMS	5
DIES 222	DIESEL PROCEDURES	6
DIES 223	HYDRAULIC SYSTEMS	5
DIES 224	DIESEL PROCEDURES	10
DIES 225	BRAKES, STEERING, AND SUSPENSION	5
DIES 226	DIESEL PROCEDURES	10
Total Credits/Units		123

¹ ENGL 097 does not meet the Communication Skills General Education Requirement for the AAS degree.

Code	Title	Credits/ Units
Suggested Extra Courses (for preparation into trade)		
BUS 110	CUSTOMER SERVICE	3
DIES 096	CUMMINS ENGINES	3
DIES 135		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 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.

Diesel Technologies (AAT)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING	5
Subtotal		5
<i>Computational Skills</i>		
PTCS 110	PROFESSIONAL TECHNICAL COMPUTATIONAL SKILLS	5
Subtotal		5
<i>Human Relations</i>		
Course Options (p. 322)		5
Subtotal		5
Major Area Requirements		
DIES 111	DIESEL FUNDAMENTALS	5
DIES 112	DIESEL PROCEDURES	10
DIES 113	DIESEL ENGINES/FUEL SYSTEMS	5
DIES 114	DIESEL PROCEDURES	10
DIES 115	DRIVE TRAINS	5
DIES 116	DIESEL PROCEDURES	10
DIES 120	BASIC ELECTRICAL	3
DIES 121	ELECTRONIC ENGINE MANAGEMENT SYSTEMS	3
DIES 122	ELECTRONIC VEHICLE CONTROL SYSTEMS	3
DIES 221	ELECTRICAL/ELECTRONIC SYSTEMS	5
DIES 222	DIESEL PROCEDURES	6
DIES 223	HYDRAULIC SYSTEMS	5
DIES 224	DIESEL PROCEDURES	10
DIES 225	BRAKES, STEERING, AND SUSPENSION	5
DIES 226	DIESEL PROCEDURES	10
Total Credits/Units		110

Code	Title	Credits/ Units
Additional Recommended Courses (for preparation into trade)		
BUS 110	CUSTOMER SERVICE	3
DIES 096	CUMMINS ENGINES	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 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.

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) (p. 59)

Digital Media Arts (AAT)

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

The Web & Graphic Design AAT degree prepares students for professional practice in the field of visual communications. The program builds a first-year foundation of aesthetic and technical skills and progresses into advanced study of web and graphic design practices. Students learn to effectively communicate ideas and information in a variety of traditional, digital, print, web and other media formats. Essential skills are developed through practical hands-on experience, real client project work, a focus on professional skills and building a portfolio of work. Graduates can seek employment as freelance designers, production designers or coordinators, content managers or publishers, marketing communications specialists, or entry-level web or graphic designers.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
or PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING	
<i>Computational Skills</i>		
PTCS 110	PROFESSIONAL TECHNICAL COMPUTATIONAL SKILLS	5
<i>Human Relations</i>		
Select one from the following:		5
CMST&210	INTERPERSONAL COMMUNICATION	
CMST&230	SMALL GROUP COMMUNICATION	
BUS& 101	INTRODUCTION TO BUSINESS	
SOC& 101	INTRO TO SOCIOLOGY	
Major Area Requirements		
<i>Fine Art Foundations</i>		
ART 101	2D ART AND DESIGN	5
ART 110	CREATIVITY AND CONCEPT	3
<i>Digital Media Arts</i>		
ART 118	TIME-BASED ART AND DESIGN	4

ART 208	DIGITAL PAINTING & ILLUSTRATION	4
DMA 101	PHOTOSHOP RASTER GRAPHICS	4
DMA 102	ILLUSTRATOR VECTOR GRAPHICS	4
DMA 104	MOTION GRAPHICS AND ANIMATION I	4
DMA 204	MOTION GRAPHICS AND ANIMATION II	4
DMA 201	VIDEO AND SOUND PRODUCTION I	4
DMA 202	VIDEO AND SOUND PRODUCTION II	4
<i>Web Design</i>		
CTEC 112	PROGRAMMING ESSENTIALS	5
CTEC 117	USER EXPERIENCE DESIGN	4
CTEC 122	HTML FUNDAMENTALS	4
CTEC 160	WORDPRESS I	5
CTEC 270	WEB AND INTERFACE DESIGN I	4
CTEC 271	WEB AND INTERFACE DESIGN II	4
<i>Professional Development</i>		
DMA 114	PROFESSIONAL PRACTICES AND PORTFOLIO I	4
DMA 214	PROFESSIONAL PRACTICES AND PORTFOLIO II	4
DMA 215	PROFESSIONAL STUDIO EXPERIENCE ¹	4
or DMA 199	COOPERATIVE WORK EXPERIENCE	
Total Credits/Units		93

¹ Four credits/units 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)
- Effectively organize and manage web design projects.
- Use written, verbal and visual means to effectively present and communicate web design projects.
- Demonstrate work and business ethics in web design practice.
- Apply fine art theory and design purposeful projects relevant to audience needs.
- 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.

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 (Statewide) (CC) (p. 60)
- Short State Early Childhood Education Certificate of Specialization-General (Statewide) (CC) (p. 60)
- Short State Certificate of Specialization-Infants and Toddlers (Statewide) (CC) (p. 61)
- Short State Certificate of Specialization-School Age Care (Statewide) (CC) (p. 61)
- Short State Certificate of Specialization-Family Child Care (Statewide) (CC) (p. 61)
- Short State Certificate of Specialization-Administration (statewide) (CC) (p. 61)
- State Early Childhood Education Certificate (Statewide) (CP) (p. 62)
- Early Childhood Education (AAS) (p. 62)
- Early Childhood Education (AAS-T) (p. 63)

State Initial Early Childhood Education Certificate (Statewide) (CC)

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

Code	Title	Credits/ Units
Major Area Requirements		
ECED&105	INTRODUCTION TO EARLY CHILDHOOD EDUCATION	5
ECED&107	HEALTH/SAFETY/NUTRITION	5
ECED&120	PRACTICUM-NURTURING REL	2
Total Credits/Units		12

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.

Short State Early Childhood Education Certificate of Specialization-General (Statewide) (CC)

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

*CC-State Short Early Childhood Education Certificate of Specialization-General (statewide)

Code	Title	Credits/ Units
Major Area Requirements		
ECED&105	INTRODUCTION TO EARLY CHILDHOOD EDUCATION	5
ECED&107	HEALTH/SAFETY/NUTRITION	5
ECED&120	PRACTICUM-NURTURING REL	2
EDUC&115	CHILD DEVELOPMENT	5
EDUC&130	GUIDING BEHAVIOR	3
Total Credits/Units		20

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.

Short State Certificate of Specialization-Infants and Toddlers (Statewide) (CC)

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

Code	Title	Credits/ Units
Major Area Requirements		
ECED&105	INTRODUCTION TO EARLY CHILDHOOD EDUCATION	5
ECED&107	HEALTH/SAFETY/NUTRITION	5
ECED&120	PRACTICUM-NURTURING REL	2
EDUC&115	CHILD DEVELOPMENT	5
ECED&132	INFANTS/TODDLER CARE	3
Total Credits/Units		20

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.

Short State Certificate of Specialization-School Age Care (Statewide) (CC)

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

Code	Title	Credits/ Units
Major Area Requirements		
ECED&105	INTRODUCTION TO EARLY CHILDHOOD EDUCATION	5
ECED&107	HEALTH/SAFETY/NUTRITION	5

ECED&120	PRACTICUM-NURTURING REL	2
EDUC&115	CHILD DEVELOPMENT	5
EDUC&136	SCHOOL AGE CARE	3
Total Credits/Units		20

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.

Short State Certificate of Specialization-Family Child Care (Statewide) (CC)

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

Code	Title	Credits/ Units
Major Area Requirements		
ECED&105	INTRODUCTION TO EARLY CHILDHOOD EDUCATION	5
ECED&107	HEALTH/SAFETY/NUTRITION	5
ECED&120	PRACTICUM-NURTURING REL	2
EDUC&115	CHILD DEVELOPMENT	5
ECED&134	FAMILY CARE MANAGEMENT	3
Total Credits/Units		20

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.

Short State Certificate of Specialization-Administration (statewide) (CC)

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

Code	Title	Credits/ Units
ECED&105	INTRODUCTION TO EARLY CHILDHOOD EDUCATION	5
ECED&107	HEALTH/SAFETY/NUTRITION	5
ECED&120	PRACTICUM-NURTURING REL	2
EDUC&115	CHILD DEVELOPMENT	5
ECED&139	ADMINISTRATION OF ECE	3
Total Credits/Units		20

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.

State Early Childhood Education Certificate (Statewide) (CP)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
Select one from the following:		3-5
ENGL 098	WRITING FUNDAMENTALS	
ENGL 103	ADVANCED ENGLISH COMPOSITION	
PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING	
ENGL&101	ENGLISH COMPOSITION I	
ENGL&102	ENGLISH COMPOSITION II	
ENGL&235	TECHNICAL WRITING	
Subtotal		3-5
Computational Skills		
Course Options (p. 322)		5
Subtotal		5
<i>Human Relations</i>		
EDUC&150	CHILD, FAMILY, COMMUNITY	3
Subtotal		3
Major Area Requirements		
ECED&105	INTRODUCTION TO EARLY CHILDHOOD EDUCATION	5
ECED&107	HEALTH/SAFETY/NUTRITION	5
ECED&120	PRACTICUM-NURTURING REL	2
ECED&160	CURRICULUM DEVELOPMENT	5
ECED&170	LEARNING ENVIRONMENTS	3
ECED&180	LANGUAGE AND LITERACY	3

ECED&190	OBSERVATION AND ASSESSMENT	3
EDUC&115	CHILD DEVELOPMENT	5
Select one from the following:		3
EDUC&130	GUIDING BEHAVIOR	
EDUC&136	SCHOOL AGE CARE	
ECED&132	INFANTS/TODDLER CARE	
ECED&134	FAMILY CARE MANAGEMENT	
ECED&139	ADMINISTRATION OF ECE	
Total Credits/Units		45-47

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/46EA/Gedt.html>).

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)
- 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.

Early Childhood Education (AAS)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
Course Options (p. 321)		1
<i>Health & Physical Education</i>		
Course Options (p. 322)		3
<i>Computational Skills</i>		
Select one from the following:		5
MATH 092	APPLIED ELEMENTARY ALGEBRA	

Human Relations		
EDUC&150	CHILD, FAMILY, COMMUNITY	3
Humanities		
Course Options (p. 323)		3
Social Sciences		
Course Options (p. 323)		3
Natural Sciences		
ENVS 109	INTEGRATED ENVIRONMENTAL SCIENCE	5
Major Area Requirements		
ECE 102	SCIENCE AND MATHEMATICS FOR YOUNG CHILDREN	3
ECE 116	LITERATURE AND STORYTELLING FOR CHILDREN	2
ECE 133	REFLECTIVE PRACTICES IN EARLY LEARNING	3
ECE 135	PARTNERSHIPS WITH FAMILIES IN EARLY CARE & EDUC	3
ECE 199 & ECE 215	COOPERATIVE WORK EXPERIENCE and EARLY CHILDHOOD SEMINAR ¹	5
ECE 211 & ECE 212	LEARNING EXPERIENCES FOR YOUNG CHILDREN II and LEARNING EXP FOR YOUNG CHILDREN II LAB ¹	6
ECE 213 & ECE 214	LEARNING EXPERIENCES FOR YOUNG CHILDREN III and LEARNING EXP FOR YOUNG CHILDREN III LAB ¹	6
ECED&105 & ECED&120	INTRODUCTION TO EARLY CHILDHOOD EDUCATION and PRACTICUM-NURTURING REL ¹	7
ECED&107	HEALTH/SAFETY/NUTRITION	5
ECED&160	CURRICULUM DEVELOPMENT	5
ECED&170	LEARNING ENVIRONMENTS	3
ECED&180	LANGUAGE AND LITERACY	3
ECED&190	OBSERVATION AND ASSESSMENT	3
EDUC&115	CHILD DEVELOPMENT	5
EDUC&130	GUIDING BEHAVIOR	3
EDUC&203	EXCEPTIONAL CHILD	3
Additional Major Area Requirements		
ECED&132 or EDUC&136	INFANTS/TODDLER CARE SCHOOL AGE CARE	3
Total Credits/Units		96

¹ Concurrent enrollment required.

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.

Early Childhood Education (AAS-T)

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

Students preparing to transfer should make an early decision and contact the four-year school to which they will transfer. The Early Childhood Education coordinator can help in planning a schedule based on the four-year school's requirements. The department has made transfer agreements with several colleges to date.

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.

Code	Title	Credits/Units
General Education Requirements ¹		
Communication Skills		
ENGL&101	ENGLISH COMPOSITION I	5
ENGL&102	ENGLISH COMPOSITION II	5
Quantitative Skills		

MATH&107	MATH IN SOCIETY	5
<i>Humanities</i>		10
CMST 216	INTERCULTURAL COMMUNICATION	
Course Options (excluding CMST) (p. 311)		
<i>Social Sciences</i>		10
PSYC&200	LIFESPAN PSYCHOLOGY	
Course Options (excluding PSYC) (p. 312)		
<i>Natural Sciences</i>		
BIOL 164	HUMAN BIOLOGY	5
& BIOL 165	and HUMAN BIOLOGY LAB	
PHSC 101	GENERAL PHYSICAL SCIENCE	5
Major Area Requirements		
ECE 100	CHILD DEVELOPMENT: BIRTH TO SIX	3
ECE 133	REFLECTIVE PRACTICES IN EARLY LEARNING	3
ECE 199	COOPERATIVE WORK EXPERIENCE	3
ECE 211	LEARNING EXPERIENCES FOR YOUNG CHILDREN II	3
ECE 212	LEARNING EXP FOR YOUNG CHILDREN II LAB	3
ECE 213	LEARNING EXPERIENCES FOR YOUNG CHILDREN III	3
ECE 214	LEARNING EXP FOR YOUNG CHILDREN III LAB	3
ECE 215	EARLY CHILDHOOD SEMINAR	2
ECED&105	INTRODUCTION TO EARLY CHILDHOOD EDUCATION	5
ECED&107	HEALTH/SAFETY/NUTRITION	5
ECED&120	PRACTICUM-NURTURING REL	2
EDUC&130	GUIDING BEHAVIOR	3
EDUC&150	CHILD, FAMILY, COMMUNITY	3
ECED&160	CURRICULUM DEVELOPMENT	5
ECED&180	LANGUAGE AND LITERACY	3
EDUC&203	EXCEPTIONAL CHILD	3
Total Credits/Units		97

¹ Note: Some general education requirements may be met by the specific requirements of the 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:

- 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.
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate interpersonal/human relations skills. (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)

EDUCATION

Teachers play a direct role in the life of almost every person and in the development of society as a whole. Shortages of trained educators are anticipated in the near future as many of those currently working in the profession reach retirement age.

Elementary teachers instruct students in basic concepts in several subjects, including mathematics, language arts, science, and social studies. They also introduce small children to formal learning in kindergarten.

Secondary teachers usually specialize in teaching one subject to high school students such as English, music, history, mathematics, languages, biology, chemistry, or others. Many secondary teachers spend at least some time teaching outside of their subject area. Duties may also include attending staff meetings, supervising extracurricular activities and meeting with parents.

A minimum of a bachelor's degree plus teaching certification is required to teach in grades kindergarten through 12.

Prospective education students should consult with an education advisor to plan a course of study. At Clark College, students usually complete General Education Requirements within the Associate in Arts degree. A specific course of study should be planned based on the requirements of the senior institution where the student will transfer.

- Elementary Education - Transfer to WSU Vancouver (AA) (p. 65)

Elementary Education - Transfer to WSU Vancouver (AA)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the 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 an upper-division elementary education major. This degree is defined specifically for transfer to the WSUV cohort program in elementary education.

Students taking this degree should note that a change in transfer institution might change requirements, and advisors at the transfer institution should be consulted. Students are encouraged to visit the WSUV Elementary Education program website for more comprehensive information related to the program admissions requirements, application deadlines and alternative coursework options.

Although not required for this degree, students should be advised they must take the WEST-B in order to apply to teacher preparation programs. 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.

Complete as Many General Electives (GE) courses as needed to reach the total 90 credits required by the degree.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
ENGL&102	ENGLISH COMPOSITION II	5
<i>Quantitative Skills</i>		
MATH 122	MATH FOR ELEMENTARY TEACHERS	5
<i>Health & Physical Education</i>		
Course Options (p. 311)		3
<i>Humanities</i>		
Course Options (p. 311)		15
<i>Social Sciences</i>		
Select one from the following:		5
GEOG&100	INTRODUCTION TO GEOGRAPHY	
GEOG&102	WORLD REGIONAL GEOGRAPHY	
GEOG&200	HUMAN GEOGRAPHY	
GEOG 205	PHYSICAL GEOGRAPHY	
GEOG&207	ECONOMIC GEOGRAPHY	
Select one from the following:		5
HIST&146	UNITED STATES HISTORY I	
HIST&147	UNITED STATES HISTORY II	
HIST&148	UNITED STATES HISTORY III	
PSYC&200	LIFESPAN PSYCHOLOGY	5
<i>Natural Sciences</i>		
Select 18 credits/units from the following:		18
BIOL&100	SURVEY OF BIOLOGY	
GEOL&101	INTRO PHYSICAL GEOLOGY	
CHEM&110	CHEMICAL CONCEPTS W/LAB (recommended)	
ASTR&101	INTRO TO ASTRONOMY (recommended)	
PHYS&100	PHYSICS NON-SCI MAJORS (recommended)	
Program Requirements		
MATH 123	MATH FOR ELEMENTARY TEACHERS	5
MATH 124	MATH FOR ELEMENTARY TEACHERS	5
POLS 111	AMERICAN NATIONAL GOVERNMENT AND POLITICS	5
Select one from the following:		3-5
ECON 101	INTRODUCTION TO ECONOMICS	
ECON&201	MICRO ECONOMICS	
ECON&202	MACRO ECONOMICS	
<i>Complete as Many General Electives (GE) courses as needed to reach the total 90 credits required by the degree</i>		
EDUC&201	INTRODUCTION TO EDUCATION (recommended)	
EDUC 210	INTRODUCTORY FIELD EXPERIENCE (recommended)	
HIST&126	WORLD CIVILIZATIONS I (recommended)	
MATH 110	COLLEGE ALGEBRA WITH SUPPLEMENTAL INSTRUCTION (recommended)	
	or MATH 111 COLLEGE ALGEBRA	
Total Credits/Units		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:

- 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 claims about the natural world using scientific methodology. (GE)
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (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)
- 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)

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) (p. 67)

Electrical and Computer Engineering (AST2)

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

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 defined below:

- Clark requires 3 credits of Health-Physical Education coursework.

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 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.

Generic Requirements

Courses taken must come from the current ICRC distribution list in order to count as General Education or General University Requirements (GER's/GUR's) at the receiving institution. Additional general educational requirements, cultural diversity requirements, and foreign language requirements, as required by the receiving institution, must be met prior to the completion of a baccalaureate degree.

Code	Title	Credits/ Units
Basic Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
<i>Mathematics</i> ¹		25
MATH&151	CALCULUS I	
MATH&152	CALCULUS II	
MATH&153	CALCULUS III	
MATH 215	LINEAR ALGEBRA	
MATH 221	DIFFERENTIAL EQUATIONS ²	
<i>Physics</i> ³		15-18
PHYS&241 & PHYS&231 & PHYS 094	ENGINEERING PHYSICS I and ENGINEERING PHYSICS LAB I and PHYSICS CALCULATIONS	
PHYS&242 & PHYS&232 & PHYS 095	ENGINEERING PHYSICS II and ENGINEERING PHYSICS LAB II and PHYSICS CALCULATIONS	
PHYS&243 & PHYS&233 & PHYS 096	ENGINEERING PHYSICS III and ENGINEERING PHYSICS LAB III and PHYSICS CALCULATIONS	
<i>Chemistry with Lab</i>		
CHEM&141	GENERAL CHEMISTRY I	4
CHEM&151	GENERAL CHEMISTRY LABORATORY I	1
<i>Required Major Courses</i>		
ENGR&204	ELECTRICAL CIRCUITS	5
CSE 121	INTRODUCTION TO C	5
Distribution Requirements		
<i>Humanities</i>		
Course Options (p. 311)		5
<i>Social Sciences</i>		
ECON&201 or ECON&202	MICRO ECONOMICS ⁴ MACRO ECONOMICS	5
Course Options (p. 312)		
Additional Credits in either Humanities or Social Sciences		5
PHIL&120	SYMBOLIC LOGIC (recommended)	
<i>Select five (5) electives as appropriate for intended major and intended baccalaureate institution:</i>		
A second course in Computer Programming - object oriented - 4-5 credits		
Innovation in Design		
Calculus IV (Advanced or Multi-variable Calculus)		
Technical Writing		
Statics		
Dynamics		
Thermodynamics		
Digital Logic		
Biology for Science Majors I + labs		
General Chemistry II + lab		
Applied Numerical Methods		
Microprocessors		
Total Credits/Units		95-103

- ¹ 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 baccalaureate institution the student plans to attend.
- ² Clark requires concurrent enrollment or completion of MATH&254 with a grade of 'C' or better.
- ³ Calculus-based or non-calculus based sequence including laboratory. Students should be advised that some baccalaureate programs require physics with calculus.
- ⁴ Either ECON course is recommended, but not 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)
- 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.

EMERGENCY MEDICAL SERVICES

Emergency Medical Technician

Clark College offers a Certificate of Completion in Emergency Medical Technician-Basic (EMT). A variety of community agencies such as transporting ambulance companies, police and fire departments, and large industries utilize employees with EMT training. This program includes lecture, laboratory, and field experience on an ambulance and fire rescue unit as available.

EMT 103 is a ten-credit-hour Clark College course taught at the Northwest Regional Training Center (NWRTC). Check the Clark College website for directions to the training center. Students must bring the following items to the first night of class:

- Copy of current American Heart Association healthcare provider CPR card (or take HLTH 124 Healthcare Provider CPR) within first week of class).
- HEOC 120 Aids Education (or proof of minimum 7-hour AIDS Education Certificate).
- Copy of valid driver's license.
- Washington State Patrol criminal background check (within six [6] months of course date).
- MMR immunization (twice in lifetime or within last 10 years).
- Hepatitis B immunization (series of three) or signed waiver.
- Negative tuberculosis skin test or chest x-ray (within past six [6] months).
- Must be 18 years of age.
- Proof of high school completion (transcripts) or GED.

*Students are required to purchase the course textbook prior to the first class. The textbook can be purchased at the Clark College Bookstore

**Students are strongly encouraged to attend the mandatory EMT course orientation held at NWRTC.

Please call the NWRTC office at (360)397-2100 if you have any questions about the above requirements.

- Emergency Medical Technician (Accelerated) (CC) (p. 69)

Emergency Medical Technician (Accelerated) (CC)

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

To earn the Certificate of Completion, students must complete the courses listed below with a grade point average (GPA) of 2.0 or above in each offering.

Code	Title	Credits/ Units
Program Requirements		
EMT 103	EMERGENCY MEDICAL TECHNICIAN (ACCELERATED) (Accelerated)	12
Select one from the following:		4-5
HEOC 100	BASIC CONCEPTS OF ANATOMY AND PHYSIOLOGY ¹	
BIOL 164 & BIOL 165	HUMAN BIOLOGY and HUMAN BIOLOGY LAB ¹	
Total Credits/Units		16-17

¹ HEOC 100 or BIOL 164 & BIOL 165, must be seven years current upon program entry.

Code	Title	Credits/ Units
Recommended Courses		
BMED 110	MEDICAL TERMINOLOGY I (strongly recommended)	3
BMED 111	MEDICAL TERMINOLOGY II (strongly recommended)	3

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.

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.

Clark College offers the first two years of study of a four-year engineering degree program. The first two years main focus of study are preparatory courses in mathematics, chemistry, physics, and basic engineering courses required by the student's engineering field and transfer school.

Those who study engineering today can look forward to a rewarding career where they experience personal achievement, exercise their curiosity, give service to society, and realize financial success.

Engineers work on a wide variety of projects: basic and applied research, product development, design and modification of processes and equipment, and plant operation. Some enter sales, marketing, management, consulting, government agencies, or teaching.

Engineers plan, develop, and oversee the research and design of construction and manufacturing projects. They work on teams with engineers from other fields to design integrated systems and solve complex technical problems. Engineers also develop and use computer-aided design programs to simulate and test products and systems.

Engineers can specialize in many fields including:

- Aeronautical/Aerospace
- Bioengineering
- Biomedical
- Ceramic
- Chemical/Pulp & Paper
- Civil
- Computer
- Electrical/Electronics
- Environmental
- Forestry
- Manufacturing/Industrial
- Marine
- Materials
- Mechanical
- Software

There are many other interdisciplinary fields including architecture, law, sports, human factors and acoustics.

- Engineering (AST2) (p. 70)

Engineering (AST2)

Academic Plans, known as programs, include a overview description and a summary of program requirements. You can search the online catalog via the 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 a four-year Engineering program. These lower-division course requirements will vary depending on the math and English placement at Clark College, and the requirements of the four-year institution to which you transfer. It is critical

that you work with an Engineering faculty advisor to ensure your program will give you the maximum benefit when you transfer. Additional courses may be needed to satisfy graduation requirements for the Associate in Science degree (<https://catalog.clark.edu/academic-plans/track-2-ast2/general/>).

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
Subtotal		5
<i>Quantitative Skills</i>		
MATH&151	CALCULUS I	5
MATH&152	CALCULUS II	5
Subtotal		10
<i>Health & Physical Education</i>		
Course Options (p. 311)		3
Subtotal		3
<i>Humanities & Social Sciences</i>		
Select 15 credits/units from the following:		15
Humanities (HA, HB) Course Options (p. 311)		
Social Sciences (SS) Course Options (p. 312)		
Subtotal		15
Pre-Major Program Requirements		
CHEM&141	GENERAL CHEMISTRY I	4
CHEM&151	GENERAL CHEMISTRY LABORATORY I	1
MATH&153	CALCULUS III	5
MATH 221	DIFFERENTIAL EQUATIONS	5
MATH&254	CALCULUS IV	5
PHYS&241 & PHYS&231	ENGINEERING PHYSICS I and ENGINEERING PHYSICS LAB I	5
PHYS&242 & PHYS&232	ENGINEERING PHYSICS II and ENGINEERING PHYSICS LAB II	5
PHYS&243 & PHYS&233	ENGINEERING PHYSICS III and ENGINEERING PHYSICS LAB III	5
Elective Requirements		
Complete as many General Elective (GE) courses as needed to reach the total of 90 credits/units required by the degree. ¹		22
CHEM&142	GENERAL CHEMISTRY II	
CHEM&143	GENERAL CHEMISTRY III	
CHEM&152	GENERAL CHEMISTRY LABORATORY II	
CHEM&153	GENERAL CHEMISTRY LABORATORY III	
CSE 121	INTRODUCTION TO C	
CSE 222	INTRODUCTION TO DATA STRUCTURES	
ENGR 101	ENGINEERING AND COMPUTER SCIENCE ORIENTATION	
ENGR&104	INTRODUCTION TO DESIGN	
ENGR 107	INTRO TO AEROSPACE ENGINEERING	
ENGR 109	INTRODUCTION TO ENGINEERING	
ENGR 113	ENGINEERING SKETCHING AND VISUALIZATION	
ENGR 115	GEOMETRIC DIMENSIONING AND TOLERANCING	
ENGR 120	INTRO TO ELECTRICAL/COMPUTER SCI & ENGINEERING	

ENGR 121	FIELD SURVEY I
ENGR 140	BASIC AUTOCAD
ENGR 150	BASIC SOLIDWORKS
ENGR 199	COOPERATIVE WORK EXPERIENCE
ENGR&204	ELECTRICAL CIRCUITS
ENGR 208	FUNDAMENTALS OF FLIGHT
ENGR&214	STATICS
ENGR&215	DYNAMICS
ENGR 221	MATERIALS SCIENCE
ENGR&224	THERMODYNAMICS
ENGR&225	MECHANICS OF MATERIALS
ENGR 239	MANUFACTURING PROCESSES
ENGR 250	DIGITAL LOGIC DESIGN
ENGR 252	ELECTRICAL CIRCUITS AND SIGNALS
ENGR 253	SIGNALS AND SYSTEMS
ENGR 270	DIGITAL SYSTEMS AND MICROPROCESSORS
ENGR 280	SELECTED TOPICS
ENGR 290	SPECIAL PROJECTS
ENGL&235	TECHNICAL WRITING
MATH 215	LINEAR ALGEBRA

Total Credits/Units

90

¹ Requirements vary by school and program. See an Engineering faculty advisor regarding proper selection.

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.

- Acquire scientific and technological information from appropriate sources to examine issues, claims or situations.
- 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.

ENVIRONMENTAL SCIENCE

Environmental scientists apply mathematics and scientific principles to solve environmental problems. They develop ways to reduce, correct, or prevent damage to the environment.

Following the 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:

- Environmental engineering
- Environmental law
- State and federal wildlife agencies
- Environmental science teaching at the elementary or secondary level
- Environmental research scientist
- Environmental planning/policy analyst
- Nonprofit environmental organizations

Environmental Science is a highly interdisciplinary field; students interested in careers in the Environmental Sciences will need a fundamental understanding of a variety of sciences and social sciences. Depending on specific career objectives, students pursuing a four-year degree in Environmental Science may want to emphasize additional coursework in such fields as Biology, Chemistry, Physics, Geology, Oceanography, or the Atmospheric Sciences. Students planning careers in Environmental Studies, Environmental Regulation and Policy, or Regional Planning may want to emphasize additional coursework in the Social Sciences, Business, or Economics.

- Environmental Science (AST1) (p. 72)

Environmental Science (AST1)

Academic Plans, known as programs, include a overview description and a summary of program requirements. You can search the online catalog via the 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 major study in Environmental Science. Lower-division course requirements will vary depending on the transfer institution. Contact an advisor at the transfer institution to determine required coursework as early as possible.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
Subtotal		5
<i>Quantitative Skills</i>		
MATH&151	CALCULUS I	5
MATH&152	CALCULUS II	5
Subtotal		10
<i>Health & Physical Education</i>		
Course Options (p. 311)		3
Subtotal		3
<i>Humanities & Social Sciences</i>		
ENVS 231	ENVIRONMENTAL POLITICS	5
or POLS 231	ENVIRONMENTAL POLITICS	

Humanities List A (p. 311)	5
Humanities or Social Sciences (p. 312)	5
Subtotal	15

Pre-Major Program Requirements

BIOL&221	MAJORS ECOLOGY/EVOLUTION	5
BIOL&222	MAJORS CELL/MOLECULAR	5
BIOL&223	MAJORS ORGANISMAL PHYS	5
CHEM&141	GENERAL CHEMISTRY I	4
CHEM&142	GENERAL CHEMISTRY II	4
CHEM&143	GENERAL CHEMISTRY III	4
CHEM&151	GENERAL CHEMISTRY LABORATORY I	1
CHEM&152	GENERAL CHEMISTRY LABORATORY II	1
CHEM&153	GENERAL CHEMISTRY LABORATORY III	2

Program Requirements

MATH&146	INTRODUCTION TO STATISTICS	5
ENGL&102	ENGLISH COMPOSITION II	5
ENVS&101	INTRODUCTION TO ENVIRONMENTAL SCIENCE	5

Select one from the following: 5

GEOL 102	INTRO TO GEOL II: EARTH'S SURFACE PROCESSES	
PHYS&241 & PHYS&231	ENGINEERING PHYSICS I and ENGINEERING PHYSICS LAB I	

Total Credits/Units 84

Code	Title	Credits/ Units
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Suggested Electives

Select one from the following: 5

GEOL&101	INTRO PHYSICAL GEOLOGY	
PHYS&242 & PHYS&232	ENGINEERING PHYSICS II and ENGINEERING PHYSICS LAB II	
PHYS&243 & PHYS&233	ENGINEERING PHYSICS III and ENGINEERING PHYSICS LAB III	5
SURV 125	INTRODUCTION TO GIS	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:

- 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.

GEOLOGY

Geology is the study of the Earth's chemistry, physics, and history. Geologists work to understand the complex systems at work in our planet and, through this work, to understand the origin and evolution of the landscapes that surround us. Geologists work in natural resource development, natural hazard management, environmental monitoring, and pollution mitigation. Research subjects encompass everything from glacier systems to volcanoes to the fossil history of the evolution of life.

Career Opportunities

Careers in Geology generally require advanced degrees. Here at Clark College, you can begin a program that will lead to advanced degrees at any major university.

Job opportunities through private, federal, and state agencies exist in:

- Climate Change Studies
- Energy
- Environmental Monitoring and Mitigation
- Geological Engineering
- Mining
- Petroleum
- Geology (AST1) (p. 74)

Geology (AST1)

Academic Plans, known as programs, include a overview description and a summary of program requirements. You can search the online catalog via the 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 major study in Geology. Lower-division course requirements will vary depending on the transfer institution. Contact an advisor at the transfer institution to determine required coursework as early as possible. Additional courses are needed to satisfy graduation requirements for the Associate in Science or the Associate in Arts degree.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
Subtotal		5
<i>Quantitative Skills</i>		
MATH&151	CALCULUS I	5
MATH&152	CALCULUS II	5
Subtotal		10
<i>Health & Physical Education</i>		
Select one from the following:		3
HPE 258	FITNESS-WELLNESS	
HLTH Health Course (two credits/units) and PE Activity Course (one credit/unit)		
Subtotal		3
<i>Humanities & Social Sciences</i>		
CMST&220	PUBLIC SPEAKING	5

Select 10 credits/units from the following:		10
Humanities Course Options (p. 311)		
Social Sciences Course Options (p. 312)		
Subtotal		15
Chemistry Sequence		
CHEM&141	GENERAL CHEMISTRY I	4
CHEM&142	GENERAL CHEMISTRY II	4
CHEM&143	GENERAL CHEMISTRY III	4
CHEM&151	GENERAL CHEMISTRY LABORATORY I	1
CHEM&152	GENERAL CHEMISTRY LABORATORY II	1
CHEM&153	GENERAL CHEMISTRY LABORATORY III	2
Additional Science Sequence Requirements		
PHYS&241	ENGINEERING PHYSICS I	5
& PHYS&231	and ENGINEERING PHYSICS LAB I	
PHYS&242	ENGINEERING PHYSICS II	5
& PHYS&232	and ENGINEERING PHYSICS LAB II	
PHYS&243	ENGINEERING PHYSICS III	5
& PHYS&233	and ENGINEERING PHYSICS LAB III	
Pre-Major Program Requirements		
GEOL&101	INTRO PHYSICAL GEOLOGY	5
GEOL 102	INTRO TO GEOL II: EARTH'S SURFACE PROCESSES	5
GEOL 218	FIELD STUDIES IN GEOLOGY	1-6
MATH&153	CALCULUS III	5
ENGL&102	ENGLISH COMPOSITION II	5
Total Credits/Units		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)

HONORS PROGRAM

The Transfer AA Honors Program is designed to promote excellence in learning and celebrate exceptional student achievement. Students admitted to the Honors Program have the opportunity to take intellectually enriching honors courses with other outstanding students, work closely with a faculty mentor, and complete an independent capstone project relevant to their area of interest.

Program Admission Requirements

Students must meet the following requirements for admission to the program:

- At least 12 college-level credits with a cumulative GPA of 3.50 or higher
- Completion of ENGL&101 with a grade B+ or higher
- Eligibility for enrollment in MATH 096 or higher

One or more of the admission requirements above may be waived if a Clark faculty member submits a formal recommendation of admission on behalf of the student. An online application form is available at www.clark.edu/honors (<http://www.clark.edu/honors/>)

Transfer AA Honors Concentration

To earn the Honors Academic Concentration, students must satisfy the following requirements:

- Completion of 20 credits of Honors-designated courses
- Completion of a 3-credit Honors capstone course
- 3.50 cumulative GPA
- Concurrent completion of Transfer AA, AST, or AFA degree requirements
- Honors Concentration (AC) (p. 75)

Honors Concentration (AC)

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

To earn the Transfer AA Honors Academic Concentration, students must complete the following courses and concurrently satisfy the degree requirements for an Associate in Arts degree, Associate in Science degree, or Associate in Fine Arts degree.

Code	Title	Credits/ Units
Certificate Requirements		
Honors-designated courses		20
HONS 290	SPECIAL PROJECTS: HONORS ¹	1-6
Total Credits/Units		23

¹ Students must complete at least three 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:

- Integrate knowledge and skills from multiple academic disciplines to produce original academic or artistic works.

HUMAN SERVICES

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 mental health and addictions treatment. This BASHS degree will operate in tandem with the Addiction Counseling Education Department, which will function as the primary foundational Associates degree for the BAS.

All prospective students who meet the minimum requirements, and would like to apply for admission to the BAS in Human Services 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;
- Submission of official college transcripts from previous colleges attended;
- Completed Baccalaureate of Applied Science in Human Services Statement of Intent submitted in-person, by mail, or email to the Enrollment Services Office:

Enrollment Services Office
Gaiser Hall, Room 128
360-992-2107
admissions@clark.edu

Clark College
Enrollment Services Office, GH 128
1933 Fort Vancouver Way
Vancouver, WA 98663-3598

- Bachelor of Applied Science in Human Services (BAS) (p. 76)

Bachelor of Applied Science in Human Services (BAS)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
ENGL&102	ENGLISH COMPOSITION II	5
<i>Quantitative Skills</i>		
MATH&146	INTRODUCTION TO STATISTICS	5
<i>Humanities</i>		
WS 101	INTRODUCTION TO WOMEN'S STUDIES (recommended)	5
Course Options (p. 311)		5
<i>Social Sciences</i>		
PSYC&100	GENERAL PSYCHOLOGY	5
PSYC&200	LIFESPAN PSYCHOLOGY	5
<i>Natural Sciences</i>		

BIOL 164 & BIOL 165	HUMAN BIOLOGY and HUMAN BIOLOGY LAB (recommended)	5
Course Options (p. 312)		5
<i>Additional General Education Courses</i>		
SOC 230	DOMESTIC VIOLENCE (recommended)	5
ANTH&206	INTRODUCTION TO CULTURAL ANTHROPOLOGY (recommended)	5
SOC& 101	INTRO TO SOCIOLOGY (recommended)	5
ACED courses and/or General Education Courses ¹		42

Code	Title	Credits/ Units
Major Area Requirements		
BASHS301	INTRODUCTION TO HUMAN SERVICES	5
BASHS302	SYSTEMS AND SOCIAL JUSTICE	5
BASHS303	ETHICS IN HUMAN SERVICES	5
BASHS304	PRACTICAL FAMILY THERAPY	5
BASHS305	ADVANCED CO-OCCURRING DISORDERS TREATMENT	5
BASHS306	TRAUMA, GRIEF & LOSS	5
BASHS401	MULTICULTURAL COUNSELING IN HS	5
BASHS402	HUMAN SERVICES INTERVENTION & ADVOCACY	5
BASHS403	RESEARCH & EVALUATION METHODOLOGIES IN HS	5
BASHS404	ADVANCED CASE MANAGEMENT IN HS	5
BASHS410	HUMAN SERVICES FIELD PLACEMENT I	5
BASHS411	HUMAN SERVICES FIELD PLACEMENT II	5
ACED 101	SURVEY OF ADDICTIONOLOGY	3
ACED 122	INTRODUCTION TO ADDICTIONS COUNSELING SKILLS	3
ACED 125	GROUP COUNSELING IN ADDICTIONS	3
ACED 136	LAW AND ETHICS IN ADDICTIONS COUNSELING	3
ACED 160	PHARMACOLOGY OF DRUGS OF ABUSE	3
ACED 201	THEORIES OF COUNSELING	3
Total Credits including those earned from AA/AAS/AAT		180

- ¹ Please note that for all BAS degrees the following General Education credits must be earned:
- Communications - 10 credits
 - Quantitative/Symbolic Reasoning Skills - 5 credits
 - Humanities - 10 credits
 - Social Science - 10 credits
 - Natural Science - 10 credits
 - Additional general education courses – 15 credits
- Please work with advisor to identify any outstanding needs based on associate degree credits already earned.

INTERNATIONAL STUDIES

The International Studies concentration option recognizes the growing importance of global interdependence and diversity. It is of special interest to students planning careers in fields emphasizing backgrounds in such areas as foreign languages, regional studies, business, and economics.

International Studies Academic Concentration

For students in World Languages (Japanese, or Spanish) interested in emphasizing courses with a strong international focus as they complete the distribution requirements for their Associate of Arts degree. To earn the Academic Concentration (which appears as a special notation on the transcript), students must complete 5 credits of a 200 level World Language Course and 20 credits of approved international courses. Students must complete the 200 level language class with a grade of C or above.

- International Studies (AC) (p. 77)

International Studies (AC)

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

The International Studies Academic Concentration allows students to earn two years of foreign language credit while meeting the distribution requirements for the Associate in Arts degree.

Code	Title	Credits/ Units
Required Core Courses		
<i>World Language</i>		
Select five credits/units from &200-level courses in one language (Japanese or Spanish)		5
Subtotal		5
<i>Electives</i>		
Select 20 credits/units from the Approved International Electives		20
Subtotal		20
Total Credits/Units		25

The International Studies Academic Concentration has identified certain courses in the Clark College catalog as having a strong international component. Students must complete 20 credits from the list below. The selected courses count toward the International Studies Academic Concentration while at the same time meeting distribution requirements for the Associate of Arts degree. Students must complete each international elective class with a grade of C or above. See list of Approved International Courses below:

Code	Title	Credits/ Units
Approved International Electives		
ANTH&206	INTRODUCTION TO CULTURAL ANTHROPOLOGY	5
Select one from the following:		5

ART 220	ART HISTORY: ANCIENT TO LATE ANTIQUE	
ART 221	ART HISTORY: MEDIEVAL-RENAISSANCE	
ART 222	ART HISTORY: BAROQUE-MODERN	
BIOL 101	ENVIRONMENTAL BIOLOGY	5
CMST 216	INTERCULTURAL COMMUNICATION	5
ECON 110	INTRODUCTION TO THE GLOBAL ECONOMY	5
ECON 120	INTERNATIONAL ECONOMICS	3
ENGL&255	WORLD LITERATURE II	5
or ENGL&256	WORLD LITERATURE III	
Select one from the following:		3
ENGL&226	BRITISH LITERATURE I	
ENGL&227	BRITISH LITERATURE II	
ENGL&228	BRITISH LITERATURE III	
ENGL 150	INTRODUCTION TO MYTHOLOGY	5
GEOG&102	WORLD REGIONAL GEOGRAPHY	5
GEOG&207	ECONOMIC GEOGRAPHY	5
HIST 231	HISTORY OF GENOCIDE	3
HIST 260	AFRICAN HISTORY	5
HIST 285	HISTORY OF LATIN AMERICA	5
Select one from the following:		5
HIST&126	WORLD CIVILIZATIONS I	
HIST&127	WORLD CIVILIZATIONS II	
HIST&128	WORLD CIVILIZATIONS III	
HIST 251	WOMEN IN WORLD HISTORY I	5
or HIST 252	WOMEN IN WORLD HISTORY II	
JAPN 171	JAPANESE CULTURE AND SOCIETY	5
Select one from the following:		5
MUSC 116	MUSIC HISTORY: MIDDLE AGES TO BAROQUE	
MUSC 117	MUSIC HISTORY: CLASSICAL/ROMANTIC	
MUSC 118	MUSIC HISTORY: TWENTIETH CENTURY	
PHIL&101	INTRODUCTION TO PHILOSOPHY	5
POLS&203	INTERNATIONAL RELATIONS	5
POLS 220	THE GEOPOLITICS OF THE MIDDLE EAST	5
WS 201	WOMEN AROUND THE WORLD	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:

- Demonstrate Awareness of other cultures.
- Demonstrate world language skills
- Describe the field of international studies.

JOURNALISM

Clark College's Journalism program prepares students who plan to transfer to a four-year institution as well as those seeking success in a workplace that requires clear writing and thoughtful inquiry. Our coursework also helps all students become more responsible consumers of news and information.

We offer a News Media Studies certificate designed to provide students with a clear pathway to greater success and preparation for transfer. Details about the 24- to 25- credit course of study appear below.

The core course is JOUR 101, Introduction to Journalism, a five-credit writing-intensive class that includes a study of the changing news media landscape as well as instruction in the basics of news reporting and writing.

Students looking at careers or further study in journalism, public relations, public affairs, politics, law, and communications should consider taking JOUR 111, which is our Digital News course, and JOUR 110, College News Production. College News Production provides students an opportunity to further develop meaningful hands-on skills by working on the print and online editions of the award-winning student news product, the Independent.

Several paid positions on the Independent are available each quarter for students, ranging from copy and section editors, designers, photography editors, and multimedia editors.

In addition to Clark's journalism courses, students should take a variety of courses that offer a broad general education and prepare them to transfer to a four-year school offering a degree in journalism or a related field. CMST&102 provides a foundation for understanding how the media function in our society and is highly recommended. ENGL&101, ENGL&102, and ENGL 103 are designed to improve a student's ability to write and do documented research accurately. Courses in the social sciences (particularly political science), history, literature, and science provide a background for accurate reporting and the interpretation of data.

Students should make every effort to develop relevant computer skills while at the community college. These skills include word processing, graphic design, and multimedia production, including photography and video production.

Because course requirements vary at each institution, a student interested in a four-year degree in Journalism should work with advisers at Clark and the transfer institution. Journalism courses typically transfer to four-year institutions. However, a student should contact the transfer institution to clarify each course's transferability.

- News Media Studies (AC) (p. 78)

News Media Studies (AC)

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

For students who want expertise in journalism and news media, this concentration may be earned along with a regular AA degree, and will be awarded upon graduation.

Code	Title	Credits/ Units
Core Courses		
JOUR 101	INTRODUCTION TO JOURNALISM	5
JOUR 111	DIGITAL NEWS	5
Select three credits/units from the following:		3
JOUR 110	COLLEGE NEWS PRODUCTION	
JOUR 120	COLLEGE NEWS PRODUCTION	
JOUR 130	COLLEGE NEWS PRODUCTION	
ENGL 127	CREATIVE NONFICTION WRITING	5
CMST&102	INTRO TO MASS MEDIA	5
Subtotal		23
Additional Coursework		
Select one from the following:		3-4
ART 131	PHOTOGRAPHIC STORYTELLING	
DMA 201	VIDEO AND SOUND PRODUCTION I	
Subtotal		3-4
Total Credits/Units		26-27

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:

- Students who complete the News Media Studies Certificate will be able to explain current news media principles and practices and appropriately apply fundamental news production skills.

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) (p. 79)
- Marketing (AAS) (p. 79)

Marketing (CP)

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

The Marketing certificate provides students with a clear and well-rounded picture of how basic business functions impact marketing in the United States, as well as global, economic systems. Students learn about the conceptual and applied use of marketing, which includes marketing research tactics, the marketing mix concept, customer behavior, and the external environments considered in marketing decisions. Technology, ethics and social responsibility, competition, economics, and government and legal considerations complete the key components of this certificate.

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.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
BTEC 106 or ENGL&101	APPLIED OFFICE ENGLISH ENGLISH COMPOSITION I	3-5
Subtotal		3-5
<i>Computational Skills</i>		
BUS 102	BUSINESS MATH APPLICATIONS	5
Subtotal		5
<i>Human Relations</i>		
BTEC 148	BUSINESS PROFESSIONAL SELF DEVELOPMENT	3
Subtotal		3
Business Core Courses		
BUS 028	BASIC ACCOUNTING PROCEDURES	3
BUS& 101	INTRODUCTION TO BUSINESS	5
BTEC 100	KEYBOARDING ²	1-3
BTEC 150	COMPUTER BUSINESS APPLICATIONS	5
ECON 101	INTRODUCTION TO ECONOMICS	3

MGMT 101	PRINCIPLES OF MANAGEMENT	3
Major Area Requirements		
BUS 117	ADVERTISING	3
BUS 199	COOPERATIVE WORK EXPERIENCE ¹	1-5
BUS 251	PROFESSIONAL SELLING	3
BUS 260	PRINCIPLES OF MARKETING	5
CMST&230 or CMST&220	SMALL GROUP COMMUNICATION PUBLIC SPEAKING	5
Total Credits/Units		54-56

¹ Minimum of five credits/units must be earned in Cooperative Work Experience.

² Minimum of Three credits/units required for completion

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/252B/Gedt.html>).

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)
- Successfully manage a buyer-seller relationship to include service follow-up, using professional selling techniques.
- Analyze a target market and develop product, pricing, promotion, and distribution strategies to meet customers' needs at a profit.
- Create an effective business advertisement to meet the needs of specific target market(s).

Marketing (AAS)

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

The Marketing Associate of Applied Science degree provides a pervasive and critical link between the producers of products and the consumers of those products. Marketing professionals research, design, price, promote, and place goods and services that meet the needs of target customer groups. With the foundation in basic business skills that this program provides, the student is prepared for an entry-level career in varied and interesting manufacturing, distribution, advertising, public relations, selling, and retail fields.

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.

Completion of Certificate of Proficiency in Marketing, Small Business Management, Accounting Clerk or Supervisory Management accounts for 56-60 of necessary credits.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
CMST&220	PUBLIC SPEAKING	5
or CMST&230	SMALL GROUP COMMUNICATION	
Subtotal		5
<i>Health and Physical Education</i>		
Course Options (p. 322)		3
Subtotal		3
<i>Humanities</i>		
Course Options (p. 323)		3
Subtotal		3
<i>Natural Sciences</i>		
Course Options (p. 324)		3
Subtotal		3
<i>Computational Skills</i>		
Satisfied in the CPs		
Subtotal		0
<i>Human Relations</i>		
Satisfied in the CPs		
Subtotal		0
<i>Social Sciences</i>		
Satisfied in the CPs		
Subtotal		0
Major Area Requirements		
BUS 029	BASIC ACCOUNTING PROCEDURES	3
BUS 105	INTRODUCTION TO INTERNATIONAL BUSINESS	3
BUS 117	ADVERTISING	3
BUS& 201	BUSINESS LAW	5
BUS 251	PROFESSIONAL SELLING	3
BUS 260	PRINCIPLES OF MARKETING	5
Select a minimum of 3-14 additional credits/units from the following 3-14 areas:		
Accounting (ACCT) (p. 122)		
Business Administration (BUS) (p. 143)		
Economics (ECON) (p. 181)		
Supervisory Management (MGMT) (p. 216)		
Computer Applications (BTEC) (p. 145) ¹		
General Electives		
Complete as many General Elective (GE) courses as needed to reach the total of 90 credits/units required by the degree		
Total Credits/Units		90-93

¹ Six credit/unit maximum.

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)
- Analyze a target market and develop product, pricing, promotion, and distribution strategies to meet customers' needs at a profit.
- Establish market strategies on the international level.
- Use micro- and macroeconomic concepts to analyze domestic and global business situations.
- Accurately maintain payroll register as required under federal and state laws.
- Create an effective business advertisement to meet the needs of specific target market(s).

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

MATH EDUCATION

The mathematics program at Clark College prepares students for successful study at four-year colleges and universities. At the university level, the student may prepare for a career in industry, government, or teaching. Students who intend to enter the job market before graduate school should have exposure to the natural, social, and applied sciences.

A variety of resources are available which help students with differing learning styles understand mathematical concepts. At Clark, computers, graphing calculators and other technology are integrated into classroom teaching and research.

The math department maintains a Web page that provides information about faculty members, course descriptions and online general advising for selecting a math course. Advice to help students succeed in math courses, along with instructional materials for some math classes, can be found on the website.

The Math Help Session is staffed 25-30 hours each week by department instructors to assist students who drop by for individual help with homework or understanding math concepts. New evening hours have also been added for night students at the Help Session.

Students who need to brush up on basic math skills will find classes in both the math and developmental education departments that prepare them for success before tackling college-level coursework. Single-credit classes to learn to use graphing calculators and for overcoming math anxiety are also offered.

- Math Education - DTA/MRP (AA) (p. 81)

Math Education - DTA/MRP (AA)

Academic Plans, known as programs, include a overview description and a summary of program requirements. You can search the online catalog via the 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 math education majors at the secondary level 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

Code	Title	Credits/ Units
Basic Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
ENGL&102	ENGLISH COMPOSITION II	5
<i>Quantitative/Symbolic Reasoning Requirements ¹</i>		
MATH&151	CALCULUS I	5
Distribution Requirements		
<i>Humanities</i>		15
CMST&220	PUBLIC SPEAKING ²	
Course Options (p. 311)		
<i>Social Sciences</i>		15
PSYC&100	GENERAL PSYCHOLOGY	
Course Options (p. 312)		
<i>Natural Sciences</i>		
MATH&152	CALCULUS II	5
Course Options (p. 312) ³		10
Major Requirements		
<i>Math Courses</i>		
MATH&153	CALCULUS III	5
MATH 215	LINEAR ALGEBRA	5
MATH&254	CALCULUS IV	5
<i>Education Courses</i>		
EDUC&201	INTRODUCTION TO EDUCATION	3
EDUC 210	INTRODUCTORY FIELD EXPERIENCE	3
Electives		
<i>Elective Courses</i>		
Course Options (p. 313) ⁴		9
Total Credits/Units		90

¹ Intermediate algebra proficiency is required.

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)
- Demonstrate progress toward healthier behaviors. (GE)
- Apply communication theory to demonstrate effective oral communication skills. (GE)

MATHEMATICS

Advances in science, technology, social science, business, industry, and government are dependent upon precise analysis and the extraction of information from large quantities of data. Environmental problems, for example, require careful analysis by persons with skills in mathematics, computer science, biology, geology, physics, and business.

The mathematics program at Clark College prepares students for successful study at four-year colleges and universities. At the university level, the student may prepare for a career in industry, government, or teaching. Students who intend to enter the job market before graduate school should have exposure to the natural, social, and applied sciences.

A variety of resources are available which help students with differing learning styles understand mathematical concepts. At Clark, computers, graphing calculators and other technology are integrated into classroom teaching.

The math department maintains a Web page that provides information about faculty members, course descriptions and online general advising for selecting a math course. Advice to help students succeed in math courses, along with instructional materials for some math classes, can be found on the website.

The math department staffs several help facilities to assist students on a drop-in basis. Assistance is provided by faculty and trained helpers.

Students who need to brush up on basic math skills will find classes in both the math and developmental education departments that prepare them for success before tackling college-level coursework.

- General - Mathematics (Suggested) (AA) (p. 83)

General - Mathematics (Suggested) (AA)

Academic Plans, known as programs, include a overview description and a summary of program requirements. You can search the online catalog via the 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 major study in Mathematics. Lower-division course requirements will vary depending on the transfer institution. Contact an advisor at the transfer institution to determine required coursework as early as possible.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
ENGL&102	ENGLISH COMPOSITION II	5
<i>Quantitative Skills</i>		
MATH&151	CALCULUS I	5
<i>Health & Physical Education</i>		
HPE 258 or HPE 266	FITNESS-WELLNESS MIND BODY HEALTH	3
<i>Humanities</i>		
CMST&230	SMALL GROUP COMMUNICATION	5

Additional Humanities Course(s)		10
<i>Social Sciences</i>		
ECON&201 or ECON&202	MICRO ECONOMICS MACRO ECONOMICS	5
Course Options (p. 312)		10
<i>Additional Requirements</i>		
<i>Natural Science</i>		
PHYS&241 & PHYS&231 & PHYS 094	ENGINEERING PHYSICS I and ENGINEERING PHYSICS LAB I and PHYSICS CALCULATIONS ¹	6
PHYS&242 & PHYS&232 & PHYS 095	ENGINEERING PHYSICS II and ENGINEERING PHYSICS LAB II and PHYSICS CALCULATIONS ¹	6
Additional course in Natural Science outside of PHYS		5
COLL 101	COLLEGE ESSENTIALS: INTRODUCTION TO CLARK	2
Elective Requirements		
MATH&152	CALCULUS II	5
MATH&153	CALCULUS III	5
MATH 215	LINEAR ALGEBRA	5
MATH 221	DIFFERENTIAL EQUATIONS	5
MATH&254	CALCULUS IV	5
PHYS&243 & PHYS&233 & PHYS 096	ENGINEERING PHYSICS III and ENGINEERING PHYSICS LAB III and PHYSICS CALCULATIONS ¹	6
Total Credits/Units		95

¹ PHYS 094, PHYS 095, and PHYS 096 do not count toward the credit total of a transfer 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)

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) (p. 84)

Mechanical, Civil & Aeronautical Engineering (AST2)

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

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. Additional courses may be needed to satisfy graduation requirements for the Associate in Science degree (<https://catalog.clark.edu/academic-plans/track-2-ast2/general/>).

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 Articulated Degree defined below:

- Clark requires 3 credits of Health-Physical Education coursework.

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 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.

Clark College Equivalents

Code	Title	Credits/ Units
Communication Skills		
ENGL&101	ENGLISH COMPOSITION I	5
Humanities/Fine Arts/English & Social Science		
Minimum 5 credits in Humanities, minimum 5 credits in Social Science, plus an additional 5 credits in either Humanities or Social Science		15
Mathematics		
MATH&151	CALCULUS I ¹	5
MATH&152	CALCULUS II	5
MATH&153	CALCULUS III	5
MATH 215	LINEAR ALGEBRA	5
MATH 221	DIFFERENTIAL EQUATIONS ²	5
Physics		
Complete the following with the required concurrent enrollment: ³		15
<i>Sequence One</i>		
PHYS&241 & PHYS 094	ENGINEERING PHYSICS I and PHYSICS CALCULATIONS (concurrent enrollment required)	5
PHYS&231	ENGINEERING PHYSICS LAB I	1
<i>Sequence Two</i>		
PHYS&242 & PHYS 095	ENGINEERING PHYSICS II and PHYSICS CALCULATIONS (concurrent enrollment required)	5
PHYS&232	ENGINEERING PHYSICS LAB II	1
<i>Sequence Three</i>		
PHYS&243 & PHYS 096	ENGINEERING PHYSICS III and PHYSICS CALCULATIONS (concurrent enrollment required)	5
PHYS&233	ENGINEERING PHYSICS LAB III	1
Chemistry with Laboratory		
CHEM&141 & CHEM&151	GENERAL CHEMISTRY I and GENERAL CHEMISTRY LABORATORY I	5
CHEM&142 & CHEM&152	GENERAL CHEMISTRY II and GENERAL CHEMISTRY LABORATORY II	5
Additional Requirements		
ENGR&214	STATICS	5
ENGR&215	DYNAMICS	5
ENGR&225	MECHANICS OF MATERIALS	5
Electives		
<i>Electives as appropriate for intended major and intended baccalaureate 15-20 institution. Requirements vary by school and program. See an Engineering faculty advisor for proper selection.</i>		
Computer Programming		
Innovation in Design		
Calculus IV (Advanced or Multi-Variable Calculus)		
3-D Visualization and CAD (Engineering Graphics)		
Technical Writing		

Thermodynamics	
Electrical Circuits	
Materials Science	
Applied Numerical Methods	
Total Credits/Units	102

- ¹ MATH 103/MATH 102 and MATH 111/MATH 110 are required prerequisites for MATH&151 that may be needed if calculus placement is not met via COMPASS.
- ² Clark requires concurrent enrollment of completion in MATH&254 when taking MATH 221.
- ³ 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:

- 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.

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 know-how 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 too 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) (p. 86)
- Mechanical Automation (CA) (p. 86)
- Mechanical Automation (AAT) (p. 86)

Mechatronics Fundamentals (CC)

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

Code	Title	Credits/ Units
Major Area Requirements		
MTX 100	INDUSTRIAL SAFETY	1
MTX 101	DC FUNDAMENTALS	3
MTX 102	AC FUNDAMENTALS	4
MTX 103	BASIC MEASUREMENT TOOLS	2
MTX 106	FLUID POWER SYSTEMS	4
MTX 110	ELECTRIC MOTOR CONTROL 1	4
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.

Mechanical and Instrumentation Automation (CA)

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

Code	Title	Credits/ Units
Major Area Requirements		
MTX 100	INDUSTRIAL SAFETY	1
MTX 101	DC FUNDAMENTALS	3
MTX 102	AC FUNDAMENTALS	4
MTX 103	BASIC MEASUREMENT TOOLS	2
MTX 106	FLUID POWER SYSTEMS	4
MTX 110	ELECTRIC MOTOR CONTROL 1	4
MTX 121	SEMICONDUCTORS I	3
MTX 130	PROGRAMMABLE LOGIC CONTROLLERS 1	4
or MTX 132	SIEMENS PLC LVL I	
MTX 140	ROBOTIC SYSTEMS	4
MTX 145	ELECTRICAL POWER & DISTRIBUTION SYSTEMS	4
MTX 175	MECHATRONICS SYSTEMS FUNDAMENTALS	3
MTX 180	MECHANICAL SYSTEMS	5
Total Credits/Units		41

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/633E/Gedt.html>).

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 problems in electrical, mechanical, hydraulic and pneumatic equipment.
- Communicate with colleagues, supervisors and clients, using written and verbal technical and/or nontechnical language.
- Actively participate as an effective team member, completing prescribed project tasks and meeting project goals.

Mechanical and Instrumentation Automation (AAT)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		

PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING (recommended)	5
Subtotal		5
<i>Computational Skills</i>		
PTCS 110	PROFESSIONAL TECHNICAL COMPUTATIONAL SKILLS	5
Subtotal		5
<i>Human Relations</i>		
COLL 101	COLLEGE ESSENTIALS: INTRODUCTION TO CLARK	2
BTEC 148 or MGMT 101	BUSINESS PROFESSIONAL SELF DEVELOPMENT PRINCIPLES OF MANAGEMENT	3
Subtotal		5
Major Area Requirements		
MTX 100	INDUSTRIAL SAFETY	1
MTX 101	DC FUNDAMENTALS	3
MTX 102	AC FUNDAMENTALS	4
MTX 103	BASIC MEASUREMENT TOOLS	2
MTX 106	FLUID POWER SYSTEMS	4
MTX 110	ELECTRIC MOTOR CONTROL 1	4
MTX 121	SEMICONDUCTORS I	3
MTX 130	PROGRAMMABLE LOGIC CONTROLLERS 1	4
MTX 132	SIEMENS PLC LVL I	4
MTX 140	ROBOTIC SYSTEMS	4
MTX 145	ELECTRICAL POWER & DISTRIBUTION SYSTEMS	4
MTX 175	MECHATRONICS SYSTEMS FUNDAMENTALS	3
MTX 180	MECHANICAL SYSTEMS	5
MTX 216	MECHATRONICS 2	5
MTX 221	SEMICONDUCTORS 2	3
MTX 224	MOTOR DRIVE SYSTEMS	5
MTX 230	LASER ALIGNMENT	2
MTX 232	DIGITAL ELECTRONICS FUNDAMENTALS	3
MTX 240	PROCESS CONTROL SYSTEMS	6
MTX 250	ADVANCED PROGRAMMABLE LOGIC CONTROLLERS	4
MTX 275	ADVANCED FLUID POWER SYSTEMS	5
MTX 292	MANUFACTURING SYSTEM PRINCIPLES	4
MTX 296	CAPSTONE/FINAL PROJECT	4
Total Credits/Units		101

- Communicate with colleagues, supervisors, clients, using written and verbal technical and/or nontechnical language.
- Actively participate as an effective team member, completing prescribed project tasks and meeting project goals.
- Use computational skills to analyze physical parameters within automated processes and systems.
- Assimilate/interpret technical and nontechnical descriptions to form a solution.
- Collect data based on sensory input and system performance to analyze and interpret process capabilities.
- Operate, measure, and modify, software-driven industrial control systems

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)
- Design, operate, and troubleshoot automation processes and systems.

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.

Commission on Accreditation of Allied Health Education Programs
www.caahep.org (<http://www.caahep.org>)
 25400 US Highway N
 Suite 158
 Clearwater, FL 33756
 727-210-2350

Medical Assistant Education Review Board
<http://www.maerb.org/>
 20 N. Wacker Drive, Suite 1575
 Chicago, IL 60606
 1-800-228-2262

Washington State Department of Health
www.doh.wa.gov (<http://www.doh.wa.gov>)
 Town Center 2
 111 Israel Rd SE
 Tumwater, WA 98501
 360-236-4700
 Fax number: 360-236-4818
 Email Address: hsqa.csc@doh.wa.gov

National Center for Competency Testing
 NCCT 7007 College Blvd Suite 385 Overland Park KS 66211
 Phone: 800.875.4404 Fax: 913.498.1243
www.ncctinc.com/ (<http://www.ncctinc.com/>)

American Association of Medical Assistants
www.aama-ntl.org (<http://www.aama-ntl.org>)

Applications are accepted at any time however this is a limited entry program. Candidates who meet the preliminary requirements will be considered for winter term entry.

Minimum Requirements:

- Complete the Clark College Application for Admission and the Medical Assistant Application. Return both to the Clark College Welcome Center with the non-refundable program application fees (subject to change). For the current fee amounts, please visit the Medical Assistant website. Date of Medical Assistant Application (fee paid date) will be considered in selecting students for entry into the program.

- Complete with a 2.0 or above all Preliminary Required Courses:

Code	Title	Credits/ Units
BMED 103	MATH FOR HEALTH CARE PROFESSIONALS	3
BMED 110	MEDICAL TERMINOLOGY I	3
BMED 111	MEDICAL TERMINOLOGY II	3
BMED 116	MEDICAL OFFICE ADMINISTRATIVE PROCEDURES I	3

Select one from the following:

BTEC 107	BUSINESS ENGLISH	
PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING	
ENGL&101	ENGLISH COMPOSITION I	
BTEC 149	COMPUTER APPLICATIONS ESSENTIALS	3

Select one from the following:

HEOC 100	BASIC CONCEPTS OF ANATOMY AND PHYSIOLOGY	
BIOL 164 & BIOL 165	HUMAN BIOLOGY and HUMAN BIOLOGY LAB	
HEOC 104	HEALTH CARE DELIVERY & CAREER EXPLORATION	3
HEOC 130	PHARMACOLOGY FOR HEALTH ASSISTANTS	3

- To comply with Washington State Law [WAC 246-901-030(2)], Clark College requires that students must submit proof of high school graduation, GED completion, or U.S. degree conferment to be eligible for selection into the Medical Assisting Program. Students who do not plan to apply transfer credits towards the program are not required to submit official transcripts.
- Take the Clark College COMPASS Test. Call (360) 992-2648 for Assessment Center hours. The following scores or equivalent classes are required prior to program entry:
 - Reading: English REadiness Assessment Score placing students in ENGL&101 or equivalent with 2.0 or above.
 - Obtain a minimum Clark College cumulative GPA of 2.0 or above

Program Progression:

- Obtain a complete physical to verify proof of fitness to perform Medical Assistant requirements.
- Contact the Health Services Center at Clark College or a personal physician for the physical. Submit physical results to the Director of the Medical Assistant program.
- Complete all program courses with a minimum grade of 'C' or better.
- Maintain a cumulative GPA of 2.00 or higher.
- Do not repeat any required program course more than once.
- Provide proof of all required immunizations before registering for Medical Office Clinical Procedures I (BMED 163) <https://www.certifiedbackground.com/> (register as a student and pay the fee required as a BMED student under the Medical Assistant Program, complete the background check on this site as well).
- Complete or take concurrently all Medical Assistant Program courses before registering for Medical Assistant Practicum (BMED 166).
- Medical Assistant (CP) (p. 89)
- Medical Assisting (AAT) (p. 90)

Medical Assistant (CP)

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

The program description language is for the Medical Billing/Coding program, not Medical Assisting. The language should be:

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 Program 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.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
Select one from the following:		5
BTEC 107	BUSINESS ENGLISH	
PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING	
ENGL&101	ENGLISH COMPOSITION I	
Subtotal		5
<i>Computational Skills</i>		
BMED 103	MATH FOR HEALTH CARE PROFESSIONALS	3
Subtotal		3
<i>Human Relations</i>		
BMED 166	MEDICAL ASSISTANT PRACTICUM ¹	6
Subtotal		6
Major Area Requirements		
BMED 110	MEDICAL TERMINOLOGY I	3
BMED 111	MEDICAL TERMINOLOGY II	3
BMED 112	INTRODUCTION TO PATHOPHYSIOLOGY	5
BMED 116	MEDICAL OFFICE ADMINISTRATIVE PROCEDURES I	3
BMED 117	MEDICAL OFFICE ADMINISTRATIVE PROCEDURES II	3
BMED 129	MEDICAL REIMBURSEMENT	5
BMED 137	THERAPEUTIC COMM SKILLS FOR HEALTH PROF	3
BMED 138	LEGAL ASPECTS OF THE MEDICAL OFFICE	2
BMED 139	MA ASSISTANT EXAMINATION REVIEW	2
BMED 163	MEDICAL OFFICE CLINICAL PROCEDURES I (with lab)	6

BMED 164	MEDICAL OFFICE CLINICAL PROCEDURES II (with lab) ²	6
BMED 165	MEDICAL OFFICE LABORATORY PROCEDURES ²	4
Select one from the following:		3
BTEC 101	KEYBOARDING & WORD PROCESSING ^{3,4}	
BTEC 103	REFRESHER KEYBOARDING ^{3,4}	
BTEC 148	BUSINESS PROFESSIONAL SELF DEVELOPMENT	3
BTEC 149	COMPUTER APPLICATIONS ESSENTIALS	3
HEOC 100	BASIC CONCEPTS OF ANATOMY AND PHYSIOLOGY ²	4
HEOC 104	HEALTH CARE DELIVERY & CAREER EXPLORATION	3
HEOC 120	AIDS EDUCATION	1
HEOC 130	PHARMACOLOGY FOR HEALTH ASSISTANTS	3
HLTH 124	HEALTHCARE PROVIDER CPR AND FIRST AID	1
Total Credits/Units		80

¹ Practicum is a non-paid, supervised work experience.

² Students pursuing the A.A.S. degree should take BIOL 164/BIOL 165 or another approved science elective. HEOC 100 will not satisfy degree requirements as outlined in the Clark College catalog.

³ Register for BTEC 100.

⁴ Three credits/units required.

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/381B/Gedt.html>).

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 information management, billing and office finances). (affective, cognitive and psychomotor)
- Apply policies and principles of office management (patient reception, scheduling, billing and office finances). (affective, cognitive and psychomotor)
- Apply policies and procedures for office management. (cognitive)
- Communicate effectively with peers, patients, and health care professionals through written and oral communications. (affective and psychomotor)
- Demonstrate the ability to work as a team member to accomplish a task. (affective)
- 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)

Medical Assisting (AAT)

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

One of the most complex processes involved in the practice of medicine is keeping billing procedures and medical records accurate. To ensure that payments 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.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
Select from the following:		5
BTEC 107	BUSINESS ENGLISH	
PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING	
ENGL&101	ENGLISH COMPOSITION I	
Subtotal		5
<i>Computational Skills</i>		
BMED 103	MATH FOR HEALTH CARE PROFESSIONALS	3
BMED 105	STATISTICS FOR HEALTH CARE PROFESSIONALS	2
Subtotal		5
<i>Human Relations</i>		
CMST&230	SMALL GROUP COMMUNICATION	5
Subtotal		5
Major Area Requirements		
BMED 110	MEDICAL TERMINOLOGY I	3
BMED 111	MEDICAL TERMINOLOGY II	3
BMED 112	INTRODUCTION TO PATHOPHYSIOLOGY	5
BMED 116	MEDICAL OFFICE ADMINISTRATIVE PROCEDURES I	3
BMED 117	MEDICAL OFFICE ADMINISTRATIVE PROCEDURES II	3
BMED 129	MEDICAL REIMBURSEMENT	5
BMED 130	MEDICAL CODING - CPT/HCPCS	4
BMED 132	MEDICAL CODING ICD-9-CM/ICD-10	5
BMED 137	THERAPEUTIC COMM SKILLS FOR HEALTH PROF	3
BMED 138	LEGAL ASPECTS OF THE MEDICAL OFFICE	2
BMED 139	MA ASSISTANT EXAMINATION REVIEW	2
BMED 163	MEDICAL OFFICE CLINICAL PROCEDURES I (with lab)	6
BMED 164	MEDICAL OFFICE CLINICAL PROCEDURES II (with lab)	6
BMED 165	MEDICAL OFFICE LABORATORY PROCEDURES	4

BMED 166	MEDICAL ASSISTANT PRACTICUM	6
Select one from the following:		3
BTEC 101	KEYBOARDING & WORD PROCESSING ^{1,2}	
BTEC 103	REFRESHER KEYBOARDING ^{1,2}	
BTEC 148	BUSINESS PROFESSIONAL SELF DEVELOPMENT	3
BTEC 149	COMPUTER APPLICATIONS ESSENTIALS	3
HEOC 100	BASIC CONCEPTS OF ANATOMY AND PHYSIOLOGY	4
HEOC 104	HEALTH CARE DELIVERY & CAREER EXPLORATION	3
HEOC 120	AIDS EDUCATION	1
HEOC 130	PHARMACOLOGY FOR HEALTH ASSISTANTS	3
HLTH 124	HEALTHCARE PROVIDER CPR AND FIRST AID	1
Total Credits/Units		96

¹ Students should register for BTEC 100.

² Three credits/units 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 and clearly explain an effective strategy to solve a quantitative problem. (GE)
- Demonstrate interpersonal/human relations skills. (GE)
- 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)
- Apply policies and principles of office management (patient reception, scheduling, billing and office finances). (affective, cognitive and psychomotor)
- Apply policies and procedures for office management. (cognitive)
- 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 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)

MEDICAL BILLING AND CODING

One of the most complex processes involved in the practice of medicine is keeping billing procedures and medical records accurate. To ensure that payments are properly billed and paid, the health care and insurance industries maintain a standardized coding system for all diagnoses and procedures. The complexities of the health insurance system call for the expertise of a medical billing and coding specialist. Clark College's Medical Billing and Coding program prepares graduates for work in a variety of healthcare settings such as in a physician's office, at a billing company, an outpatient clinic, or an insurance company. Medical billing & coding graduates are eligible to obtain an array of certifications through the American Association of Medical Coders and the American Health Information Management Association.

The Medical Billing/Coding Specialist program prepares individuals for employment in outpatient office or inpatient hospital settings, healthcare claims processing, and home-remote coding. Training in medical billing includes completion of standard industry claim forms as well as the processing of insurance claims. Coding instruction includes ICD, CPT, HCPCS, and the use of MSDRGs.

Graduates will gain highly marketable skills that are compatible with today's healthcare industry needs. The need for trained individuals to fill these jobs have never been greater.

BMED courses are not limited entry and students may begin the coursework any term.

Commission on Accreditation of Allied Health Education Programs
www.caahep.org (<http://www.caahep.org/>)

25400 US Highway N
Suite 158
Clearwater, FL 33756
727-210-2350

Medical Assistant Education Review Board
<http://www.maerb.org/>

20 N. Wacker Drive, Suite 1575
Chicago, IL 60606
1-800-228-2262

Washington State Department of Health
www.doh.wa.gov (<http://www.doh.wa.gov/>)

Town Center 2
111 Israel Rd SE
Tumwater, WA 98501
360-236-4700
Fax number: 360-236-4818
Email Address: hsqa.csc@doh.wa.gov

National Center for Competency Testing
NCCT 7007 College Blvd Suite 385 Overland Park KS 66211
Phone: 800.875.4404 Fax: 913.498.1243
www.ncctinc.com/ (<http://www.ncctinc.com/>)

American Association of Medical Assistants
www.aama-ntl.org (<http://www.aama-ntl.org/>)

Applications are accepted at any time however this is a limited entry program. Candidates who meet the preliminary requirements will be considered for winter term entry.

- Medical Billing/Coding Professional (AAT) (p. 91)
- Medical Billing/Coding Specialist (CP) (p. 92)

Medical Billing/Coding Professional (AAT)

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

The Medical Billing/Coding AAT trains students in both inpatient and outpatient coding and billing. The graduate of this program is highly trained in billing, coding and health information with many successfully passing CPC, or CCS certifications and obtaining high-paying and rewarding positions. In addition the student will earn their Associate of Applied Technology degree.

With the planned implementation of the ICD-10 medical coding system October 1, 2015, the expected need for Coders and RHITs will be the highest in recent history. Many hospitals will need two coders for every one they currently employ. The BMED programs teach both ICD-9 & ICD-10 and offer classes that utilize real-world applications such as electronic charting, Encoder, PCS, and AHIMA Virtual Labs.

BMED courses are not limited entry and students may begin the coursework any term.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
or PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING	
Subtotal		5
<i>Computational Skills</i>		
BMED 103 & BMED 105	MATH FOR HEALTH CARE PROFESSIONALS and STATISTICS FOR HEALTH CARE PROFESSIONALS	5
Subtotal		5
<i>Human Relations</i>		
CMST&210	INTERPERSONAL COMMUNICATION	5
or CMST&230	SMALL GROUP COMMUNICATION	
Subtotal		5
Major Area Requirements		
BMED 110	MEDICAL TERMINOLOGY I	3
BMED 111	MEDICAL TERMINOLOGY II	3
BMED 112	INTRODUCTION TO PATHOPHYSIOLOGY	5
BMED 116	MEDICAL OFFICE ADMINISTRATIVE PROCEDURES I	3
BMED 129	MEDICAL REIMBURSEMENT	5
BMED 130	MEDICAL CODING - CPT/HCPCS	4
BMED 132	MEDICAL CODING ICD-9-CM/ICD-10	5
BMED 133	INTERMEDIATE MEDICAL CODING	5

BMED 138	LEGAL ASPECTS OF THE MEDICAL OFFICE	2
BMED 140	LEGAL ASPECTS OF HEALTH INFORMATION	2
BMED 222	HEALTH INFORMATION PROCEDURES	5
BMED 226	MEDICAL OFFICE PRACTICUM	3
or BMED 250	MEDICAL OFFICE CAPSTONE PRACTICUM	
BMED 227	HEALTH DATA CONTENT AND STRUCTURE	3
BMED 233	INTRODUCTION TO PATIENT NAVIGATION & ADVOCACY	5
BMED 242	INTERMEDIATE ANATOMY AND PHYSIOLOGY	3
BTEC 100	KEYBOARDING	1-3
BTEC 135	10-KEY CALCULATOR	1
BTEC 149	COMPUTER APPLICATIONS ESSENTIALS	3
BTEC 169	INTRODUCTION TO EXCEL	3
Select one from the following:		4-5
BIOL 164 & BIOL 165	HUMAN BIOLOGY and HUMAN BIOLOGY LAB	
HEOC 100	BASIC CONCEPTS OF ANATOMY AND PHYSIOLOGY	
HEOC 104	HEALTH CARE DELIVERY & CAREER EXPLORATION	3
HI 202	INTRODUCTION TO HEALTH CARE QUALITY	3
HLTH 124	HEALTHCARE PROVIDER CPR AND FIRST AID	1
Total Credits/Units		92-93

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.

Medical Billing/Coding Specialist (CP)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog

via the the Academic Plan links on the right for a desired program or a specific course information.

The Medical Billing/Coding Specialist program prepares individuals for employment in the areas of medical insurance, physician's office coding, inpatient hospital coding, healthcare 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-4, ICD-9 & ICD-10-CM, PCS, and MSDRGs as well as the legislative changes, such as the Affordable Care Act (ACA) to the billing and coding environment.

Graduates have highly marketable skills that will continue to be in high demand. With the implementation of ICD-10 this October the need for trained individuals to fill these jobs have never been greater.

This program is open-entry and you may begin taking classes in this rewarding and lucrative field any term.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
or PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING	
<i>Computational Skills</i>		
BMED 103	MATH FOR HEALTH CARE PROFESSIONALS	3
<i>Human Relations</i>		
CMST&210	INTERPERSONAL COMMUNICATION	5
or CMST&230	SMALL GROUP COMMUNICATION	
Major Area Requirements		
BMED 105	STATISTICS FOR HEALTH CARE PROFESSIONALS	2
BMED 110	MEDICAL TERMINOLOGY I	3
BMED 111	MEDICAL TERMINOLOGY II	3
BMED 112	INTRODUCTION TO PATHOPHYSIOLOGY	5
BMED 116	MEDICAL OFFICE ADMINISTRATIVE PROCEDURES I	3
BMED 129	MEDICAL REIMBURSEMENT	5
BMED 130	MEDICAL CODING - CPT/HCPCS	4
BMED 132	MEDICAL CODING ICD-9-CM/ICD-10	5
BMED 133	INTERMEDIATE MEDICAL CODING	5
BMED 138	LEGAL ASPECTS OF THE MEDICAL OFFICE	2
BMED 226	MEDICAL OFFICE PRACTICUM	3
or BMED 250	MEDICAL OFFICE CAPSTONE PRACTICUM	
BMED 233	INTRODUCTION TO PATIENT NAVIGATION & ADVOCACY	5
BTEC 149	COMPUTER APPLICATIONS ESSENTIALS	3
Select one from the following:		4-5
BIOL 164 & BIOL 165	HUMAN BIOLOGY and HUMAN BIOLOGY LAB	
HEOC 100	BASIC CONCEPTS OF ANATOMY AND PHYSIOLOGY	
HEOC 104	HEALTH CARE DELIVERY & CAREER EXPLORATION	3

HLTH 124	HEALTHCARE PROVIDER CPR AND FIRST AID	1
Total Credits/Units		69-70

Code	Title	Credits/ Units
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Recommended Elective (Not Required)

BMED 140	LEGAL ASPECTS OF HEALTH INFORMATION	2
BTEC 169	INTRODUCTION TO EXCEL	3

Refer to the Degree and Certificate Requirements section in the Clark College Catalog to identify the courses needed to satisfy the general education requirements.

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/313A/Gedt.html>).

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

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-music major with the skills and background to fully enjoy music as a cultural pursuit.

Contact:

Dr. Doug Harris, Director of Bands

Phone: (360) 992-2188

Email: DAHarris@clark.edu

- Associate in Music DTA/MRP (AA) (p. 94)

Associate in Music DTA/MRP (AA)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
Course Options (p. 311)		10
Subtotal		10
<i>Quantitative Skills</i>		
MATH&107	MATH IN SOCIETY	5
Subtotal		5
<i>Humanities</i>		
MUSC&141	MUSIC THEORY I	5
MUSC&142	MUSIC THEORY II	5
Select five credits/units from other disciplines (p. 311)		5
Subtotal		15
<i>Social Sciences</i>		
Selected from at least two disciplines (p. 312) ¹		15
Subtotal		15
<i>Natural Sciences</i>		
Selected from at least two disciplines (p. 312) ²		15
Subtotal		15
Major Area Requirements ³		
MUSC&121	EAR TRAINING 1	1
MUSC&122	EAR TRAINING 2	1
MUSC&123	EAR TRAINING 3	1
MUSC&221	EAR TRAINING 4	1
MUSC&222	EAR TRAINING 5	1
MUSC&223	EAR TRAINING 6	1
MUSC&143	MUSIC THEORY III	5
MUSC&231	MUSIC THEORY IV	3
MUSC&232	MUSIC THEORY V	3
MUSC&233	MUSIC THEORY VI	3

MUSC 101	BEGINNING PIANO CLASS	2
MUSC 201	INTERMEDIATE PIANO CLASS	2
<i>Applied Instrument, Piano, or Voice ⁴</i>		
Select six credits/units from the following:		6
All MUSCA Courses (MUSCA101-MUSCA286)		
Applied Voice:		
MUSC 170	APPLIED VOICE	
MUSC 171	APPLIED VOICE	
MUSC 172	APPLIED VOICE	
MUSC 270	APPLIED VOICE	
MUSC 271	APPLIED VOICE	
MUSC 272	APPLIED VOICE	
Applied Piano:		
MUSC 173	APPLIED PIANO	
MUSC 174	APPLIED PIANO	
MUSC 175	APPLIED PIANO	
MUSC 273	APPLIED PIANO	
MUSC 274	APPLIED PIANO	
MUSC 275	APPLIED PIANO	
<i>Major Performing Ensemble</i>		
Select 12 credits/units from the following:		12
Orchestra:		
MUSC 151	ORCHESTRA	
MUSC 152	ORCHESTRA	
MUSC 153	WOMEN'S CHORAL ENSEMBLE	
MUSC 251	ORCHESTRA	
MUSC 252	ORCHESTRA	
MUSC 253	WOMEN'S CHORAL ENSEMBLE	
Concert Band:		
MUSC 180	CONCERT BAND	
MUSC 181	CONCERT BAND	
MUSC 182	CONCERT BAND	
MUSC 280	CONCERT BAND	
MUSC 281	CONCERT BAND	
MUSC 282	CONCERT BAND	
Concert Choir:		
MUSC 183	CONCERT CHOIR	
MUSC 184	CONCERT CHOIR	
MUSC 185	CONCERT CHOIR	
MUSC 283	CONCERT CHOIR	
MUSC 284	CONCERT CHOIR	
MUSC 285	CONCERT CHOIR	
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.

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) (p. 96)
- Cisco Technologies (AAT) (p. 96)
- Microsoft Technician (CA) (p. 97)
- Network Technologies (AAT) (p. 97)

Cisco Technician (CA)

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

This program is designed for students who want to work as network administrators with local area network systems. Network administrators maintain network operations, conduct performance monitoring, network security, firewalls, VPNs, design networks, perform backup and recovery procedures, and perform troubleshooting.

Code	Title	Credits/ Units
Major Area Requirements		
NTEC 103	IP SUBNETTING	3
NTEC 125	INFORMATION SECURITY FUNDAMENTALS	3
NTEC 132	WINDOWS MTA SERVER ADMINISTRATION FUNDAMENTALS	3
NTEC 142	CLOUD COMPUTING FUNDAMENTALS	3
NTEC 151	LINUX ESSENTIALS	6
NTEC 220	DEPLOYING LINUX SERVER SERVICES	6
NTEC 221	CISCO CCNA 1:INTRODUCTION TO NETWORKS	6
NTEC 222	CISCO CCNA 2: ROUTING & SWITCHING ESSENTIALS	6
NTEC 252	LINUX ADMINISTRATION 1	6
Total Credits/Units		42

Note: Students will be required to have access to the Internet to complete their coursework.

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/644E/Gedt.html>).

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.

Cisco Technologies (AAT)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
or PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING	
Subtotal		5
<i>Computational Skills</i>		
Select one from the following:		
MATH&107	MATH IN SOCIETY	
MATH 111	COLLEGE ALGEBRA	
PTCS 110	PROFESSIONAL TECHNICAL COMPUTATIONAL SKILLS	
PHIL&120	SYMBOLIC LOGIC	
Subtotal		5
<i>Human Relations</i>		
COLL 101	COLLEGE ESSENTIALS: INTRODUCTION TO CLARK	2
Course Options (p. 322)		3
Subtotal		5
Major Area Requirements		
NTEC 103	IP SUBNETTING	3
NTEC 125	INFORMATION SECURITY FUNDAMENTALS	3
NTEC 132	WINDOWS MTA SERVER ADMINISTRATION FUNDAMENTALS	3
NTEC 142	CLOUD COMPUTING FUNDAMENTALS	3
NTEC 151	LINUX ESSENTIALS	6
NTEC 220	DEPLOYING LINUX SERVER SERVICES	6
NTEC 221	CISCO CCNA 1:INTRODUCTION TO NETWORKS	6
NTEC 222	CISCO CCNA 2: ROUTING & SWITCHING ESSENTIALS	6
NTEC 223	CISCO CCNA 3: SCALING NETWORKS	6
NTEC 224	CISCO CCNA 4: CONNECTING NETWORKS	6
NTEC 225	CISCO CCNA SECURITY	6
NTEC 242	DATACENTER VIRTUALIZATION TECHNOLOGY	6
NTEC 252	LINUX ADMINISTRATION 1	6
NTEC 253	LINUX ADMINISTRATION 2	6
NTEC 299	CAPSTONE EXPERIENCE: CISCO TECHNOLOGIES	3
Total Credits/Units		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:

- 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 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.

Microsoft Technician (CA)

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

Code	Title	Credits/ Units
Major Area Requirements		
CTEC 132	MICROSOFT WINDOWS SERVER FUNDAMENTALS	4
NTEC 103	IP SUBNETTING	3
NTEC 125	INFORMATION SECURITY FUNDAMENTALS	3
NTEC 142	CLOUD COMPUTING FUNDAMENTALS	3
NTEC 151	LINUX ESSENTIALS	6
NTEC 220	DEPLOYING LINUX SERVER SERVICES	6
NTEC 221	CISCO CCNA 1:INTRODUCTION TO NETWORKS	6
NTEC 222	CISCO CCNA 2: ROUTING & SWITCHING ESSENTIALS	6
NTEC 236	MICROSOFT SERVER ADMINISTRATOR 3	6
Total		42

Network Technologies (AAT)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
or PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING	
Subtotal		5
<i>Computational Skills</i>		
Select one from the following:		
MATH&107	MATH IN SOCIETY	
MATH 111	COLLEGE ALGEBRA	
PTCS 110	PROFESSIONAL TECHNICAL COMPUTATIONAL SKILLS	
PHIL&120	SYMBOLIC LOGIC	
Subtotal		5
<i>Human Relations</i>		
COLL 101	COLLEGE ESSENTIALS: INTRODUCTION TO CLARK	2
Course Options (p. 322)		3
Subtotal		3
Major Area Requirements		
CTEC 132	MICROSOFT WINDOWS SERVER FUNDAMENTALS	4
NTEC 103	IP SUBNETTING	3
NTEC 125	INFORMATION SECURITY FUNDAMENTALS	3
NTEC 142	CLOUD COMPUTING FUNDAMENTALS	3

NTEC 151	LINUX ESSENTIALS	6
NTEC 220	DEPLOYING LINUX SERVER SERVICES	6
NTEC 221	CISCO CCNA 1:INTRODUCTION TO NETWORKS	6
NTEC 222	CISCO CCNA 2: ROUTING & SWITCHING ESSENTIALS	6
NTEC 225	CISCO CCNA SECURITY	6
NTEC 234	MICROSOFT SERVER ADMINISTRATOR 1	6
NTEC 235	MICROSOFT SERVER ADMINISTRATOR 2	6
NTEC 236	MICROSOFT SERVER ADMINISTRATOR 3	6
NTEC 242	DATACENTER VIRTUALIZATION TECHNOLOGY	6
NTEC 252	LINUX ADMINISTRATION 1	6
NTEC 297	CAPSTONE EXPERIENCE: NETWORK TECHNOLOGIES	3
Total		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:

- 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.

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.

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.

Clark College's Associate Degree in Nursing program is accredited by the Accreditation Commission for Education in Nursing (ACEN).

ACEN

Accreditation Commission for Education In Nursing
3343 Peachtree Road NE, Suite 850
Atlanta, Georgia 30326
www.acenursing.org (<http://www.acenursing.org>)

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

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 Clark's Disability Support Services (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.

- Pre-Nursing - DTA/MRP (AA) (p. 99)
- Nursing (AA) (p. 101)

Pre-Nursing - DTA/MRP (AA)

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.

Students planning a career pathway in Nursing should seek advisement from Clark College's Advising Department early. Besides this degree, Clark has several consortial agreements with regard to degrees in Nursing.

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; 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, 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. 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

Code	Title	Credits/ Units
Basic Requirements		
Communication Skills		
ENGL&101	ENGLISH COMPOSITION I	5
ENGL&102	ENGLISH COMPOSITION II	5
Quantitative/Symbolic Reasoning Requirement		
MATH&146	INTRODUCTION TO STATISTICS	5
Distribution Requirements		
Humanities		
CMST&220	PUBLIC SPEAKING (fulfills oral communication requirement)	5
Select 10 term credits/units of other Humanities, five of which can be CMST (p. 311)		10
Social Science		
PSYC&100	GENERAL PSYCHOLOGY	5
PSYC&200	LIFESPAN PSYCHOLOGY	5
Select five credits/units of Sociology (p. 312)		5
Natural Sciences		
Select one from the following:		5
BIOL&100	SURVEY OF BIOLOGY	15
BIOL 164 & BIOL 165	HUMAN BIOLOGY and HUMAN BIOLOGY LAB ¹	
or BIOL&160 GENERAL BIOLOGY W/LAB		
BIOL&251 & BIOL&252 & BIOL&253	HUMAN A & P I and HUMAN A & P II and HUMAN A & P III	
OR		
BIOL&241 & BIOL&242	HUMAN ANATOMY AND PHYSIOLOGY I and HUMAN ANATOMY AND PHYSIOLOGY II	10
BIOL&260	MICROBIOLOGY	5
CHEM&121	INTRO TO CHEMISTRY: PRE-HEALTH	5
CHEM&131	INTRO TO ORGANIC/BIOCHEM	5
NUTR&101	NUTRITION ²	3
Electives		
Elective Courses (p. 313) ³		10
Total Credits/Units		90-96

¹ BIOL&160 preferred.

² Students need to be aware that Clark College's nutrition class is only three credits/units, not the required five credits/units.

³ Up to 10 additional term credits/units of which a maximum of five credits/units may be in college-level courses as defined by the community college, and the remainder shall be fully transferable as defined by the receiving institution. Students need to consult with the transfer institution to determine which course is 'fully transferable.'

Notes

Basic Requirements

Communication Skills

ENGL&102 is required at Northwest University and Walla Walla University.

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).

Students should make sure that the receiving institution will accept the business statistics sequence prior to starting.

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. See the humanities choices in the WSU 'Diversity Course Identification Guidelines' for possible selection or choose courses that include minority, non-Western, ethnic or other 'area' studies.

Social Sciences

Northwest University requires Cultural Anthropology and does not accept a course in the sociology discipline as a substitute. Students may be admitted to the BSN without Cultural Anthropology if they agree to complete the course at NU in the summer prior to the junior year.

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. See the sociology choices in the WSU 'Diversity Course Identification Guidelines' for possible selection or choose courses that include minority, non-Western, ethnic or other 'area' studies.

Natural Sciences

Introductory survey courses or review courses do not meet the content level expectations for these natural science requirements.

Northwest University requires 2 credits of Genetics as well. Students may be admitted to the BSN without Genetics if they agree to complete the course at NU in the summer prior to the junior year.

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)

Nursing (AA)

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

Code	Title	Credits/ Units
Nursing Degree Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
Select an additional five credits/units (p. 311)		5
<i>Quantitative Skills</i>		
MATH&146	INTRODUCTION TO STATISTICS	5
<i>Humanities</i>		
Course Options (p. 311)		10
<i>Social Sciences</i>		
PSYC&100	GENERAL PSYCHOLOGY	5
PSYC&200	LIFESPAN PSYCHOLOGY	5
<i>Natural Science</i>		
CHEM&121	INTRO TO CHEMISTRY: PRE-HEALTH	5
BIOL&160	GENERAL BIOLOGY W/LAB	5
BIOL&260	MICROBIOLOGY	5
BIOL&241	HUMAN ANATOMY AND PHYSIOLOGY I	5

BIOL&242	HUMAN ANATOMY AND PHYSIOLOGY II	5
NUTR&101	NUTRITION	3

Nursing Core Requirements

<i>First Term</i>		
NURS 110	FOUNDATIONS OF NURSING CONCEPTS	2
NURS 111	FOUNDATIONS OF CLINICAL NURSING	2
ENGL 112	ETHICS AND POLICY IN HEALTHCARE I	2
NURS 113	LIFESPAN ASSESSMENT CONCEPTS	3
NURS 114	NURSING SKILLS APPLICATION I	1
NURS 115	NURSING SKILLS LAB I	2
<i>Second Term</i>		
NURS 122	FAMILY-CENTERED NURSING	2
PSYC 122	PSYCHOSOCIAL ISSUES IN HEALTH CARE I	1
NURS 123	FAMILY-CENTERED CLINICAL NURSING	4
PSYC 124	PSYCHOSOCIAL ISSUES IN HEALTH CARE II	2
NURS 127	NURSING SKILLS APPLICATION II	1
NURS 128	NURSING SKILLS LAB II	2
<i>Third Term</i>		
NURS 135	MEDICAL SURGICAL NURSING CONCEPTS I	3
NURS 136	MEDICAL-SURGICAL CLINICAL NURSING I	5
NURS 137	NURSING SKILLS APPLICATION III	1
NURS 138	NURSING SKILLS LAB III	2
NUTR 139	NUTRITION IN HEALTHCARE I	1
<i>Fourth Term</i>		
NURS 241	MEDICAL-SURGICAL NURSING CONCEPTS II	3
NURS 242	MEDICAL/SURGICAL CLINICAL NURSING II	8
NUTR 240	NUTRITION IN HEALTHCARE II	1
<i>Fifth Term</i>		
NURS 251	MEDICAL-SURGICAL NURSING CONCEPTS III	2
NURS 252	ADVANCED HOLISTIC CLINICAL NURSING	8
PSYC 253	PSYCHOSOCIAL ISSUES IN HEALTH CARE III	2
<i>Sixth Term</i>		
NURS 261	PROFESSIONAL LEADERSHIP TRANSITION TO PRACTICE	1
ENGL 273	ETHICS AND POLICY IN HEALTHCARE II	3
NURS 262	PROFESSIONAL LEADERSHIP SENIOR PRACTICUM	6
NURS 263	PROFESSIONAL ROLE IN COMMUNITY SERVICE	1
NURS 264	CAPSTONE NCLEX PREPARATION	1
Total Credits/Units		135

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.

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.

The Pharmacy Technician Program Guide is posted on the Pharmacy Technician website (<http://www.clark.edu/academics/programs/pharmacy/>).

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) (p. 103)
- Pharmacy Technician Leadership (AAT) (p. 104)

Pharmacy Technician (CP)

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

Code	Title	Credits/ Units
Preliminary Requirements ¹		
BMED 110	MEDICAL TERMINOLOGY I ²	3
BTEC 149	COMPUTER APPLICATIONS ESSENTIALS	3
HEOC 104	HEALTH CARE DELIVERY & CAREER EXPLORATION	3
HEOC 120	AIDS EDUCATION	1
Additional Requirements		
Select one from the following:		4-5
HEOC 100	BASIC CONCEPTS OF ANATOMY AND PHYSIOLOGY ²	
BIOL 164 & BIOL 165	HUMAN BIOLOGY and HUMAN BIOLOGY LAB ²	
HLTH 124	HEALTHCARE PROVIDER CPR AND FIRST AID	1
General Education Requirements		
<i>Communication Skills</i>		3-5
Select one of the following:		
ENGL 098	WRITING FUNDAMENTALS	
Course Options (p. 321)		
<i>Computational Skills</i>		
PHAR 110	PHARMACY CALCULATIONS	3
<i>Human Relations</i>		
CMST&210	INTERPERSONAL COMMUNICATION	5
or CMST&230	SMALL GROUP COMMUNICATION	
Major Area Requirements		
BMED 111	MEDICAL TERMINOLOGY II ²	3
PHAR 105	INTRODUCTION TO PHARMACY	4
PHAR 112	PHARMACOLOGY I	5
PHAR 114	PHARMACY PRACTICE AND TECHNOLOGY	4
PHAR 118	PHARMACY EXTERNSHIP I	4
PHAR 119	PHARMACY EXTERNSHIP SEMINAR I	2
PHAR 122	PHARMACOLOGY II	5
PHAR 123	PHARMACY LAW	2
PHAR 127	PHARMACY COMPOUNDING	4
PHAR 128	PHARMACY EXTERNSHIP II	4

PHAR 129	PHARMACY EXTERNSHIP SEMINAR II	2
Total Credits/Units		65-68

- ¹ Completion of ENGL 098 or equivalent with a grade of "C" or better (2.0) or placement into ENGL&101. Completion of MATH 092 or equivalent with a grade of "C" or better (2.0) or placement into MATH 090/MATH 096 (Must be 7 years current upon program entry).
- ² Must be seven years current upon program entry and must be completed by the end of the first term.

General Information

Selection criteria is subject to change. For complete updated information, please refer to the application materials, available online at www.clark.edu/pharmacytech (<http://www.clark.edu/pharmacytech/>).

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/399A/Gedt.html>).

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 work place while complying with laws, regulations, and ethical standards of practice.
- Successfully complete all criteria necessary for registration as a pharmacy tech in any state.

Pharmacy Technician Leadership (AAT)

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

The Associate in Applied Technology (AAT) in Pharmacy Technician Leadership is intended for those students who would like to continue their education beyond the Pharmacy Technician Certificate of Proficiency. Currently, the Certificate of Proficiency is a one-year program. Courses required for the AAT focus on developing skill sets in leadership, business relations, and professional development. These additional skill sets will provide students with a significant advantage in securing entry-level positions as well as progressing within their career field.

Code	Title	Credits/Units
Preliminary Requirements ¹		
BMED 110	MEDICAL TERMINOLOGY I ²	3
BTEC 149	COMPUTER APPLICATIONS ESSENTIALS	3
Select one from the following:		4-5
HEOC 100	BASIC CONCEPTS OF ANATOMY AND PHYSIOLOGY ²	
BIOL 164 & BIOL 165	HUMAN BIOLOGY and HUMAN BIOLOGY LAB ²	
HEOC 104	HEALTH CARE DELIVERY & CAREER EXPLORATION	3
HEOC 120	AIDS EDUCATION	1
HLTH 124	HEALTHCARE PROVIDER CPR AND FIRST AID	1
General Education Requirements		
<i>Communications</i>		
Course Options (p. 321)		5
Subtotal		20-21
<i>Computational Skills</i>		
Course Options (p. 322)		5
Subtotal		5
<i>Human Relations</i>		
CMST&210 or CMST&230	INTERPERSONAL COMMUNICATION SMALL GROUP COMMUNICATION	5
Subtotal		5
Major Area Requirements		
BMED 111	MEDICAL TERMINOLOGY II ²	3
PHAR 105	INTRODUCTION TO PHARMACY	4
PHAR 110	PHARMACY CALCULATIONS	3
PHAR 112	PHARMACOLOGY I	5
PHAR 114	PHARMACY PRACTICE AND TECHNOLOGY (with lab)	4
PHAR 118	PHARMACY EXTERNSHIP I	4
PHAR 119	PHARMACY EXTERNSHIP SEMINAR I	2
PHAR 122	PHARMACOLOGY II	5
PHAR 123	PHARMACY LAW	2
PHAR 127	PHARMACY COMPOUNDING	4
PHAR 128	PHARMACY EXTERNSHIP II	4
PHAR 129	PHARMACY EXTERNSHIP SEMINAR II	2
Additional Requirements		
HDEV 120	PRACTICAL REASONING AND DECISION MAKING	3
HDEV 200	PROFESSIONAL DEVELOPMENT	2
MGMT 101	PRINCIPLES OF MANAGEMENT	3
MGMT 133	PRODUCTION AND OPERATIONS MANAGEMENT	3
Electives		
Select a minimum two courses from the following:		6-8
ACED 101	SURVEY OF ADDICTIONOLOGY	
BMED 222	HEALTH INFORMATION PROCEDURES	
BUS 110	CUSTOMER SERVICE	
BUS 211	BUSINESS COMMUNICATIONS	
MGMT 106	MOTIVATION AND PERFORMANCE	

¹ Completion of ENGL 098 or equivalent with a grade of "C" or better (2.0) or placement into ENGL&101. Completion of MATH 092 or equivalent with a grade of "C" or better (2.0) or placement into MATH 090/MATH 096 (Must be 7 years current upon program entry).

² 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 work place 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)

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) (p. 106)

Phlebotomy (CA)

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

Code	Title	Credits/ Units
Preliminary Requirements		
Obtain a minimum applicable GPA of 2.5 prior to program entry		
BMED 110	MEDICAL TERMINOLOGY I ¹	3
ENGL 098	WRITING FUNDAMENTALS ²	5
HEOC 104	HEALTH CARE DELIVERY & CAREER EXPLORATION	3
HLTH 124	HEALTHCARE PROVIDER CPR AND FIRST AID	1
HEOC 120	AIDS EDUCATION	1
HEOC 100	BASIC CONCEPTS OF ANATOMY AND PHYSIOLOGY	4
Program Requirements		
BMED 111	MEDICAL TERMINOLOGY II ¹	3
CMST&210	INTERPERSONAL COMMUNICATION	5
PHLE 115	PHLEBOTOMY EDUCATION W/LAB	3
PHLE 116	BASIC LABORATORY FOR THE PHLEBOTOMIST	3
PHLE 197	PHLEBOTOMY CLINICAL EXPERIENCE	5
PHLE 198	PHLEBOTOMY CLINICAL SEMINAR	1
Total Credits/Units		37

¹ Course must be seven years current upon program entry.

² Or equivalent with a grade of "C" or better (2.0) or placement into ENGL&101.

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.

PHYSICS

Physics is the study of the fundamental nature of our universe. This knowledge is applicable to a wide variety of disciplines in the biological and physical sciences, engineering, medicine, and technology. By taking physics at Clark College, you will get the benefits of small class size, up-to-date laboratory equipment, and instructors who place their emphasis on quality learning.

Physics majors can choose from a variety of courses and are encouraged to explore a wide sample of offerings to obtain a well-rounded education. Students wishing to major in physics should contact the Physics Department for program guidance.

- Physics (AST2) (p. 107)

Physics (AST2)

Academic Plans, known as programs, include a overview description and a summary of program requirements. You can search the online catalog via the 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 major study in Physics. Lower-division course requirements will vary depending on the transfer institution. Contact an advisor at the transfer institution to determine required coursework as early as possible. Additional courses may be needed to satisfy graduation requirements for the Associate in Science degree (<https://catalog.clark.edu/academic-plans/track-2-ast2/general/>).

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
ENGL&101	ENGLISH COMPOSITION I	5
Subtotal		5
<i>Quantitative Skills</i>		
MATH&151	CALCULUS I	5
MATH&152	CALCULUS II	5
Subtotal		10
<i>Health & Physical Education</i>		
	Health Requirement (p. 311)	2
	Physical Education Activity (p. 311)	1
Subtotal		3
<i>Humanities & Social Sciences</i>		
	Select one from the following:	5
CMST&210	INTERPERSONAL COMMUNICATION	
CMST&220	PUBLIC SPEAKING	
CMST&230	SMALL GROUP COMMUNICATION	
	Select 10 credits/units from the following:	10
	Humanities Course Options (p. 311)	
	Social Science Course Options (p. 312)	
Subtotal		15
Pre-Major Program Requirements		
ENGL&102	ENGLISH COMPOSITION II	5
MATH 111	COLLEGE ALGEBRA	5

or MATH 110	COLLEGE ALGEBRA WITH SUPPLEMENTAL INSTRUCTION	
MATH&153	CALCULUS III	5
MATH 221	DIFFERENTIAL EQUATIONS	5
MATH&254	CALCULUS IV	5
Electives		1-5
Science Sequence Requirements		
CHEM&141	GENERAL CHEMISTRY I	4
CHEM&142	GENERAL CHEMISTRY II	4
CHEM&143	GENERAL CHEMISTRY III	4
CHEM&151	GENERAL CHEMISTRY LABORATORY I	1
CHEM&152	GENERAL CHEMISTRY LABORATORY II	1
CHEM&153	GENERAL CHEMISTRY LABORATORY III	2
PHYS&241 & PHYS&231	ENGINEERING PHYSICS I and ENGINEERING PHYSICS LAB I	5
PHYS&242 & PHYS&232	ENGINEERING PHYSICS II and ENGINEERING PHYSICS LAB II	5
PHYS&243 & PHYS&233	ENGINEERING PHYSICS III and ENGINEERING PHYSICS LAB III	5
Total Credits/Units		90-94

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)

POWER, PRIVILEGE, AND INEQUITY

In the contemporary United States, we are increasingly called upon to simultaneously engage with multiple ideas and diverse peoples while addressing complex problems related to power, privilege, and inequity. When unprepared to address these issues, we often, unknowingly, perpetuate these problems.

This Academic Concentration prepares students to identify power, privilege, and inequity as central organizing principles of human experience within the United States. Students who complete this Academic Concentration will be able to do the following.

- 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.

This Academic Concentration would be earned along with any two-year degree, and would be awarded upon graduation.

- Power, Privilege, and Inequity (AC) (p. 108)

Power, Privilege, and Inequity (AC)

Code	Title	Credits/ Units
Core Courses ¹		
ECE 133	REFLECTIVE PRACTICES IN EARLY LEARNING	3
ENGL 175	INTRODUCTION TO LGBTQ STUDIES	5
ENGL 240	LITERATURE BY WOMEN	5
SOC 131	RACE AND ETHNICITY IN THE U.S.	5
WS 101	INTRODUCTION TO WOMEN'S STUDIES	5
WS 220	RACE, CLASS, GENDER AND SEXUALITY	5
WS 225	RACISM & WHITE PRIVILEGE IN THE U.S.	3
Elective Courses		
Select one from the following:		3-5
ASL 125	AMERICAN DEAF CULTURE	
ENGL 176	NATURE AND THE HUMANITIES	
ENGL 254	INTRODUCTION TO QUEER LITERATURE	
ENGL 267	AMERICAN MULTIETHNIC LIT	
HIST&215	WOMEN IN U.S. HISTORY	
HIST&219	NATIVE AMERICAN HISTORY	
HIST 275	AFRICAN-AMERICAN HISTORY	
SOC 230	DOMESTIC VIOLENCE	
Total Credits/Units		34-36

¹ Each core course below is required. Students must earn a minimum grade of "C."

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.

SMALL BUSINESS MANAGEMENT

Small businesses play significant roles in today's economy, both domestic and global. No matter the type of industry, management training is essential to the probability of long-term success. This Small Business Management certificate includes the basic courses that provide the necessary skills needed for small business owners to sustain and expand their operations.

- Small Business Management (CP) (p. 109)

Small Business Management (CP)

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

This program focuses on the theories used to manage and lead a small business. Whether an entrepreneur, small business owner, or franchiser/franchisee, the odds of being a success greatly improve through real-world practices that are taught in this program. The foundation of knowledge gleaned from the study of small business management emphasizes the many stakeholders that are necessary for success. The impact that small business has on one's life and the lives of others is revealed, along with the contributions from small business to the economy and society. Many of today's career opportunities have been in the small business sector, and forecasts suggest that this trend will continue. The Small Business Management certificate provides a solid foundation to operate and maintain a successful small business.

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.

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		3-5
BTEC 106	APPLIED OFFICE ENGLISH or ENGL&101ENGLISH COMPOSITION I	
<i>Computational Skills</i>		
BUS 102	BUSINESS MATH APPLICATIONS	5
<i>Human Relations</i>		
BTEC 148	BUSINESS PROFESSIONAL SELF DEVELOPMENT	3
Business Core Course		
BUS 028	BASIC ACCOUNTING PROCEDURES	3
BUS& 101	INTRODUCTION TO BUSINESS	5
BTEC 100	KEYBOARDING ²	1-3
BTEC 150	COMPUTER BUSINESS APPLICATIONS	5
ECON 101	INTRODUCTION TO ECONOMICS	3
MGMT 101	PRINCIPLES OF MANAGEMENT	3
Major Area Requirements		
BUS 029	BASIC ACCOUNTING PROCEDURES	3
BUS 036	ACCOUNTING APPLICATIONS	3

BUS 115	SMALL BUSINESS MANAGEMENT	5
BUS& 201	BUSINESS LAW	5
BUS 251	PROFESSIONAL SELLING	3
BUS 199	COOPERATIVE WORK EXPERIENCE ¹	1-5
Total Credits/Units		57-59

- ¹ Minimum of five credits/units must be earned in Cooperative Work Experience.
- ² Minimum of three credits/units required for program completion

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/257A/Gedt.html>).

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.
- Analyze a target market and develop product, pricing, promotion, and distribution strategies to meet customers' needs at a profit.
- Describe the U.S. legal system and the legal environment of business by outlining the basic principles of law that apply to business transactions.

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.

- Survey & Geomatics Technician - GIS (CP) (p. 110)
- Survey & Geomatics Technician - Boundary (CP) (p. 110)
- Surveying/Geomatics (AAS) (p. 111)

Survey & Geomatics Technician - GIS (CP)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING (recommended)	5
Subtotal		5

Computational Skills

MATH 103	COLLEGE TRIGONOMETRY	5
Subtotal		5

Human Relations

CMST&210	INTERPERSONAL COMMUNICATION (recommended)	5
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Subtotal		5
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Major Area Requirements

CADD 140 or ENGR 140	BASIC AUTOCAD	4
SURV 104	COMPUTATION AND PLATTING	5
SURV 121 or ENGR 121	FIELD SURVEY I	5
SURV 122	FIELD SURVEY II	5
SURV 123	PROFESSIONAL ETHICS	1
SURV 125	INTRODUCTION TO GIS	3
SURV 163	ROUTE SURVEYING	5
SURV 250	ARC GIS I	3
SURV 252	MAP PROJECTIONS	2
SURV 253	INTRODUCTION TO GPS	2

Total Credits/Units		50
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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.

Survey & Geomatics Technician - Boundary (CP)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		

PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING (recommended)	5
Subtotal		5
<i>Computational Skills</i>		
MATH 103	COLLEGE TRIGONOMETRY	5
Subtotal		5
<i>Human Relations</i>		
CMST&210	INTERPERSONAL COMMUNICATION (recommended)	5
Subtotal		5
Major Area Requirements		
CADD 140 or ENGR 140	BASIC AUTOCAD	4
SURV 104	COMPUTATION AND PLATTING	5
SURV 121 or ENGR 121	FIELD SURVEY I	5
SURV 122	FIELD SURVEY II	5
SURV 123	PROFESSIONAL ETHICS	1
SURV 163	ROUTE SURVEYING	5
SURV 202	BOUNDARY SURVEYS	4
SURV 203	LEGAL DESCRIPTIONS	3
SURV 223	BOUNDARY LAW I	3
SURV 264	SURVEY SOFTWARE APPLICATIONS	4
Total Credits/Units		54

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/624D/Gedt.html>).

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.

Surveying/Geomatics (AAS)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog

via the the Academic Plan links on the right for a desired program or a specific course information.

Code	Title	Credits/Units
General Education Requirements		
<i>Communication Skills</i>		6
CMST&210	INTERPERSONAL COMMUNICATION (recommended)	
PTWR 135	INTRODUCTION TO APPLIED TECHNICAL WRITING (recommended)	
<i>Health & Physical Education</i>		3
HPE 220	OCCUPATIONAL WELLNESS (recommended)	
<i>Computational Skills</i>		
MATH 103	COLLEGE TRIGONOMETRY	5
<i>Human Relations</i>		3
CMST&210	INTERPERSONAL COMMUNICATION (recommended)	
<i>Humanities</i>		
Course Options (p. 323)		3
<i>Social Sciences</i>		
Course Options (p. 323)		3
<i>Natural Sciences</i>		3
PHSC 101	GENERAL PHYSICAL SCIENCE (recommended)	
Major Area Requirements		
BTEC 169	INTRODUCTION TO EXCEL	3
CADD 140 or ENGR 140	BASIC AUTOCAD	4
ENGR 113	ENGINEERING SKETCHING AND VISUALIZATION	2
MATH 111	COLLEGE ALGEBRA (or higher)	5
MATH&151	CALCULUS I (or higher)	5
SURV 102	FUNDAMENTALS OF SURVEY (recommended)	2
SURV 104	COMPUTATION AND PLATTING	5
SURV 121 or ENGR 121	FIELD SURVEY I	5
SURV 122	FIELD SURVEY II	5
SURV 123	PROFESSIONAL ETHICS	1
SURV 125	INTRODUCTION TO GIS	3
SURV 163	ROUTE SURVEYING	5
SURV 202	BOUNDARY SURVEYS	4
SURV 203	LEGAL DESCRIPTIONS	3
SURV 223	BOUNDARY LAW I	3
SURV 225	SUBDIVISION PLANNING A & PLATTING	3
SURV 250	ARC GIS I	3
SURV 253	INTRODUCTION TO GPS	2
SURV 252	MAP PROJECTIONS	2
SURV 264	SURVEY SOFTWARE APPLICATIONS	4
Total Credits/Units		93

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.

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. Student 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.

- Welded Sculpture/Fabrication (CC) (p. 113)
- Flux Core Arc Welding (CA) (p. 113)
- Gas Metal Arc Welding (CA) (p. 113)
- Gas Tungsten Arc Welding (CA) (p. 114)
- Shielded Metal Arc Welding (CA) (p. 114)
- Welding Technician (CP) (p. 114)
- Welding Technologies (AAT) (p. 116)

Welded Sculpture/Fabrication (CC)

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

Code	Title	Credits/ Units
Major Area Requirements		
WELD 120	WELDED SCULPTURE LAB I	3
WELD 121	WELDING SCULPTURE LAB II	3
WELD 122	WELDED SCULPTURE LAB III	3
Total Credits/Units		9

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:

- Use personal-protection safety equipment and demonstrate safe work habits.
- Operate state-of-the-art welding equipment used in today's fabrication industries.
- Weld components in the flat, horizontal, vertical, and overhead positions.
- Utilize CNC software for plasma shape-cutting.

Flux Core Arc Welding (CA)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog

via the the Academic Plan links on the right for a desired program or a specific course information.

Code	Title	Credits/ Units
Major Area Requirements		
HLTH 120	ADULT CPR AND FIRST AID	1
WELD 102	INTRODUCTION TO WELDING	6
WELD 110	WELDING BLUEPRINT READING	5
WELD 142	FLUX CORE ARC WELDING	6
WELD 143	FLUX CORE ARC FABRICATION	6
Total Credits/Units		24

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/814G/Gedt.html>).

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.
- Demonstrate Oxy Fuel Cutting and Plasma Arc Cutting principles of operation.
- Interpret blueprints and specifications.

Gas Metal Arc Welding (CA)

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

Code	Title	Credits/ Units
Major Area Requirements		
HLTH 120	ADULT CPR AND FIRST AID	1
WELD 102	INTRODUCTION TO WELDING	6
WELD 110	WELDING BLUEPRINT READING	5
WELD 140	GAS METAL ARC WELDING	6
WELD 141	GAS METAL ARC FABRICATION	6
Total Credits/Units		24

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/814H/Gedt.html>).

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 Metal Arc Welding (GMAW) and cutting processes.
- 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.
- Demonstrate Oxy/fuel Cutting and Plasma Arc Cutting principles of operation.
- Interpret blueprints and specifications.

Gas Tungsten Arc Welding (CA)

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

Code	Title	Credits/ Units
Major Area Requirements		
HLTH 120	ADULT CPR AND FIRST AID	1
WELD 102	INTRODUCTION TO WELDING	6
WELD 110	WELDING BLUEPRINT READING	5
WELD 240	GAS TUNGSTEN ARC WELDING	6
WELD 241	GAS METAL ARC FABRICATION	6
Total Credits/Units		24

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/814C/Gedt.html>).

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.

Shielded Metal Arc Welding (CA)

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

Code	Title	Credits/ Units
Major Area Requirements		
HLTH 120	ADULT CPR AND FIRST AID	1
WELD 102	INTRODUCTION TO WELDING	6
WELD 110	WELDING BLUEPRINT READING	5
WELD 144	SHIELDED METAL ARC WELDING	6
WELD 145	SHIELDED METAL ARC FABRICATION	6
Total Credits/Units		24

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/814D/Gedt.html>).

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.

Welding Technician (CP)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
Course Options (p. 321)		3
Subtotal		3
<i>Computational Skills</i>		
Course Options (p. 322)		3
Subtotal		3
<i>Human Relations</i>		
Course Options (p. 322)		3

Subtotal		3
Major Area Requirements		
HLTH 120	ADULT CPR AND FIRST AID	1
WELD 102	INTRODUCTION TO WELDING	6
WELD 110	WELDING BLUEPRINT READING	5
WELD 140	GAS METAL ARC WELDING	
WELD 141	GAS METAL ARC FABRICATION	
WELD 142	FLUX CORE ARC WELDING	6
WELD 143	FLUX CORE ARC FABRICATION	6
WELD 144	SHIELDED METAL ARC WELDING	6
WELD 145	SHIELDED METAL ARC FABRICATION	6
WELD 156	WELDING CERTIFICATION	2
WELD 240	GAS TUNGSTEN ARC WELDING	6
WELD 241	GAS METAL ARC FABRICATION	6
Total Credits/Units		59

To learn more about this program's employment outlook, approximate cost and potential careers, please visit the Gainful Employment Program Information page (<http://www.clark.edu/academics/catalog/gainful-employment/814B/Gedt.html>).

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 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 weldments. Describe OFC, PAC and CAG-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 common hand tools. 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 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.
- Identify and use Welding Technology principles of operation, terms and safe practices related to OFC, PAW 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.
- 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. 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.

Welding Technologies (AAT)

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

Code	Title	Credits/ Units
General Education Requirements		
<i>Communication Skills</i>		
Course Options (p. 321)		5
<i>Computational Skills</i>		
Course Options (p. 322)		5
<i>Human Relations</i>		
Course Options (p. 322)		5
Major Area Requirements		
HLTH 120	ADULT CPR AND FIRST AID	1
WELD 102	INTRODUCTION TO WELDING	6
WELD 110	WELDING BLUEPRINT READING	5
WELD 141	GAS METAL ARC FABRICATION	6
WELD 140	GAS METAL ARC WELDING	6
WELD 142	FLUX CORE ARC WELDING	6
WELD 143	FLUX CORE ARC FABRICATION	6
WELD 144	SHIELDED METAL ARC WELDING	6
WELD 145	SHIELDED METAL ARC FABRICATION	6
WELD 156	WELDING CERTIFICATION	2
WELD 240	GAS TUNGSTEN ARC WELDING	6
WELD 241	GAS METAL ARC FABRICATION	6
WELD 242	ADVANCED WIRE FEED WELDING	6
WELD 243	ADVANCED WIRE FEED FABRICATION	6
WELD 244	ADVANCED GAS TUNGSTEN ARC WELDING	6
WELD 245	ADVANCED GAS TUNGSTEN ARC FABRICATION	6
MACH 235	ELEMENTARY METALLURGY	2
MACH 236	ELEMENTARY METALLURGY LAB	2
Total Credits/Units		99

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)
- 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.

- 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 common hand tools. 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 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 weldments. Describe OFC, PAC and CAG-A 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.
- 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, PAW 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 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 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.

- 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.

WOMEN'S STUDIES

Women's Studies is an interdisciplinary field that identifies gender as one of the central organizing principles of human experience. Grounded in feminist theory and centered around feminist scholarship, Women's Studies confronts and challenges institutional, individual and ideological systems of power, privilege and inequity. Women's Studies analyzes socially constructed power imbalances based on gender, race, class, sexual identity, ability, age and other differences, allowing students profound insights into the origins of their own experience.

Because Women's Studies seeks to understand how our gendered experience affects every aspect of our lives, course topics may include: gender socialization, family, work, politics, health, sexuality, body image, violence, spirituality, art and culture. We may also discuss feminists' roles in social justice movements of the past as well as current and future trends in scholarship and activism.

Since other aspects of identity influence how individuals understand gender, we can't assume we all share the same experiences. Women's Studies creates opportunities to understand how and why we assign value to our differences and suggests strategies for resisting the power imbalances that result. By acknowledging that we don't have to be the same to be equal, Women's Studies provides a platform for exploring our differences as a potential source of strength rather than only a source of conflict. Students are encouraged to explore their relationship to individual and institutional power and to make visible the social and political forces at work. What advantages and obstacles do we each experience as a result of our socially constructed identities? Whose experience is understood as 'normal' and why might it matter? What individual and communal action can we take?

Women's Studies students learn new and exciting ways to interpret the world around them, and their place within it. Most students find that their worldview undergoes profound changes as a result of taking a Women's Studies class. What new things will you notice?

Are you ready to:

- Think critically
- View popular culture in ways you've never imagined
- Gain a new self-awareness
- Transform your interpersonal relationships
- Confront our shared legacy of privilege and oppression
- Take action!

If so, Women's Studies at Clark College is ready to help you take that next step...

- Women's Studies (AC) (p. 118)

Women's Studies (AC)

For students who want expertise in women's issues, this Academic Concentration may be earned along with a regular A.A. degree, and will be awarded upon graduation.

Code	Title	Credits/ Units
Core Courses ¹		
WS 101	INTRODUCTION TO WOMEN'S STUDIES	5

WS 201	WOMEN AROUND THE WORLD	3
WS 220	RACE, CLASS, GENDER AND SEXUALITY	5

Electives

Select at least three credits/units from the following:² 9-11

ART 250	WOMEN ARTISTS THROUGH HISTORY
ENGL 175	INTRODUCTION TO LGBTQ STUDIES
ENGL 240	LITERATURE BY WOMEN
ENGL 254	INTRODUCTION TO QUEER LITERATURE
HIST&215	WOMEN IN U.S. HISTORY
HIST 251	WOMEN IN WORLD HISTORY I
HIST 252	WOMEN IN WORLD HISTORY II
HLTH 207	WOMEN'S HEALTH
SOC 230	DOMESTIC VIOLENCE
WS 210	WOMEN'S CULTURE
WS 225	RACISM & WHITE PRIVILEGE IN THE U.S.
WS 280	SELECTED TOPICS
WS 290	SPECIAL PROJECTS

Total Credits/Units 22-24

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.

WORLD LANGUAGES

Language proficiency is an important skill for more and more Americans who must compete professionally in a global economy. It is a marketable skill in such diverse fields as medicine, government, science, technology, banking, trade, industry, communications, teaching, and social work. Clark College language students apply their skills not only to employment but also to upper-division transfer studies at four-year universities.

Classes emphasize learning strategies that are necessary to communicate in the real world. Language clubs provide active support and opportunities for using the language ranging from film series and round-table discussion groups to field trips and cultural presentations.

Program Options

Students who intend to major in a world language at a four-year institution should consider two years of study in one language. Clark offers two-year programs (elementary, intermediate) in the following areas:

- Spanish
- Japanese
- American Sign Language

Summer Study Abroad for Language Students

The departments provide the following language and cultural opportunities:

- French Study Abroad opportunity
- German immersion/study every summer with the German Studies in Berlin program
- Spanish immersion/study at the University of Valladolid in Valladolid, Spain
- Japanese immersion/study at Tokyo Institute of Japanese in Tokyo and visiting Kyoto and Joyo

Other Study Abroad

Clark College is a member of the Washington Community College Consortium for Study Abroad (WCCCSA), which offers term-long programs in London, England; Paris, France; Florence, Italy; and Alajuela, Costa Rica. Contact an advisor in the International Center for more information.

- American Sign Language (AC) (p. 119)

American Sign Language (AC)

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

For students who want expertise in American Sign Language, this Academic Concentration may be earned along with a regular AA degree, and will be awarded upon graduation.

Code	Title	Credits/ Units
Core Courses		
ASL 125	AMERICAN DEAF CULTURE	5
ASL& 221	AM SIGN LANGUAGE IV	5
ASL& 222	AM SIGN LANGUAGE V	5
ASL& 223	AM SIGN LANGUAGE VI	5
CMST&220	PUBLIC SPEAKING	5
Total Credits/Units		25

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.
- Analyze the Deaf culture and American Sign Language, with an appreciation for the linguistic and cultural diversity.
- Manage common interactions using enhanced vocabulary and grammar with fellow classmate using ASL.
- Identify the rules of behavior, values, beliefs and etiquette of Deaf culture.

COURSE DESCRIPTIONS

A

- Accounting (ACCT) (p. 122)
- Addiction Counselor Education (ACED) (p. 123)
- American Sign Language (ASL) (p. 125)
- Anthropology (ANTH) (p. 126)
- Art (ART) (p. 127)
- Astronomy (ASTR) (p. 132)
- Automotive Technology (AUTO) (p. 133)

B

- BAS Applied Management (BASAM) (p. 137)
- BAS Human Services (BASHS) (p. 139)
- Biology (BIOL) (p. 140)
- Business Administration (BUS) (p. 143)
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ACCOUNTING (ACCT)

PRINCIPLES OF ACCOUNTING I

ACCT&201 5 Credits/Units

55 hours of lecture

Prerequisite: Eligibility for ENGL 101 and MATH 095 or MATH 096 or consent of Instructional Unit.

Accounting theory and practice including the entire accounting cycle and accounting for merchandising operations, receivables, current liabilities, and payroll. Formerly BUS 231. Credit not allowed for both BUS 231 and ACCT 201. [SE]

PRINCIPLES OF ACCOUNTING II

ACCT&202 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in ACCT 201.

Continuation of ACCT 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. Formerly BUS 232. Credit not allowed for both BUS 232 and ACCT 202. [SE]

PRINCIPLES OF ACCOUNTING III

ACCT&203 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in ACCT 201.

Continuation of ACCT 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. Formerly BUS 233. [SE]

ADDICTION COUNSELOR EDUCATION (ACED)

SURVEY OF ADDICTIONOLOGY

ACED 101

33 hours of lecture

Prerequisite: ENGL 101 (or ENGL 101).

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]

INTRODUCTION TO ADDICTIONS COUNSELING SKILLS

ACED 122

33 hours of lecture

Prerequisite: ACED 101 or CDEP 101, and consent of Instructional Unit.

Application of basic counseling theories, including relapse prevention, to an addiction client population. Group, individual and family counseling. Other cultures also addressed. [GE]

GROUP COUNSELING IN ADDICTIONS

ACED 125

33 hours of lecture

Prerequisite: ACED 201 or CDEP 120/201, and consent of Instructional Unit.

Use of group process for modifying individual attitudes and actions. Application of group counseling theories to an addiction client population. [GE]

INTRODUCTION TO COUNSELING FAMILY MEMBERS

ACED 132

33 hours of lecture

Prerequisite: ACED 201 or CDEP 201 (or 120), and consent of Instructional Unit.

Knowledge and skills for working with significant persons in the addicted client's environment. Emphasis on counseling immediate family members. [GE]

LAW AND ETHICS IN ADDICTIONS COUNSELING

ACED 136

33 hours of lecture

Prerequisite: ACED 101 or CDEP 101, and consent of Instructional Unit.

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]

ADDICTIONS AND MENTAL ILLNESS

ACED 137

33 hours of lecture

Prerequisite: ACED 101 or CDEP 101, and consent of Instructional Unit.

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]

PREVENTION AND EDUCATION IN THE COMMUNITY

ACED 138

33 hours of lecture

Prerequisite: ACED 101 or CDEP 101, and consent of Instructional Unit.

Application of the Public Health and Social Development models to prevention activities. Knowledge of community resources in developing community education and prevention programs. [GE]

PHARMACOLOGY OF DRUGS OF ABUSE

ACED 160

3 Credits/Units

33 hours of lecture

Prerequisite: ENGL 101 (or ENGL 101) and consent of Instructional Unit.

Pharmacological effects of alcohol and drugs on the human body and mind. [GE]

ADOLESCENT ADDICTION ASSESSMENT & TREATMENT

ACED 164

3 Credits/Units

33 hours of lecture

Prerequisite: ACED 101 and 122, or CDEP 101 and 122, and consent of Instructional Unit.

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]

AIR- AND BLOOD-BORNE PATHOGENS

ACED 170

3 Credits/Units

33 hours of lecture

Prerequisite: Consent of Instructional Unit.

Skills to reduce impact of air- and blood-borne pathogens on addition clients. HIV/AIDS, pathogen, and suicidality brief risk intervention for the addiction client population. Community resources available to clients. [GE]

THEORIES OF COUNSELING

ACED 201

3 Credits/Units

33 hours of lecture

Prerequisite: ACED 101 or CDEP 101 and PSYC 101, and consent of Instructional Unit.

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]

MULTI-CULTURAL ADDICTIONS COUNSELING

ACED 202

3 Credits/Units

33 hours of lecture

Prerequisite: ACED 122 or CDEP 122 and ACED 201 or CDEP 120/201, and consent of Instructional Unit.

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]

CASE MANAGEMENT IN ADDICTION MEDICINE

ACED 203

3 Credits/Units

33 hours of lecture

Prerequisite: ACED 201 or CDEP 120/201, and ACED 122 or CDEP 122, and consent of Instructional Unit.

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]

ADVANCED TECHNIQUES FOR ADDICTION COUNSEL

ACED 205

3 Credits/Units

33 hours of lecture

Prerequisite: ACED 101 or CDEP 101, ACED 201 or CDEP 120/201, ACED 122 or CDEP 122, and consent of Instructional Unit.

Development of skills needed to establish and maintain effective helping relationships with clients. Integration of relapse prevention counseling in treatment. [GE]

FIELD	PLACEMENT	I
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ACED 210		6 Credits/Units
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198 hours of clinical

Prerequisite: 30 hours of ACED or CDEP courses including ACED 136 or CDEP 135 and ACED 122, possession of the WA state CDPT credential and instructor's permission.

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]

FIELD	PLACEMENT	II
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ACED 211		6 Credits/Units
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198 hours of clinical

Prerequisite: Grade of 'C' or better in ACED 210 or CDEP 210 and instructor's permission.

Ten or twenty hours weekly of on-the-job supervised experience applying counseling theories and practices. Addiction Counselor Competencies will be used as a framework for assessment. [GE]

SELECTED	TOPICS
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ACED 280	3 Credits/Units
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33 hours of lecture

Prerequisite: ENGL 101.

Special topics in chemical dependence as listed in the term class schedule. May be repeated for credit. [GE]

SPECIAL	PROJECTS
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ACED 290	5 Credits/Units
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Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize, and complete special projects approved by the Instructional Unit. [GE]

AMERICAN SIGN LANGUAGE (ASL)

AM SIGN LANGUAGE I
ASL& 121 5 Credits/Units

55 hours of lecture
Introduction to American Sign Language emphasizing instruction and practice in expressive and receptive ASL skills. Focus on basic vocabulary, grammar, and cultural aspects of the deaf community. [SE, HA]

AM SIGN LANGUAGE II
ASL& 122 5 Credits/Units

55 hours of lecture
Prerequisite: ASL& 121 or consent of the instructor.
Continuation of ASL I, developing skills for the student with a basic knowledge of ASL. Focus on grammar, idioms, vocabulary building, culture and language. [SE, HA]

AM SIGN LANGUAGE III
ASL& 123 5 Credits/Units

55 hours of lecture
Prerequisite: ASL& 122 or consent of the instructor.
Continuation of ASL II, developing grammar and vocabulary skills, with emphasis on students expressive and receptive skills. Topics include abstract concepts of language and the deaf culture's values, attitudes, and community. [SE, HA]

AMERICAN DEAF CULTURE
ASL 125 5 Credits/Units

55 hours of lecture
This course will focus on topics in the culture of deaf people including studies of their beliefs, practices and language. [HA]

AM SIGN LANGUAGE IV
ASL& 221 5 Credits/Units

55 hours of lecture
Prerequisite: A grade of 'C' or better in ASL& 123, demonstrated equivalent proficiency, or with permission of the instructor.
First of the second-year sequence in studying the language of Deaf Americans. Topics include developing receptive and expressive skill and fluency; correct formation of signs, movement, rhythm, phrasing and clarity; vocabulary building; developing proficiency in ASL grammar. Students will develop a respect for ASL as a language, including acceptance and appreciation of its diverse regional and personal applications within its culture. [SE, HA]

AM SIGN LANGUAGE V
ASL& 222 5 Credits/Units

55 hours of lecture
Prerequisite: A grade of 'C' or better in ASL& 221, demonstrated equivalent proficiency, or with permission of the instructor.
Second of second-year sequence in studying the language of Deaf Americans. Topics include developing receptive and expressive skills in dialogue; applying ASL informal discourse styles; vocabulary building; developing proficiency in ASL grammar for recreation, social services, government and the workplace. Students will develop a respect for ASL as a language, including acceptance and appreciation of its diverse regional and personal applications within its culture. [SE, HA]

AM SIGN LANGUAGE VI
ASL& 223 5 Credits/Units

55 hours of lecture
Prerequisite: A grade of 'C' or better in ASL& 222, demonstrated equivalent proficiency, or with permission of the instructor.
Third of second-year sequence in studying the language of Deaf Americans. Continuing development of receptive and expressive skills and fluency. Emphasis on increasing vocabulary, classifier, phrases and grammatical usage with a decrease dependency on English syntax structure. Students will be able to initiate and converse in topics such as technical fields of work, college level academic subjects, politics, and religion with consistent grammatical accuracy with native ASL users. [SE, HA]

SELECTED TOPICS
ASL 280 3 Credits/Units

33 hours of lecture
Course focuses on selected topics in American Sign Language. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit for different topics. [PNP]

SPECIAL PROJECTS
ASL 290 5 Credits/Units

Prerequisite: Consent of Instructional Unit.
Opportunity to plan, organize and complete special projects approved by the department.

ANTHROPOLOGY (ANTH)

INTRODUCTION **TO** **ARCHAEOLOGY**
 ANTH&204 5 Credits/Units

55 hours of lecture

Study of ancient and prehistoric cultures of the world. Introduction to theories and techniques of archaeological investigation. Formerly ANTH 102. [SE, SS]

INTRODUCTION **TO** **CULTURAL** **ANTHROPOLOGY**
 ANTH&206 5 Credits/Units

55 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. Formerly ANTH 103. [SE, SS]

BIOANTHROPOLOGY
 ANTH&215 5 Credits/Units

44 hours of lecture / 22 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. Formerly ANTH 101. [SE, SS, NS]

PRIMATOLOGY
 ANTH&245 5 Credits/Units

55 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. [NS, SE]

SELECTED **TOPICS**
 ANTH 280 3 Credits/Units

33 hours of lecture

Varying topics for anthropology as listed in the term class schedule. May be repeated for credit. [SE]

SPECIAL **PROJECTS**
 ANTH 290 5 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize, and complete special projects approved by the department. [SE]

ART (ART)

2D ART AND DESIGN I

ART 101 5 Credits/Units

33 hours of lecture / 44 hours of lab
Foundational art course working with line, shape, value, color, and the principles of spatial organization. May include designing with computers. [HB, GE, SE][PNP]

DRAWING I

ART 103 3 Credits/Units

22 hours of lecture / 22 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. [HB, SE] [PNP]

OBSERVATIONAL DRAWING

ART 104 4 Credits/Units

22 hours of lecture / 44 hours of lab

Prerequisite: ART 103.

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. [HB, SE] [PNP]

CONTEMPORARY DRAWING PRACTICES

ART 105 4 Credits/Units

22 hours of lecture / 44 hours of lab

Prerequisite: ART 103.

An interdisciplinary exploration of creative, critical, and analytical approaches to contemporary content and composition in a variety of media. Classes may include a nude model. [HB, SE] [PNP]

CREATIVITY AND CONCEPT

ART 110 3 Credits/Units

22 hours of lecture / 22 hours of lab
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. [HB, SE]

TWO-DIMENSIONAL DESIGN

ART 115 4 Credits/Units

22 hours of lecture / 44 hours of lab
Foundation art course working with line, shape, value, texture and the principles of spatial organization. May include designing with computers. [HB, SE] [PNP]

COLOR THEORY AND DESIGN

ART 116 4 Credits/Units

22 hours of lecture / 44 hours of lab

Prerequisite: ART 115.

Continuation of ART 115. Color theory and the application of color to specific design problems. Includes designing with computers. [HB, SE] [PNP]

THREE-DIMENSIONAL

ART 117

22 hours of lecture / 44 hours of lab

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. [HB, SE] [PNP]

TIME-BASED ART AND DESIGN

ART 118 4 Credits/Units

22 hours of lecture / 44 hours of lab
Introduction of concepts and tools for the design of art to explore the transaction between people, objects and situations over time. Exploring the personal, cultural, formal, political, and historical aspects of the medium through readings, writings and critical reflection of relevant 20th and 21st century artworks, as well as the principles and aesthetics of moving imagery including timing, pacing, repetition, editing, composition, process and the link between sound and image. Activities include class discussions, software and equipment tutorials and studio time for experimental project development. [HA, SE]

INTRODUCTION TO PRINTMAKING

ART 120 3 Credits/Units

22 hours of lecture / 22 hours of lab
Introduction to basic materials, editions concepts in the different types of printmaking. Explores various techniques including screen printing, relief printing various photo-sensitive print processes. Stencils will be created through both hand drawn digitally generated artwork. This is an introductory, no prerequisite class, but it will build on some drawing and design skills. [GE, SE, HB][PNP]

PRINTMAKING II

ART 121 3 Credits/Units

22 hours of lecture / 22 hours of lab

Prerequisite: ART 120.

Builds on the skills learned in ART 120, Introduction to Printmaking and will refine handling of basic materials, editions concepts in the different types of printmaking. Students will continue to explore various techniques including screen printing, monoprinting, relief printing various photo-sensitive print processes. Students are welcome to choose an area of focus with different printing disciplines. Stencils will be created through both hand drawn digitally generated artwork. [GE, SE, HB][PNP]

PRINTMAKING III

ART 122 3 Credits/Units

22 hours of lecture / 22 hours of lab

Prerequisite: ART 120 and 121.

Builds on the skills learned in ART 120 and ART 121, Introduction to Printmaking and Printmaking II and will refine handling of basic materials, editions concepts in the different types of printmaking. Students will continue to explore various techniques including screen printing, monoprinting, relief printing various photo-sensitive print processes. Student projects are more self-directed and independent in this third class of the Printmaking sequence. Stencils will be created through both hand drawn digitally generated artwork. [HB, GE, SE]

PHOTOGRAPHY

ART 123

5 Credits/Units

33 hours of lecture / 44 hours of lab

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. Credit not allowed for both ART 140 and ART 123. [HB, GE, SE][PNP]

PHOTOGRAPHY

ART 124

5 Credits/Units

33 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in ART 123 or equivalent or consent of Instructional Unit.

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. [HB,GE,SE][PNP]

PHOTOGRAPHY

ART 125

5 Credits/Units

33 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in ART 124 or equivalent or consent of Instructional Unit.

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. [HB, GE, SE][PNP]

PHOTOGRAPHIC

ART 131

STORYTELLING

3 Credits/Units

22 hours of lecture / 22 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. [HA, SE]

DARKROOM

ART 140

PHOTOGRAPHY

4 Credits/Units

22 hours of lecture / 44 hours of lab

Basic camera handling and darkroom procedures, metering, film processing, printing, and learning to see photographically. All work in black-and-white. Student must provide manual 35mm camera. A limited number of cameras are available for checkout in the Art Department. [HB, SE] [PNP]

PHOTOGRAPHY

ART 141

II

4 Credits/Units

22 hours of lecture / 44 hours of lab

Prerequisite: ART 140 or equivalent or consent of Instructional Unit. Continuation of ART 140. Particular emphasis on self-expression and print quality. Special topics vary from quarter to quarter, but may include medium and large format photography, various image transfer techniques, liquid photographic emulsions, and studio lighting. Practicing effective small group discussion to demonstrate visual literacy. [HB, SE] [PNP]

PHOTOGRAPHY

ART 142

III

4 Credits/Units

22 hours of lecture / 44 hours of lab

Prerequisite: ART 141 or equivalent.

Continuation of ART 141. Opportunities to develop additional technical skill and continued exploration of self-expression. [HB, SE] [PNP]

DIGITAL

ART 145

PHOTOGRAPHY**I**

3 Credits/Units

22 hours of lecture / 22 hours of lab

Introduction to digital camera operation, image manipulation software use, seeing skills development, and expressive sensitivity. Special emphasis on the elements and principles of photographic composition, ethical issues, aesthetic vocabulary, and the study of how images communicate. Includes lecture, supervised lab, and group critiques. Familiarity with Adobe Photoshop will be helpful. Students must provide digital camera; a limited number of digital cameras are available for student checkout in the Art Department. [HB, SE]

DIGITAL

ART 146

PHOTOGRAPHY**II**

4 Credits/Units

22 hours of lecture / 44 hours of lab

Continuation of ART 145. Particular emphasis on digital imagery as self-expression. Refining technical skills, exploring the unique opportunities of the digital medium, and examining current trends in contemporary photography. Special topics vary from quarter to quarter, but may include medium and large format photography, various image transfer techniques, liquid photographic emulsions, and studio lighting. Practicing effective small group discussion to demonstrate visual literacy. Prerequisite: ART 145 or both ART 140 and GRCP 120, or consent of Instructional Unit. [HB, SE]

ART

ART 151

APPRECIATION

3 Credits/Units

33 hours of lecture

The visual arts with which we come in contact every day. Ways contemporary and historic creative expression influence present day living and thinking. Personal contact with many art forms. Some hands-on experience. Especially for non-majors. [HA, SE]

GRAPHIC

ART 172

DESIGN**EXPLORATION**

3 Credits/Units

22 hours of lecture / 22 hours of lab

Theoretical survey of Graphic Design and its cultural and historical context. Intended for both non-majors and pre-majors; focus on how Graphic Design functions as a mode of visual communication and its role in society, as well as exploring Graphic Design as a possible career. [HA, SE]

GRAPHIC

ART 173

DESIGN**STUDIO****I**

4 Credits/Units

22 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in ART 101 and CGT/DMA 101 or 102, or equivalent computer experience.

The first in a sequence of three applied graphic design studio courses. Introduction to the elements and principles of graphic design and the design process through a series of hands-on projects stressing visual literacy, unity of form and utilizing common tools of the trade, including computers. [HB, SE]

TYPOGRAPHY			I	THE HUMAN FIGURE	I
ART 174		3 Credits/Units		ART 203	4 Credits/Units
22 hours of lecture / 22 hours of lab				22 hours of lecture / 44 hours of lab	
Prerequisite: A grade of 'C' or better in DMA 102, or equivalent computer experience.				Prerequisite: ART 103 or consent of Instructional Unit.	
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, and the creation of original letterform designs. [HB, SE]				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. [HB, SE]	
CERAMICS			I	THE HUMAN FIGURE	II
ART 180		5 Credits/Units		ART 204	4 Credits/Units
33 hours of lecture / 44 hours of lab				22 hours of lecture / 44 hours of lab	
Working with clay. Hand-building techniques of pinch, coil, slab and press mold. Introduction to the potter's wheel. Basic glazing techniques. [HB, SE] [PNP]				Prerequisite: ART 203.	
CERAMICS			II	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. [HB, SE]	
ART 181		5 Credits/Units		DIGITAL PAINTING & ILLUSTRATION	
33 hours of lecture / 44 hours of lab				ART 208	4 Credits/Units
Prerequisite: ART 180.				22 hours of lecture / 44 hours of lab	
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. [HB, SE] [PNP]				Prerequisite: A grade of 'C' or better in CGT/DMA 101 102, or equivalent computer experience.	
CERAMICS			III	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. [HB, SE]	
ART 182		5 Credits/Units		PORTFOLIO DEVELOPMENT	
33 hours of lecture / 44 hours of lab				ART 215	3 Credits/Units
Prerequisite: ART 181.				22 hours of lecture / 22 hours of lab	
Combining hand and wheel techniques to create original pieces as sculpture or for specific functions. Mold making, slip casting, underglazing, and kiln firing. [HB, SE] [PNP]				Prerequisite: Consent of Instructional Unit.	
METAL ARTS			I	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. [SE]	
ART 189		4 Credits/Units		ART HISTORY: ANCIENT TO LATE ANTIQUE	
22 hours of lecture / 44 hours of lab				ART 220	5 Credits/Units
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. [HB, SE] [PNP]				55 hours of lecture	
METAL ARTS			II	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, 40,000 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. [HA, SE]	
ART 190		4 Credits/Units		ART HISTORY: MEDIEVAL-RENAISSANCE	
22 hours of lecture / 44 hours of lab				ART 221	5 Credits/Units
Prerequisite: ART 189.				55 hours of lecture	
Continuation of ART 189. Design and technical skills in the raising and forming of metal vessels. Development of metal arts in Europe from the Middle Ages to the present. [HB, SE] [PNP]				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. [HA, SE]	
METAL ARTS			III		
ART 191		4 Credits/Units			
22 hours of lecture / 44 hours of lab					
Prerequisite: ART 190.					
Continuation of ART 190. Design and technical skills applied to casting and forging of metal objects. Overview of contemporary metal artists and their work. [HB, SE] [PNP]					
COOPERATIVE WORK EXPERIENCE					
ART 199		5 Credits/Units			
165 hours of clinical					
Prerequisite: Consent of Instructional Unit.					
Supervised work experience in art or photography. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]					

ART	HISTORY:	BAROQUE-MODERN	PAINTING	II
ART 222		5 Credits/Units	ART 258	5 Credits/Units
55 hours of lecture			33 hours of lecture / 44 hours of lab	
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. [HA, SE]			Prerequisite: ART 257.	
			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. [HB, SE]	
ART	IN	THE	PAINTING	III
		TWENTIETH		
		CENTURY	ART 259	5 Credits/Units
ART 223		5 Credits/Units	33 hours of lecture / 44 hours of lab	
55 hours of lecture			Prerequisite: ART 258.	
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. [HA, SE]			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. [HB, SE]	
ART	HISTORY:	ASIAN	WATERCOLOR	I
		ART		
ART 225		5 Credits/Units	ART 260	4 Credits/Units
55 hours of lecture			22 hours of lecture / 44 hours of lab	
Survey of the visual arts and architecture of India, China, and Japan. 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. [HA, SE]			Prerequisite: ART 103.	
			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. [HB, SE]	
SURVEY	OF	NON-WESTERN	WATERCOLOR	II
		ART		
ART 226		5 Credits/Units	ART 261	4 Credits/Units
55 hours of lecture			22 hours of lecture / 44 hours of lab	
Introduction to the visual arts and artifacts of the non-Western world, from prehistory to the present, to include the Middle East, the Pacific Islands, Africa, and the Americas. This survey course examines cultural and historical traditions, both in the secular and religious realms, as well as international contemporary art issues. Differences between Western and non-Western theories of art, aesthetics, values, and function will be explored. [HA, SE]			Prerequisite: ART 260.	
			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. [HB, SE]	
WOMEN	ARTISTS	THROUGH	WATERCOLOR	III
		HISTORY		
ART 250		5 Credits/Units	ART 262	4 Credits/Units
55 hours of lecture			22 hours of lecture / 44 hours of lab	
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. [HA, SE]			Prerequisite: ART 261.	
			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. [HB, SE]	
PAINTING			PUBLICATION	PRODUCTION
		I		
ART 257		5 Credits/Units	ART 270	9 Credits/Units
33 hours of lecture / 44 hours of lab			66 hours of lecture / 66 hours of lab	
Prerequisite: A grade of 'C' or better in ART 101, 103 or 115.			Prerequisite: Consent of Instructional Unit.	
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. [HB,SE]			Design and production skills for publications, intended for Phoenix staff, graphic design students and others interested in the publications field. Topics include: Adobe InDesign for layout, preparing for printing, editing, proofing, creating promotional materials, working with printers, budgeting, managing the project and working with a team. Includes field trip. [HB, SE] [PNP]	

TYPOGRAPHY**II**

ART 271

5 Credits/Units

33 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in ART 174.

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. [HB, SE]

GRAPHIC**DESIGN****HISTORY**

ART 272

5 Credits/Units

55 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. [HA, SE] [PNP]

GRAPHIC**DESIGN****STUDIO****II**

ART 273

4 Credits/Units

22 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in ART 173 and CGT/DMA 102, or equivalent experience.

The second in a sequence of three, analyze and apply the principles of visual communications to hands-on projects while considering strategic direction, consumer insights, and functional constraints for various types of graphic design disciplines such as persuasive design, packaging, branding and identity. Among others, revolving topics may include design for public service and working with clients. [HB, SE]

GRAPHIC**DESIGN****STUDIO****III**

ART 274

4 Credits/Units

22 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in ART 273.

The final in a sequence of three, focus on real-world design tasks and discussion of professional practices to prepare the student for employment and/or upper division coursework. Portfolio-quality graphic design work will be produced and may include a personal identity and self-promotional package. Recommended concurrent enrollment with ART 215 - Portfolio Development. [HB, SE]

SELECTED**TOPICS**

ART 280

5 Credits/Units

55 hours of lecture

Course focuses on selected topics in art. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit for different topics. [SE]

SPECIAL**PROJECTS**

ART 290

6 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [HB]

ASTRONOMY (ASTR)

INTRO	TO	ASTRONOMY
ASTR&101		5 Credits/Units
44 hours of lecture / 22 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. Formerly ASTR 101. [NS, SE]		

AUTOMOTIVE TECHNOLOGY (AUTO)

INTRODUCTION TO TOYOTA AUTO 150 7 Credits/Units

22 hours of lecture / 110 hours of lab

Prerequisite: Must meet Clark Automotive entrance standards and have the recommendation of your sponsoring Toyota/Lexus service management.

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 151 7 Credits/Units

22 hours of lecture / 110 hours of lab

Concurrent enrollment in AUTO 152 and AUTO 153.

Prerequisite: A grade of 'C' or better in AUTO 150.

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 152 7 Credits/Units

22 hours of lecture / 110 hours of lab

Concurrent enrollment in AUTO 151 and AUTO 153.

Prerequisite: A grade of 'C' or better in AUTO 150.

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 153 7 Credits/Units

22 hours of lecture / 110 hours of lab

Concurrent enrollment in AUTO 151 and AUTO 152.

Prerequisite: A grade of 'C' or better in AUTO 150.

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 INTERNSHIP I AUTO 154 8 Credits/Units

44 hours of lecture / 88 hours of lab

Prerequisite: A grade of 'C' or better in AUTO 151, 152, and 153.

First managed internship experience in a Toyota/Lexus dealership, with focus on practicing skills learned throughout the first term of automotive instruction, including performing basic maintenance and diagnosing/repairing electrical and braking 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 STEERING AND SUSPENSION AUTO 155 7 Credits/Units

22 hours of lecture / 110 hours of lab

Concurrent enrollment in AUTO 156 and AUTO 157.

Prerequisite: A grade of 'C' or better in AUTO 154.

Theory and hands-on training in the operation, diagnosis, and service of Toyota vehicle steering and suspension systems. Initial focus on performing basic tire, suspension and steering service procedures and diagnosis. Specific emphasis on the correct diagnostic strategies to locate and repair faults in TPMS and EPS 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 156 7 Credits/Units

22 hours of lecture / 110 hours of lab

Concurrent enrollment in AUTO 155 and AUTO 157.

Prerequisite: A grade of 'C' or better in AUTO 154.

First 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.

TOYOTA ENGINE PERFORMANCE II AUTO 157 7 Credits/Units

22 hours of lecture / 110 hours of lab

Concurrent enrollment in AUTO 155 and AUTO 156.

Prerequisite: A grade of 'C' or better in AUTO 154.

Second of two courses on operation, diagnosis, service and repair of Toyota Engine Management Systems. Focus on advanced level diagnostics including fuel trim, DTC's drivability, Mode \$06 scan tool usage, and emissions control systems. Acceptance and good standing in the T-Ten Program.

INTRODUCTION TO DEALERSHIP OPERATIONS AUTO 160 7 Credits/Units

22 hours of lecture / 110 hours of lab

Prerequisite: Must meet Clark Automotive entrance standards and have the recommendation of your sponsoring dealership service management. 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. Remain in good standing in the HiTECC Program.

ELECTRICAL I AUTO 161 7 Credits/Units

22 hours of lecture / 110 hours of lab

Concurrent enrollment in AUTO 162 and AUTO 163.

Prerequisite: A grade of 'C' in AUTO 160.

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.

ELECTRICAL

AUTO 162

7 Credits/Units

22 hours of lecture / 110 hours of lab

Concurrent enrollment in AUTO 161 and AUTO 163.

Prerequisite: A grade of 'C' or better in AUTO 160.

Second in a series exploring electrical properties, circuits and testing.

Major focus will be placed on the proper use of the DVOM in voltage drop diagnosis of multiplexed circuits used in Toyota vehicles. Will also include an introduction to computer controlled electrical systems operation and testing using a DSO. This course is a prerequisite for all future HiTECC courses. Remain in good standing in the HiTECC Program.

BRAKES

AUTO 163

7 Credits/Units

22 hours of lecture / 110 hours of lab

Concurrent enrollment in AUTO 161 and AUTO 162.

Prerequisite: A grade of 'C' or better in AUTO 160.

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.

INTERNSHIP

AUTO 164

8 Credits/Units

44 hours of lecture / 88 hours of lab

Prerequisite: A grade of 'C' or better in AUTO 161, 162 and 163.

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 teamworking skills. Remain in good standing in the HiTECC Program.

STEERING**AND****SUSPENSION**

AUTO 165

7 Credits/Units

22 hours of lecture / 110 hours of lab

Concurrent enrollment in AUTO 166 and AUTO 167.

Prerequisite: A grade of 'C' or better in AUTO 164.

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.

ENGINE**PERFORMANCE**

AUTO 166

7 Credits/Units

22 hours of lecture / 110 hours of lab

Concurrent enrollment in AUTO 165 and AUTO 167.

Prerequisite: A grade of 'C' or better in AUTO 164.

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.

ENGINE

AUTO 167

7 Credits/Units

22 hours of lecture / 110 hours of lab

Concurrent enrollment in AUTO 165 and AUTO 166.

Prerequisite: A grade of 'C' or better in AUTO 164.

Instruction regarding the operation, diagnosis, service and repair of engine management systems. Focus on advanced level diagnostics including fuel trim, no DTC's drivability, mode \$06 scan tool usage, and emissions control system diagnosis and repair. This course is a prerequisite for all future HiTECC courses. Remain in good standing in the HiTECC Program.

AUTOMOTIVE

AUTO 170

PROCESSES

3 Credits/Units

33 hours of lecture

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.

MECHANICAL

AUTO 171

PROCESSES

5 Credits/Units

44 hours of lecture / 22 hours of lab

Prerequisite: Completion of or concurrent enrollment in AUTO 170.

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.

MAINTENANCE

AUTO 172

PROCESSES

8 Credits/Units

44 hours of lecture / 88 hours of lab

Prerequisite: Successful completion of both AUTO 170 (Automotive Processes) and AUTO 171 (Mechanical Processes).

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.

UNDERCAR**SERVICE****AND****REPAIR**

AUTO 173

15 Credits/Units

110 hours of lecture / 110 hours of lab

Prerequisite: A grade of 'C' or better in AUTO 172 (Maintenance Processes).

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.

UNDERHOOD	SERVICE	AND	REPAIR	AUTOMATIC	TRANSMISSIONS
AUTO 174			15 Credits/Units	AUTO 254	7 Credits/Units
110 hours of lecture / 110 hours of lab					
Prerequisite: A grade of 'C' or better in AUTO 172 (Maintenance Processes).					
Underhood maintenance processes with addition of light engine 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.					
COOPERATIVE	WORK		EXPERIENCE		
AUTO 199			5 Credits/Units		
165 hours of clinical					
Prerequisite: Consent of Instructional Unit.					
Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]					
TOYOTA	CLIMATE		CONTROL		
AUTO 250			7 Credits/Units		
22 hours of lecture / 110 hours of lab					
Prerequisite: A grade of 'C' or better in AUTO 155, 156 and 157.					
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	INTERSHIP		II		
AUTO 251			4 Credits/Units		
22 hours of lecture / 44 hours of lab					
Prerequisite: A grade of 'C' or better in AUTO 250.					
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		
22 hours of lecture / 110 hours of lab					
Concurrent enrollment in AUTO 253 and AUTO 254.					
Prerequisite: A grade of 'C' or better in AUTO 251.					
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		
22 hours of lecture / 110 hours of lab					
Concurrent enrollment in AUTO 252 and AUTO 254.					
Prerequisite: A grade of 'C' or better in AUTO 251.					
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	INTERSHIP
				AUTO 255	8 Credits/Units
44 hours of lecture / 88 hours of lab					
Prerequisite: A grade of 'C' or better in AUTO 252, 253 and 254.					
Third managed internship experience in a Toyota/Lexus dealership, with focus on practicing skills learned throughout the third term of automotive instruction. Skills include performing repairs to engines, transmissions, and drivetrains. Emphasis on developing strong customer service and teamworking skills. Students required to document and share these experiences as they work towards ASE and Toyota Certification. Acceptance and good standing in the T-Ten Program. [GE]					
	CLIMATE				CONTROL
	AUTO 260				7 Credits/Units
22 hours of lecture / 110 hours of lab					
Prerequisite: A grade of 'C' or better in AUTO 165, 166 and 167.					
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.					
	INTERSHIP				II
	AUTO 261				4 Credits/Units
22 hours of lecture / 44 hours of lab					
Prerequisite: A grade of 'C' or better in AUTO 260.					
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 teamworking skills. This course is a prerequisite for all future HiTECC courses. Remain in good standing in the HiTECC Program.					
	ENGINE				MECHANICAL
	AUTO 262				7 Credits/Units
22 hours of lecture / 110 hours of lab					
Concurrent enrollment in AUTO 263 and AUTO 264.					
Prerequisite: A grade of 'C' or better in AUTO 261.					
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.					

MANUAL AUTO 263 22 hours of lecture / 110 hours of lab Concurrent enrollment in AUTO 262 and AUTO 264. Prerequisite: A grade of 'C' or better in AUTO 261. 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.	TRANSMISSION 7 Credits/Units	CAPSTONE AUTO 273 11 hours of lecture / 66 hours of lab Prerequisite: Successful completion of AUTO 271 and 272 with a grade of 'C' or better. An alternative to a internship in which students will study a new automotive technology of their choice. Final project will vary with each instructor.	NEW 4 Credits/Units	TECHNOLOGY 4 Credits/Units
AUTOMATIC AUTO 264 22 hours of lecture / 110 hours of lab Concurrent enrollment in AUTO 262 and AUTO 263. Prerequisite: A grade of 'C' or better in AUTO 261. 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.	TRANSMISSIONS 7 Credits/Units	INTERNSHIP AUTO 274 11 hours of lecture / 99 hours of lab Prerequisite: Successful completion of AUTO 271 and 272 with a grade of 'C' or better. 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.	4 Credits/Units	
INTERNSHIP AUTO 265 44 hours of lecture / 88 hours of lab Prerequisite: A grade of 'C' or better in AUTO 262, 263 and 264. Provides students with a managed internship experience in a dealership. Students will focus on practicing skills learned throughout their term quarter of automotive instruction including performing repairs to engines, transmissions, and drivetrains. 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 teamworking skills. Remain in good standing in the HiTECC Program.	III 8 Credits/Units		SELECTED AUTO 280 88 hours of lecture 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]	
DRIVER COMFORT AND CONVENIENCE SYSTEMS AUTO 271 110 hours of lecture / 110 hours of lab Prerequisite: Successful completion of all AUTO 170, 171, 172, 173 and 174 with a 'C' or better. HVAC and safety system maintenance and service processes. Some light repair procedures will be practiced. Also includes body electrical diagnosis using diagrams, DMMs, and scan tools. While a combination lecture/lab will be utilized for instruction, course will be delivered primarily through lab activities.	15 Credits/Units		SPECIAL AUTO 290 Prerequisite: Consent of Instructional Unit. For automotive majors only. Opportunity to plan, organize and complete special projects approved by the department. [GE]	
ADVANCED AUTO 272 110 hours of lecture / 110 hours of lab Prerequisite: Successful completion of all AUTO 170, 171, 172, 173 and 174 with a grade of 'C' or better. 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.	DIAGNOSTIC STRATEGIES 15 Credits/Units		TOPICS 8 Credits/Units PROJECTS 3 Credits/Units	

BAS APPLIED MANAGEMENT (BASAM)

FOUNDATIONS OF MANAGEMENT BASAM301 5 Credits/Units

55 hours of lecture

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 BASAM305 5 Credits/Units

55 hours of lecture

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 BASAM320 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 146, or MATH 203 and MATH 204, or an equivalent math course.

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. [CP]

BUSINESS PRINCIPLES BASAM325 5 Credits/Units

55 hours of lecture

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 BASAM330 5 Credits/Units

55 hours of lecture

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 BASAM335 5 Credits/Units

55 hours of lecture

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 BASAM340 5 Credits/Units

55 hours of lecture

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 BASAM400 5 Credits/Units

55 hours of lecture

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 BASAM410 5 Credits/Units

55 hours of lecture

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 BASAM415 5 Credits/Units

55 hours of lecture

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
BASAM425		5 Credits/Units

55 hours of lecture

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
BASAM440				5 Credits/Units

55 hours of lecture

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
BASAM450		5 Credits/Units

22 hours of lecture / 99 hours of clinical

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)

INTRODUCTION TO HUMAN SERVICES BASHS301

55 hours of lecture

Prerequisite: Admission to the Bachelors of Applied Sciences in Human Services program.

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 BASHS302

55 hours of lecture

Prerequisite: Admission to BASHS program.

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.

ETHICS IN HUMAN SERVICES BASHS303

55 hours of lecture

Prerequisite: Admission to the BASHS program.

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.

PRACTICAL FAMILY THERAPY BASHS304

55 hours of lecture

Prerequisite: Admission to the BASHS program.

Explores practical perspectives on marital and family counseling including an examination of family advocacy, assessment techniques, treatment planning strategies, and use of techniques. Focuses on an integration of family theory and practice.

ADVANCED CO-OCCURRING DISORDERS TREATMENT BASHS305

55 hours of lecture

Prerequisite: Admission to BASHS program.

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.

TRAUMA, GRIEF & LOSS BASHS306

55 hours of lecture

Prerequisite: Admission to the BASHS program.

Provides a theoretical and practical framework for working with traumatized and grieving populations and individuals in a broad Human Services context.

MULTICULTURAL COUNSELING IN HS BASHS401

55 hours of lecture

Prerequisite: Admission to the BASHS program.

Presents current theories and practices for working with clients of various cultural, racial, economic, and ethnic backgrounds and subcultures.

HUMAN SERVICES INTERVENTION & ADVOCACY BASHS402

55 hours of lecture

Prerequisite: Admission to BASHS program.

Practical application of theory in counseling and advocacy for Human Services populations in various settings. Emphasis is on developing a personal awareness of strengths and personal challenges in counseling and advocacy and integrating responding skills and theoretical orientations.

RESEARCH & EVALUATION METHODOLOGIES IN HS BASHS403

55 hours of lecture

Prerequisite: Admission to the BASHS program; a grade of 'C' or better in MATH 146.

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.

ADVANCED CASE MANAGEMENT IN HS BASHS404

55 hours of lecture

Prerequisite: Admission to the BASHS program.

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.

HUMAN SERVICES FIELD PLACEMENT I BASHS410

165 hours of clinical

Prerequisite: Completion of 35 credits of BASHS courses with a 'C' or better.

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. Credits must include ACED 122.

HUMAN SERVICES FIELD PLACEMENT II BASHS411

165 hours of clinical

Prerequisite: Completion of 35 credits of BASHS courses with a 'C' or better, including BASHS 403 and 410.

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.

BIOLOGY (BIOL)

SURVEY OF BIOLOGY BIOL&100 5 Credits/Units

33 hours of lecture / 44 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. Formerly BIOL 104. Credit not allowed for BIOL 104, BIOL 100, BIOL 105, and AG/BIOL 175. [NS, SE]

ENVIRONMENTAL BIOLOGY BIOL 101 5 Credits/Units

33 hours of lecture / 44 hours of lab

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. [NS, SE]

SMALL WORLD ANTIBIOTICS RESEARCH BIOL 105 5 Credits/Units

33 hours of lecture / 44 hours of lab

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 as a recommended course for other biology courses. English writing skills are highly recommended. [GE, SE, NS] [PNP]

SMALL WORLD ANTIBIOTICS RESEARCH BIOL 106 5 Credits/Units

33 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in BIOL 105 or consent of Instructional Unit.

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. [NS, GE, SE] [PNP]

INTRODUCTION TO WILDLIFE BIOL 139 3 Credits/Units

33 hours of lecture

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. [NS, SE]

MAMMALS OF THE NORTHWEST BIOL 140 3 Credits/Units

33 hours of lecture

Important mammals of the Pacific Northwest. Their identification, classification, life histories, ecology, current status, and management. [NS, SE]

BIRDS OF THE PACIFIC NORTHWEST BIOL 141 3 Credits/Units

33 hours of lecture

Important Birds of the Pacific Northwest. Their identification, classification, life histories, ecology, current status, and management. [NS, SE]

FRESHWATER FISHES OF THE PACIFIC NORTHWEST BIOL 142 3 Credits/Units

33 hours of lecture

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. [NS, SE]

INTRODUCTION TO FORESTRY BIOL 143 3 Credits/Units

33 hours of lecture

A forest management course including the structure and function of trees, soils, forest ecology, forest insects and diseases, timber management, fire management, and forest economy. Class will occasionally meet off campus and a Saturday field trip is required. [NS, SE]

REPTILES & AMPHIBIANS OF THE PACIFIC NW BIOL 145 3 Credits/Units

33 hours of lecture

Introduction to the biology, ecology, evolution, and geographic distribution of Pacific Northwest reptiles and amphibians. [NS, SE]

MARINE BIOLOGY BIOL 150 5 Credits/Units

33 hours of lecture / 44 hours of lab

The marine environment (physical and chemical properties), its plants, bacteria, animal life (vertebrates, invertebrates), ecosystems, fisheries and pollution. [NS, SE]

GENERAL BIOLOGY W/LAB BIOL&160 5 Credits/Units

33 hours of lecture / 44 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. Successful completion fulfills pre-requisite for BIOL 241, BIOL 251, and BIOL 260. [GE, SE, NS] [PNP]

HUMAN BIOLOGY BIOL 164 4 Credits/Units

44 hours of lecture

Concurrent enrollment in BIOL 165 recommended.

The structure and function of the human body as it relates to homeostasis, health, disease and the environment. Concepts to be covered include human organization, processing, transporting, integration/coordination, reproduction, genetic, and evolution/ecology. Can be used as a science distribution requirement. Formerly BIOL 160. [NS, SE]

HUMAN	BIOLOGY	LAB	MAJORS	ORGANISMAL	PHYS
BIOL 165		1 Credit/Unit	BIOL&223		5 Credits/Units
22 hours of lab			33 hours of lecture / 44 hours of lab		
Concurrent enrollment in, or completion of BIOL 164 required.			Prerequisite: A grade of 'C' or better in BIOL 222.		
Laboratory study of the structure and function of the human body as it relates to homeostasis, health, disease, and the environment. Formerly BIOL 161. [NS, SE]			Second course of three introductory courses for life science majors. Covers the physiology of major animal and plant organ systems. BIOL 222 is the first course in the three-course series for majors, to be taken prior to (second) BIOL 223 and (third) BIOL 221. [NS,SE]		
HUMAN		GENETICS	FLOWERING	PLANTS	OF THE PACIFIC NORTHWEST
BIOL 167		3 Credits/Units	BIOL 224		5 Credits/Units
33 hours of lecture			33 hours of lecture / 44 hours of lab		
Introduction to a variety of genetics topics, including nature versus, nurture, forensic sciences, patterns of inheritance, pedigree analysis, diseases, genetically modified organisms, gene therapy, cloning, and eugenics. Course will also focus on realized and/or potential impacts on society. Formerly BIOL 162. [NS, SE] [PNP]			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. A Saturday field trip is required. [NS, SE]		
BIOETHICS			HUMAN	ANATOMY	AND PHYSIOLOGY I
BIOL 180		3 Credits/Units	BIOL&241		5 Credits/Units
33 hours of lecture			33 hours of lecture / 44 hours of lab		
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. Credit not allowed for both BIOL 180 and HUM 180. [GE, NS, SE]			Concurrent enrollment in BIOL& 241L.		
COOPERATIVE	WORK	EXPERIENCE	Prerequisite: A grade of 'C' or better in BIOL 160 or department approval.		
BIOL 199		5 Credits/Units	The first 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 homeostasis, terminology, histology, the integumentary, skeletal, articular, muscular, nervous, and endocrine systems. [NS, SE]		
165 hours of clinical			HUMAN	ANATOMY	AND PHYSIOLOGY II
Prerequisite: Consent of Instructional Unit.			BIOL&242		5 Credits/Units
Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]			33 hours of lecture / 44 hours of lab		
FIELD	STUDIES	IN BIOLOGY	Concurrent enrollment in BIOL& 242L.		
BIOL 208		10 Credits/Units	Prerequisite: A grade of 'C' or better in BIOL 241 or department approval.		
22 hours of lecture / 286 hours of lab			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. [NS, SE]		
Prerequisite: Completion of a 100- or 200- level biology course, or consent of Instructional Unit.			HUMAN	A	& P I
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. [NS, SE]			BIOL&251		5 Credits/Units
MAJORS		ECOLOGY/EVOLUTION	33 hours of lecture / 44 hours of lab		
BIOL&221		5 Credits/Units	Concurrent enrollment in BIOL& 251L.		
33 hours of lecture / 44 hours of lab			Prerequisite: A grade of 'C' or better in BIOL 100 or BIOL 160 or BIOL 164/165, or BIOL 221 or CHEM 121 or 141 or consent of Instructional Unit.		
Prerequisite: A grade of 'C' or better in BIOL 222 or a grade of 'B' or better in BIOL 100.			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. Formerly BIOL 231. Credit is not allowed for both BIOL 251 and BIOL 231. Formerly BIOL 231. [NS, SE]		
Third course of three introductory courses for life science majors. Covers Mendelian genetics, evolution, adaption, speciation, biodiversity, and ecology. BIOL 222 is the first course in the three-course series for majors, to be taken prior to BIOL 223 and BIOL 221. [NS,SE]			MAJORS		CELL/MOLECULAR
MAJORS		CELL/MOLECULAR	BIOL&222		5 Credits/Units
BIOL&222			33 hours of lecture / 44 hours of lab		
33 hours of lecture / 44 hours of lab			Prerequisite: Completion of or concurrent enrollment in CHEM 139 (100) or CHEM 121 (111) or CHEM 141 (131).		
Prerequisite: Completion of or concurrent enrollment in CHEM 139 (100) or CHEM 121 (111) or CHEM 141 (131).			First course of three introductory courses for life science majors. Includes organic chemistry, cell structure, DNA structure and replication, gene expression, cell division, organismal development, molecular genetics and biotechnology. BIOL 222 is the first course in the three-course series for majors: to be taken prior to BIOL 223 and BIOL 221. [NS,SE]		
First course of three introductory courses for life science majors. Includes organic chemistry, cell structure, DNA structure and replication, gene expression, cell division, organismal development, molecular genetics and biotechnology. BIOL 222 is the first course in the three-course series for majors: to be taken prior to BIOL 223 and BIOL 221. [NS,SE]					

HUMAN	A	&	P	II
BIOL&252				5 Credits/Units

33 hours of lecture / 44 hours of lab

Concurrent enrollment in BIOL& 252L required.

Prerequisite: A grade of 'C' or better in BIOL 251 or written consent of Instructional Unit.

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. Formerly BIOL 232. Credit is not allowed for both BIOL 252 and BIOL 232. [NS, SE]

HUMAN	A	&	P	III
BIOL&253				5 Credits/Units

33 hours of lecture / 44 hours of lab

Concurrent enrollment in BIOL 011 for one credit and BIOL& 253L required.

Prerequisite: A grade of 'C' or better in BIOL 252 or consent of Instructional Unit.

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. Formerly BIOL 233. Credit is not allowed for both BIOL 253 and BIOL 233. [NS, SE]

MICROBIOLOGY	
BIOL&260	5 Credits/Units

33 hours of lecture / 44 hours of lab

Prerequisite: BIOL 160 or consent of instructor.

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. Formerly BIOL 240. [NS, SE]

HUMAN	CADAVER	DISSECTION
BIOL 275		6 Credits/Units

66 hours of lab

Dissection of the muscular, circulatory, nervous, digestive and reproductive systems. [SE]

SELECTED	TOPICS
BIOL 280	5 Credits/Units

55 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. [SE]

SPECIAL	PROJECTS
BIOL 290	5 Credits/Units

Prerequisite: Written consent of Instructional Unit.

Opportunity to plan, organize, and complete special projects approved by department. [SE]

BUSINESS ADMINISTRATION (BUS)

BASIC ACCOUNTING PROCEDURES BUS 028 3 Credits/Units

33 hours of lecture

Introduction to the fundamental bookkeeping functions of the double-entry accounting process to prepare financial information for a business or organization. Topics including the basic accounting equation, preparation of business and financial transactions, journalizing, posting, making adjustments, preparing the worksheet, and preparing financial statements from the worksheet. [PNP]

BASIC ACCOUNTING PROCEDURES BUS 029 3 Credits/Units

33 hours of lecture

Prerequisite: BUS 028.

A continuation of BUS 028, with focus on accounting in a merchandising business. Topics include the valuation of inventories, depreciation, tax reports, payroll accounting, and the preparation of financial statements and special journals. [PNP]

ACCOUNTING APPLICATIONS BUS 036 3 Credits/Units

33 hours of lecture

Prerequisite: BUS 029 or consent of Instructional Unit.

Accounting procedures applied to business simulations. Includes payroll, depreciation of fixed assets, budgeting, maintaining sales and purchase records and preparing financial statements. [PNP]

INTRODUCTION TO BUSINESS BUS& 101 5 Credits/Units

55 hours of lecture

Learn about the business functions of management, human resources, marketing, law, computers, accounting, finance, production, small business and international business. Credit not allowed for both BUS& 101, BUS 101 and MGMT 100. Formerly BUS 101. [SE, HR] [PNP]

BUSINESS MATH APPLICATIONS BUS 102 5 Credits/Units

55 hours of lecture

Prerequisite: Eligibility for MATH 089 or MATH 092 or higher or a grade of 'C' or better in CAP 042 or consent of Instructional Unit.

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 mark down, and consumer credit. Cannot receive credit for both BUS 102 and MATHB 065. [CP]

INTRODUCTION TO INTERNATIONAL BUSINESS BUS 105 3 Credits/Units

33 hours of lecture

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.

CUSTOMER SERVICE BUS 110 3 Credits/Units

33 hours of lecture

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 BUS 115 5 Credits/Units

55 hours of lecture

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 BUS 117 3 Credits/Units

33 hours of lecture

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. Credit not allowed for both BUS 117 and BUS 217. [GE] [PNP]

COMPUTERIZED ACCOUNTING BUS 130 3 Credits/Units

33 hours of lecture

Prerequisite: BUS 028 and 029 or ACCT 201 (or BUS 231).

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 PLAN BUS 135 3 Credits/Units

33 hours of lecture

An introduction to building a business plan that incorporates a promotional plan. Plan purpose, audience, design, format, and presentation will be considered. Previous business planning experience useful but not required. Plans will incorporate a 'hands-on' interactive approach. [GE]

INTRODUCTION TO ENTREPRENEURSHIP BUS 139 5 Credits/Units

55 hours of lecture

Learn what makes a successful entrepreneur, the tools an entrepreneur needs to start a business, and the opportunities and pitfalls faced by an entrepreneur. [GE] [PNP]

PERSONAL

BUS 160

55 hours of lecture

Buying insurance (life, health, property, and auto), buying and financing a home, minimizing Federal income tax, borrowing, saving, and investing. [GE] [PNP]

COOPERATIVE

BUS 199

165 hours of clinical

Prerequisite: Completion of one class with a 'C' or better in Business, Economics or Management.

Up to 5 credits for supervised work training in an approved job.

Completion of, or concurrent enrollment in BTEC 147 or HDEV 195, 198, or 200 required. Consent of Instructional Unit required. [GE] [PNP]

BUSINESS

BUS& 201

55 hours of lecture

Prerequisite: Sophomore standing or consent of Instructional Unit.

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. Formerly BUS 224. [SE]

DESCRIPTIVE

BUS 203

33 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 095 or MATH 096 or equivalent or consent of Instructional Unit.

Application of statistics to practical business problems. Includes summarizing and presenting data in tables and graphs, calculating and using common descriptive statistics, determining probabilities and using the binomial, Poisson, and normal probability distributions. Knowledge of Excel highly recommended. [SE]

INFERENTIAL

BUS 204

33 hours of lecture

Prerequisite: Completion of BUS 203 or MATH 203 with a 'C' or better or consent of Instructional Unit.

Application of statistics to practical business and economic problems. Includes sampling, point and interval estimates, hypothesis testing using the normal, t, f and chi-square distributions, analysis of variance, correlation, and simple and multiple regression. Knowledge of Excel recommended. [SE]

INTRODUCTION

BUS 210

55 hours of lecture

Introduction to e-Business includes topics such as email, EFT (electronic fund transfers), barcoding, etc.. This will be a 5 credit course that deals with the fundamentals of conducting business online. This course will help assist students better understand the strategies on conducting business online. Other issues include, international standards, ethics, business strategy, electronic marketing. Examination of e-Business in altering the structure of entire industries, and how it affects business processes including electronic transactions, supply chains, decision making and organizational performance. The exponential growth in the last few years of the Internet and its related technologies has created new ways of communication and trading. [PNP]

FINANCE

5 Credits/Units

EXPERIENCE

5 Credits/Units

LAW

5 Credits/Units

STATISTICS

3 Credits/Units

STATISTICS

3 Credits/Units

E-BUSINESS

5 Credits/Units

BUSINESS

BUS 211

33 hours of lecture

Prerequisite: ENGL 101 (or ENGL 101) or consent of Instructional Unit. 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. Same as ENGL 212. [CA,CT,WC,SE]

PROFESSIONAL

BUS 251

33 hours of lecture

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

BUS 260

55 hours of lecture

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]

SELECTED

BUS 280

55 hours of lecture

The course focuses on 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 for different topics. Individual topics are listed in the term class schedules. [GE]

SPECIAL

BUS 290

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

COMMUNICATIONS

3 Credits/Units

SELLING

3 Credits/Units

OF**MARKETING**

5 Credits/Units

TOPICS

5 Credits/Units

PROJECTS

5 Credits/Units

BUSINESS TECHNOLOGY (BTEC)

KEYBOARDING

BTEC 100

3 Credits/Units

11 hours of lecture / 44 hours of lab

Introduction to the keyboard, development of speed and accuracy, and basic keyboarding applications, including business letters, memos, tables, and reports. Keyboarding courses (BTEC 101, 102, and 190) are taught as individualized instruction through self-paced study. Students register for BTEC 100. At the end of the term, registration will automatically be changed to the appropriate course(s). A student earns from 1 to 3 credits in a course depending on the number of lessons and tests successfully completed. [GE] [PNP]

KEYBOARDING

&

WORD

PROCESSING

BTEC 101

3 Credits/Units

11 hours of lecture / 44 hours of lab

Introduction to the keyboard, development of speed and accuracy and basic word processing skills for formatting simple letters, memos, tables, and reports. [GE][PNP]

REFRESHER

BTEC 103

KEYBOARDING

3 Credits/Units

11 hours of lecture / 44 hours of lab

Review of keyboard and basic typing applications, development of speed and accuracy. Students must be able to type at least 30 words per minute by touch to register for this course. Business Technology majors who type at least 30 words per minute by touch must enroll in this course. Continuous enrollment, flexible time, individualized program. Satisfactory completion meets prerequisite for BTEC 120, Document Formatting. [GE]

BEGINNING

COMPUTER

FUNDAMENTALS

BTEC 105

3 Credits/Units

33 hours of lecture

Introduction to basic computer skills. Topics include computer components, terminology, and skills to manage files/folders, send and receive email, create documents using word processing, make simple spreadsheets, and locate information on the Internet. For students with little or no prior computer experience. [GE] [PNP]

APPLIED

OFFICE

ENGLISH

BTEC 106

3 Credits/Units

33 hours of lecture

Prerequisite: Eligibility for ENGL 098.

Fundamental skills in the use of reference materials, spelling, business vocabulary, editing, word usage, grammar, sentence structure, and punctuation and practice in basic writing skills for business letters, memorandums, and emails. Students who have already completed BTEC 087 or BTEC 107 should not take this course. [CA,GE]

BUSINESS

BTEC 107

ENGLISH

5 Credits/Units

55 hours of lecture

Prerequisite: Eligibility for ENGL 098.

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,SE]

INTRODUCTION

TO

OUTLOOK

BTEC 114

1 Credit/Unit

11 hours of lecture

This course is designed to give students an overview of Outlook.

Students will be introduced to email etiquette, calendaring functions, and create and organize contacts, and compose and deal with email messages. [GE] [PNP]

APPLICATION

ESSENTIALS:

WORD

BTEC 116

1 Credit/Unit

11 hours of lecture

Fundamentals of common business applications using MS Windows and MS Word, and using Windows to manage files/folders and giving students hands-on experience in word processing. Basic Word features, basic word processing skills and MLA document formatting will be covered. [GE] [PNP]

APPLICATION

ESSENTIALS:

EXCEL

BTEC 117

1 Credit/Unit

11 hours of lecture

Fundamentals of common business applications using MS Windows and MS Excel, and using Windows to manage files/folders and giving students hands-on experience in spreadsheets. Basic Excel features, basic spreadsheet skills and common formulas and functions will be covered. [GE] [PNP]

APPLICATION

ESSENTIALS:

POWERPOINT

BTEC 118

1 Credit/Unit

11 hours of lecture

Fundamentals of common business applications using MS Windows and MS PowerPoint to manage files/folders and giving students hands-on experience in presentation software. Basic PowerPoint features including basic designs and animation will be covered. Successful completion of BTEC 116, 117, 118 can replace BTEC 149. [GE] [PNP]

INTRODUCTION

TO

WORD

BTEC 120

3 Credits/Units

33 hours of lecture

Create, format, edit, save and print documents using fonts, numbered and bulleted text tables, tabs, columns, thesaurus, grammar-check. Create reports and longer documents using columns, page numbers, footnotes, endnotes, headers and footers. Assemble form letters using mailing lists, envelopes, mailing labels, and standard paragraphs. Use styles to create flyers and newsletters with graphics. BTEC 100 or keyboarding speed of 30 wpm recommended. Application software for this course will be Microsoft Word. Cannot receive credit for both BTEC 120 and 125. [GE]

WORD

FOR

BUSINESS

BTEC 122

5 Credits/Units

55 hours of lecture

Producing letters, memos, and tables using fonts, tabs, tables, numbered and bulleted text, thesaurus, and grammar-check. Reports and longer documents will be created using columns, page numbers, footnotes, endnotes, headers, and footers. Form letters using mailing lists, envelopes, mailing labels, and standard paragraphs will be assembled. Styles, flyers and newsletters with graphics are included. [GE] [PNP]

FILING

AND

RECORDS

MANAGEMENT

BTEC 131

3 Credits/Units

33 hours of lecture

Principles and procedures of records storage and control including record cycle, microrecords, and electronic files. Selection of equipment and supplies. Practice in using indexing rules, coding, and filing for alphabetic, numeric, geographic, and subject filing systems. [GE] [PNP]

10-KEY		CALCULATOR	COMPUTER	BUSINESS	APPLICATIONS
BTEC 135		1 Credit/Unit	BTEC 150		5 Credits/Units
5 hours of lecture / 10 hours of lab			55 hours of lecture		
Ten-key by touch using a business-size electronic calculator. Training on operational features of modern business calculators incorporating business applications. [GE] [PNP]			Introduction to creating business projects with MS Windows and MS Office that emphasize critical thinking and problem-solving skills. Assignments include managing files/folders, creating and formatting Word documents, Excel workbooks, PowerPoint presentations, and Access databases, as well as integrated Office applications; researching and writing an MLA report and, in teams, creating and giving a presentation based on research. [GE] [PNP]		
BUSINESS	TECHNOLOGY	SEMINAR	INTRODUCTION	TO	PUBLISHING
BTEC 140		2 Credits/Units	BTEC 155	OFFICE	TOOLS
22 hours of lecture			33 hours of lecture		3 Credits/Units
Concurrent enrollment in BTEC 199.			Introduction to Microsoft Publisher. Focus on creating, saving, printing, and/or publishing flyers, newsletters, Web sites, and various business publications and forms; also applying graphics and publishing standards. [GE] [PNP]		
Prerequisite: Written consent of Instructional Unit required.			POWERPOINT		PRESENTATION
Problems, methods, procedures, and human relations related to on-the-job work experience in business. [GE] [PNP]			BTEC 165		3 Credits/Units
BUSINESS	TECHNOLOGY	SEMINAR	33 hours of lecture		
BTEC 141		2 Credits/Units	Create and deliver electronic business presentations using Microsoft PowerPoint incorporating ethics in infographics. Develop presentation skills using text, graphics, charts, clip art, scanned objects, and embedding or linking media for print, sales presentations, and interoffice electronic communications. Previous experience with Windows environment using Word or Excel is recommended. [GE] [PNP]		
22 hours of lecture			INTRODUCTION	TO	EXCEL
Concurrent enrollment in BTEC 199.			BTEC 169		3 Credits/Units
Prerequisite: Written consent of Instructional Unit required.			33 hours of lecture		
Problems, methods, procedures, and human relations related to on-the-job work experience in business. [GE] [PNP]			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 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]		
BUSINESS	TECHNOLOGY	SEMINAR	EXCEL	FOR	BUSINESS
BTEC 143		2 Credits/Units	BTEC 170		3 Credits/Units
22 hours of lecture			33 hours of lecture		
Concurrent enrollment in BTEC 199 required.			Prerequisite: BTEC 169 and BUS 102 or equivalent score on COMPASS placement or consent of Instructional Unit.		
Prerequisite: Consent of Instructional Unit.			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 VBA, macros, and making an application in Excel. [GE] [PNP]		
Problems, methods, procedures, and human relations related to on-the-job work experience in business. [GE] [PNP]			ACCESS	FOR	FUNDAMENTALS
BUSINESS	TECHNOLOGY	SEMINAR	BTEC 180		2 Credits/Units
BTEC 145		2 Credits/Units	22 hours of lecture		
22 hours of lecture			Introduction to Microsoft Access skills for office workers. Topics include creation and structure of tables, queries, simple forms, and reports. Introduction of special fields such as OLE, drop-down menus and using calculations in tables, forms, and queries. The course does assume knowledge of Microsoft Windows. [GE]		
Concurrent enrollment in BTEC 199 required.					
Prerequisite: Consent of Instructional Unit.					
Problems, methods, procedures, and human relations related to on-the-job work experience in business. [GE] [PNP]					
PROFESSIONAL		SELF-DEVELOPMENT			
BTEC 147		2 Credits/Units			
22 hours of lecture					
Professional concepts applied to individuals in the business world in relation to themselves, the companies they represent, and the public they serve. Focus on improving resume, cover letter, interview, career portfolio and business communication and business etiquette skills. [GE]					
BUSINESS	PROFESSIONAL	SELF	DEVELOPMENT		
BTEC 148			3 Credits/Units		
33 hours of lecture					
This course is designed to give students an overview of the job search process and will also explore the importance of developing and using soft skills in a business setting. Students will learn professional business concepts and communication skills improving themselves, the companies they represent and the public they serve. For employees or prospective employees who wish to improve their professional relations and growth potential. [HR] [PNP]					
COMPUTER	APPLICATIONS	ESSENTIALS			
BTEC 149		3 Credits/Units			
33 hours of lecture					
Fundamentals of common business applications using MS Windows and MS Office. An overview using Windows to manage files/folders and giving students hands-on experience in word processing, spreadsheet, presentation, and database software. [GE]					

E-COMMERCE:	INTRO	TO	BUSINESS	ON	THE	WEB	SELECTED	TOPICS
BTEC 195							BTEC 280	3 Credits/Units
33 hours of lecture							33 hours of lecture	
Introduction to e-commerce including the evolution of electronic commerce, business-to-business and business-to-customer e-commerce, creating a Web presence, commerce infrastructure and software choices, security and encryption issues, and electronic payment systems. Requires a group project to write a business plan for an online entity. Prior computer class (BTEC 149 or 150), BUS 101, and familiarity with a Web browser recommended. Cannot receive credit for BTEC 195 and 212. [GE]							The course focuses on selected topics in Business Technology. Topics vary, and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit for different topics. Individual topics are listed in the term class schedules. [GE]	
COOPERATIVE			WORK			EXPERIENCE	SPECIAL	PROJECTS
BTEC 199							BTEC 290	5 Credits/Units
99 hours of clinical							55 hours of lecture	
Supervised on-the-job work experience in an approved job in the local community with specific learning objectives and employer evaluation. See Cooperative Education Work Experience description in College Life and Services section of the catalog for more information. Consent of Instructional Unit and concurrent enrollment in accompanying seminar course required. 9 credits maximum. [GE]							Prerequisite: Consent of Instructional Unit.	
							Opportunity to plan, organize and complete special projects approved by the faculty of the department. [GE]	
SPEED	AND	ACCURACY		BUILDING		I		
BTEC 200							1 Credit/Unit	
22 hours of lab								
Prerequisite: A grade of 'C' or better in BTEC 101 or equivalent.								
Emphasis on using correct keyboarding techniques and prescriptive drills to improve speed, accuracy, and endurance to prepare students for success in advanced keyboarding classes. [GE]								
DOCUMENT						FORMATTING		
BTEC 201							3 Credits/Units	
11 hours of lecture / 44 hours of lab								
Prerequisite: BTEC 101 (or 103) and BTEC 120 (or 122).								
Business letters, tables, electronic forms, use of templates, and report keyboarding on a production basis. Further development of speed and accuracy. Continuous enrollment, flexible times, individual program. Cannot receive credit for both BTEC 201 and 102. [GE]								
SPEED	AND	ACCURACY		BUILDING		II		
BTEC 203							2 Credits/Units	
11 hours of lecture / 22 hours of lab								
Prerequisite: BTEC 201 or 102 or consent of Instructional Unit.								
Emphasis will be placed on correct techniques and appropriate drills to improve speed and accuracy. Cannot receive credit for both BTEC 203 and 010. [GE]								
INTRODUCTION		TO				SHAREPOINT		
BTEC 207							3 Credits/Units	
33 hours of lecture								
Prerequisite: Completion of BTEC 149 or 150 or BTEC 120 or 122, BTEC 169, and CTEC 102 or consent of Instructional Unit.								
This course is designed to give students an overview of the content management system SharePoint and its application for use in a business environment. [CP] [PNP]								
ADMINISTRATIVE						PROCEDURES		
BTEC 211							5 Credits/Units	
55 hours of lecture								
Overview of current office procedures to equip students with the tools to solve a variety of problems in the changing business world using Microsoft applications. Complete simulated exercises requiring critical thinking, understanding of multicultural relations, and advanced office practices in preparation to work successfully in various office situations. [GE] [PNP]								

BUSINESS TECHNOLOGY MEDICAL OFFICE (BMED)

MATH FOR HEALTH CARE PROFESSIONALS BMED 103

33 hours of lecture

Prerequisite: Eligibility for MATH 030 or MATH 092.

Mathematical concepts related to both administrative and dosage calculations for the physician's office, clinic, or emergi-center. [CP]

STATISTICS FOR HEALTH CARE PROFESSIONALS BMED 105

22 hours of lecture

Prerequisite: A grade of 'C' or better in BMED 103 or BUS 102.

Introduction to statistical computations and analysis used in healthcare. Topics include patient census, occupancy, length of stay, mortality and morbidity statistics. [CP]

MEDICAL TERMINOLOGY I BMED 110

33 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 related to human anatomy, pathology, diagnostic tests, clinical procedures, and abbreviations associated with each body system. Medical Terminology I covers the following body systems: digestive, urinary, reproductive, nervous, and cardiovascular. Course work will include spelling and pronunciation of terms. [GE] [PNP]

MEDICAL TERMINOLOGY II BMED 111

33 hours of lecture

Prerequisite: BTEC 110 or BMED 110.

Continuation of Medical Terminology I, BTEC 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: respiratory, blood, lymphatic, immune, musculoskeletal, integumentary, sense organs (eyes and ears), endocrine, as well as psychiatry. Course work will include spelling and pronunciation of terms. [GE] [PNP]

INTRODUCTION TO PATHOPHYSIOLOGY BMED 112

55 hours of lecture

Prerequisite: A grade of 'C' or better in BMED 111 and BIOL 164/165 or HEOC 100.

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] [PNP]

MEDICAL OFFICE ADMINISTRATIVE PROCEDURES I BMED 116

22 hours of lecture / 22 hours of lab

Prerequisite: Completion of, or concurrent enrollment in, BMED 110 and completion of BTEC 149 or 150, or instructor permission.

Introduction to administrative positions in the medical field. Students gain introductory administrative competencies compliant with CAAHEP and other related professional organizations. The lab portion of the class prepares the student in medical office competencies and relevant software. Strong teamwork and time management skills are necessary to be successful in this rigorous course. Cannot receive credit for both BMED 115 and 116/117. [GE]

MEDICAL OFFICE ADMINISTRATIVE PROCEDURES II BMED 117

22 hours of lecture / 22 hours of lab

Prerequisite: Completion of BMED 116 or instructor permission.

Students will complete the competencies and coursework needed to successfully perform administrative and management duties in an outpatient medical clinic. This course continues where BMED 116 leaves off, offering the continuing student more 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. Cannot receive credit for both BMED 115 and 116/117. [GE]

MEDICAL REIMBURSEMENT BMED 129

55 hours of lecture

Concurrent enrollment in BMED 111.

Prerequisite: A grade of 'C' or better in BMED 110.

Overview of inpatient, outpatient health, insurance plans, revenue cycles, health insurance claims, health insurance terminology, reimbursement methodologies for professional services, completion of CMS/1500 and UB-04 billing forms. Topics include compliance issues, fraud and abuse/ HIPAA issues, processing various perspective payment systems. [GE] [PNP]

MEDICAL CODING - CPT/HCPCS BMED 130

44 hours of lecture

Prerequisite: A grade of 'C' or better in BMED 111.

Introduction to procedural coding in ambulatory settings using the CPT Code Set and HCPCS (Health Care Financing Common Procedure Coding System). Student is introduced to the symbols, terminology and methods of procedural coding used by physicians and third parties and is guided step-by-step through various procedural coding scenarios by means of workbook exercises and actual case studies. The format and guidelines of the CPT and HCPCS code sets are reviewed to include E/M codes and modifiers. Reviews medical/surgical terminology, surgical/anatomical procedures, anesthesia, pharmaceuticals, and durable medical goods. Looks at CPT's position as it relates to ICD-9 and ICD-10 in today's coding world. [GE]

MEDICAL OFFICE LABORATORY PROCEDURES
BMED 165 4 Credits/Units

22 hours of lecture / 44 hours of lab

Concurrent enrollment in BMED 137 and 164 required or consent of Instructional Unit.

Prerequisite: A grade of 'C' or better in BMED 163 or consent of Instructional Unit.

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. Quality control measures. Lab safety emphasized. Cannot receive credit for both HEOC 160 and BMED 165. [GE]

MEDICAL ASSISTANT PRACTICUM
BMED 166 6 Credits/Units

11 hours of lecture / 165 hours of clinical

Concurrent enrollment in BMED 139 required.

Prerequisite: A grade of 'C' or better in BMED 164, 165 and consent of Instructional Unit.

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]

HEALTH INFORMATION PROCEDURES
BMED 222 5 Credits/Units

44 hours of lecture / 22 hours of lab

Prerequisite: A grade of 'C' or better in BMED 103 and 105.

Introduction to health information procedures, principles and practice standards associated with medical record department and health unit coordinator responsibilities. Topics include: licensing, regulation, and accreditation of health care facilities, hospital organization, patient registration, health care statistics, medical record content, medical record assembly, analysis and coding. CPT coding (ICD-9-CM and ICD-10-CM) will be introduced as well as a review of other medical classifications of nomenclatures classification and nomenclatures. Completion of, or concurrent enrollment in BIOL 164/165 or HEOC 100, or consent of Instructional Unit. [GE] [PNP]

MEDICAL OFFICE PRACTICUM
BMED 225 2 Credits/Units

11 hours of lecture / 33 hours of clinical

Prerequisite: Consent of Instructional Unit.

Supervised learning in a clinic, medical center, or other health care facility, practicing medical office administrative responsibilities. [GE, HR]

MEDICAL OFFICE PRACTICUM
BMED 226 3 Credits/Units

11 hours of lecture / 66 hours of clinical

Prerequisite: Consent of Instructional Unit.

Supervised learning in a clinic, medical center, or other health care facility, practicing medical office administrative responsibilities. [GE, HR]

HEALTH DATA CONTENT AND STRUCTURE
BMED 227 3 Credits/Units

22 hours of lecture / 22 hours of lab

Prerequisite: Completion of with a grade of 'C' or concurrent enrollment in BMED 222.

Analysis and utilization of health record content with emphasis on physician's orders, clinical lab tests, diagnostic and treatment modalities and pharmacology and an overview of applicable consent and confidentiality principles. Students will participate in hands-on lab application of healthcare procedures via the AHIMA web-based Virtual lab. [CP]

MEDICAL DOCUMENT MANAGEMENT AND TECHNOLOGY
BMED 228 3 Credits/Units

33 hours of lecture

Prerequisite: A grade of 'C' or better in BMED 222, or consent of Instructional Unit.

Fundamental principles in identifying and applying inpatient and outpatient records and reports. Strong skills in English, spelling and grammar, medical terminology, attention to detail, proofreading, and quality assurance are recommended. Completion of with a grade of 'C' or concurrent enrollment in BMED 222.

HIIM DIRECTED PRACTICE
BMED 229 1 Credit/Unit

33 hours of clinical

Prerequisite: Successful completion of the following: BMED 116, 222 and 228 or Consent of the Instructional Unit.

Supervised learning in a clinic, medical center, campus, or other health care facility to practice medical office administrative and HIIM responsibilities. Topics include extrapolating, correcting, analyzing for completeness, abstracting reports for release of information (ROI), coding, billing and communication competencies using actual electronic medical records and medical charts. Provides students the application of classroom and laboratory objectives in a supervised affiliation site. Performed under leadership of a registered health information administrator or registered health information technician.

INTRODUCTION TO PATIENT NAVIGATION & ADVOCACY
BMED 233 5 Credits/Units

55 hours of lecture

Introduction to the knowledge, skills, and attitudes necessary to apply care navigation for the benefit of the client. The content focuses on the healthcare systems, client profiles and needs, communication basics, an introduction to chronic illness, and health coaching.

INTERMEDIATE PATIENT NAVIGATION & ADVOCACY
BMED 234 5 Credits/Units

55 hours of lecture

Prerequisite: Successful completion with a 'C' or better in BMED 233 or consent of the Instructional Unit.

Builds on the foundations developed in Introduction of Patient Navigation Advocacy. Additional topics covered are care coordination and navigation, client characteristics, an overview of behavioral health, strategies to influence outcomes, and advanced communications.

ADVANCED PATIENT NAVIGATION & ADVOCACY
BMED 235 5 Credits/Units

55 hours of lecture

Prerequisite: Successful completion with a 'C' or better in BMED 234 or consent of the Instructional Unit.

Builds on the concepts covered in Intermediate Patient Navigation Advocacy. Additional topics covered are care transitions, preventive healthcare, continued discussion of chronic illness, end of life care, and challenges particular to care navigation.

PATIENT BMED 236	ADVOCACY	IV:	ADVANCED	ADVOCACY	SKILLS 4 Credits/Units	SELECTED BMED 280	TOPICS 3 Credits/Units
44 hours of lecture						33 hours of lecture	
Prerequisite: Successful completion with a 'C' or better in BMED 110 and BMED 234 or consent of the Instructional Unit.						The course focuses on selected topics in Business Technology. Topics vary, and course theme and content change to reflect new topics.	
Advanced concepts in healthcare systems advocacy and navigation. Exploration and application of the critical process of linking healthcare systems with patients, the advocate role on the medical team and scope of practice, available resources and the culture of the patient and the community. Further emphasis on managing the patient as a whole person and partner in their care, including implications of family involvement. Examines the emotional, social, psychological and physical impact of chronic disease. Behavioral health issues, end of life issues, palliative care and hospice needs will be explored in the context of advocate role, scope of practice and safety, ethics, decision support and family. Evidence-based strategies that support healthy behaviors will be introduced and practiced. Practice in motivational interviewing techniques, teach back and activation conversations will focus on strategies to engage both patients and families.						Because the course varies in content, it is repeatable for credit for different topics. Individual topics are listed in the term class schedules.	
						[GE]	
						SPECIAL	PROJECTS
						BMED 290	5 Credits/Units
						55 hours of lecture	
						Prerequisite: Consent of Instructional Unit.	
						Opportunity to plan, organize and complete special projects approved by the faculty of the department. [GE]	
						CAPSTONE	
						BMED 299	2 Credits/Units
						11 hours of lecture / 22 hours of lab	
						Capstone project to expand knowledge by studying selected BMED topics. Normally taken during the final term of the program. Application of many topics covered in the other program courses in a simulated employee team or small group setting. Projects must be pre-approved by the instructor.	
AGING	AND	THE	AGING	POPULATION	2 Credits/Units		
BMED 237							
22 hours of lecture							
Covers topics surrounding the specific needs, conditions and support for the aging population to include strategies leading toward positive patient experience and outcomes. This coursework is highly recommended for all students who might work with or care for an elderly person. [GE]							
BEHAVIORAL	HEALTH	AND	CARE	COORDINATION	2 Credits/Units		
BMED 238							
22 hours of lecture							
Topics covered in this course address the specific needs, conditions and support for patients with mental or behavioral health issues. In addition to an overview of mental/behavioral health this course will deal specifically with Mental Health First Aid, how to deal with anxiety, depression, suicide and other common mental/behavioral health issues including strategies leading toward positive patient experience and outcomes. [GE]							
INTERMEDIATE	ANATOMY	AND	PHYSIOLOGY		3 Credits/Units		
BMED 242							
22 hours of lecture / 22 hours of lab							
Prerequisite: Successful completion with a 'C' or better of BMED 112 and BMED 132.							
Expanded exploration of human anatomy and physiology with an emphasis on medical record extrapolation, analysis of medical procedures, continuation of pathophysiology as applied to medical coding and health information management. The student will apply prerequisite coursework to common procedures, treatments and standard of care with consideration and exploration of current laws, such as the Affordable Care Act and Meaningful Use and their impact on patient care, billing and health information management.							
MEDICAL	OFFICE	CAPSTONE		PRACTICUM	3 Credits/Units		
BMED 250							
22 hours of lecture / 33 hours of clinical							
Prerequisite: A grade of 'C' or better in BMED 222 or consent of Instructional Unit.							
Supervised learning in a simulated health care environment where students will be extrapolating, correcting, analyzing for completeness; abstracting reports for release of information (ROI); coding and billing using actual electronic medical records and charts. In addition, students will develop in-depth knowledge of career opportunities and medical administrative team environments. [GE]							

CHEMISTRY (CHEM)

SKILLS FOR PRE-HEALTH CHEMISTRY
CHEM 095 3 Credits/Units

33 hours of lecture

Prerequisite: Eligibility for MATH 093, 095 or equivalent or consent of Instructional Unit.

For students who have little to no previous chemistry experience, preparation for the fast-paced and intensive experience of CHEM 121, required for health occupation fields. Topics include measurements, density, nomenclature, properties of elements and compounds, understanding the periodic table, writing and balancing chemical equations, the mole, and the application of mathematical operations used in chemical problem solving. Students cannot receive credit for both CHEM 050 and CHEM 095.

SMALL WORLD ANTIBIOTICS RESEARCH 2A
CHEM 106 5 Credits/Units

33 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in BIOL 105 or consent of Instructional Unit.

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.

CHEMICAL CONCEPTS W/LAB
CHEM&110 5 Credits/Units

44 hours of lecture / 22 hours of lab

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. [NS, SE]

INTRO TO CHEMISTRY: PRE-HEALTH
CHEM&121 5 Credits/Units

44 hours of lecture / 22 hours of lab

Prerequisite: Eligibility for MATH 146.

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. Formerly CHEM 111. [NS, SE]

INTRO TO ORGANIC/BIOCHEM
CHEM&131 5 Credits/Units

44 hours of lecture / 22 hours of lab

Prerequisite: Grade of 'C' or better in CHEM 121.

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. Formerly CHEM 112. [NS,SE]

GENERAL CHEMISTRY PREPARATION
CHEM&139 4 Credits/Units

44 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 093, 095 or 096 or equivalent or consent of Instructional Unit.

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. Formerly CHEM 100. [SE]

GENERAL CHEMISTRY I
CHEM&141 4 Credits/Units

44 hours of lecture

Concurrent enrollment in CHEM& 151, or consent of Instructional Unit.

Prerequisite: Eligibility for College Algebra and a grade of 'C' or better in CHEM 139 or equivalent or recommending score on Clark's general chemistry placement test.

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. [NS, SE]

GENERAL CHEMISTRY II
CHEM&142 4 Credits/Units

44 hours of lecture

Concurrent enrollment in CHEM& 152, or consent of Instructional Unit.

Prerequisite: A grade of 'C' or better in CHEM 141 and CHEM 151.

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. [NS, SE]

GENERAL CHEMISTRY III
CHEM&143 4 Credits/Units

44 hours of lecture

Concurrent enrollment in CHEM& 153 is recommended.

Prerequisite: A grade of 'C' or better in CHEM 142 and CHEM 152.

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. [NS, SE]

GENERAL	CHEMISTRY	LABORATORY	I	ORGANIC	CHEMISTRY	II
CHEM&151			1 Credit/Unit	CHEM&242		4 Credits/Units
22 hours of lab				44 hours of lecture		
First of a 3-term lab sequence designed for science and engineering majors, to coincide with CHEM 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 141, or consent of Instructional Unit. [NS, SE]				Concurrent enrollment in CHEM& 252 is required, or consent of Instructional Unit.		
Prerequisite: A grade of 'C' or better in CHEM 241 and CHEM 251, or consent of Instructional Unit.				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. [NS, SE]		
GENERAL	CHEMISTRY	LABORATORY	II	ORGANIC	CHEMISTRY	III
CHEM&152			1 Credit/Unit	CHEM&243		4 Credits/Units
22 hours of lab				44 hours of lecture		
Concurrent enrollment in CHEM& 142, or consent of Instructional Unit.				Prerequisite: A grade of 'C' or better in CHEM 242 and CHEM 252, or consent of Instructional Unit.		
Prerequisite: A grade of 'C' or better in CHEM 141 and CHEM 151, or consent of Instructional Unit.				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. [NS, SE]		
Second of a 3-term lab sequence designed for science and engineering majors, to coincide with CHEM 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. [NS, SE]				ORGANIC	CHEMISTRY	LABORATORY
GENERAL	CHEMISTRY	LABORATORY	III	CHEM&251		1 Credit/Unit
CHEM&153			2 Credits/Units	44 hours of lab		
11 hours of lecture / 22 hours of lab				Concurrent enrollment in CHEM& 241, or consent of Instructional Unit.		
Prerequisite: A grade of 'C' or better in CHEM 142 and CHEM 152, or consent of Instructional Unit.				Prerequisite: A grade of 'C' or better in CHEM 143 and CHEM 153, or consent of Instructional Unit.		
Third of a 3-term lab sequence to coincide with CHEM 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 electrochemistry, gravimetric analysis, coordination chemistry, volumetric analysis, inorganic synthesis, and the statistical handling of data. Completion of or concurrent enrollment in CHEM 143 with a grade of 'C' or better. [NS, SE]				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. [NS, SE]		
COOPERATIVE	WORK	EXPERIENCE		ORGANIC	CHEMISTRY	LABORATORY
CHEM 199			5 Credits/Units	CHEM&252		1 Credit/Unit
165 hours of clinical				44 hours of lab		
Prerequisite: Consent of Instructional Unit.				Concurrent enrollment in CHEM& 242, or consent of Instructional Unit.		
Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]				Prerequisite: A grade of 'C' or better in CHEM 241 and CHEM 251, or consent of Instructional Unit.		
ORGANIC	CHEMISTRY		I	ORGANIC	CHEMISTRY	LABORATORY
CHEM&241			4 Credits/Units	CHEM&253		2 Credits/Units
44 hours of lecture				11 hours of lecture / 44 hours of lab		
Concurrent enrollment in CHEM& 251 is required, or consent of Instructional Unit.				Prerequisite: A grade of 'C' or better in CHEM 242 and CHEM 252, or consent of Instructional Unit.		
Prerequisite: A grade of 'C' or better in CHEM 143 and CHEM 153, consent of Instructional Unit.				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 (beginning in Spring 2009). [NS, SE]		
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. [NS, SE]						

SPECIAL

CHEM 290

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

PROJECTS

6 Credits/Units

COLLEGE AND ACADEMIC PREPARATION (CAP)

EDUCATIONAL

CAP 001

11 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

CAP 003

11 hours of lecture

Prerequisite: Current CASAS test scores in all skills.

For students who need to improve their technology skills, especially navigating Canvas. Students will improve these skills while learning about the career pathways leading from Transitional Studies to college completion. Successful completion of the course will provide .5 Occupational Educational credit toward the HS21+ diploma. CASAS test score 211 in reading. [PNP]

JUMPSTART:

CAP 005

66 hours of lecture

Prerequisite: Current CASAS test scores in Math and Reading.

Development of standards-based reading and writing skills in the contexts of science and social studies to successfully transition into appropriate High School 21 courses. Minimum score of 211-255 on CASAS Reading test.

JUMPSTART:

CAP 006

66 hours of lecture

Prerequisite: Current CASAS test scores in Math and Reading.

Application of basic math skills in real world contexts. Topics may include: integers, basic operations, percents, fractions, decimals, ratios/proportions, mean, median, mode, range, basic probability/statistics, exponents, roots, radicals, order of operation, expressions, equations/inequalities, graphing linear equations, and basic geometry. Upon successful completion of this course, students may transition to HS 21+ courses, apprenticeships, earn the GED credential, or transition to additional workforce opportunities. Score of 211-255 on CASAS Math test.

INTENSIVE

CAP 011

22 hours of lecture

Prerequisite: Current CASAS test scores in all skills.

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 or I-BEST. HS21+ students will also receive Occupational Education credit toward their HS21+ diploma. CASAS test score between 211 and 220 in reading. ESL students must score at least 211 in listening. Or successful completion of Intensive Explorations (ESL 045, ESL 057, ESL 049) or Explorations (ESL 046, ESL 048).

INTERVIEWING

1 Credit/Unit

PATHWAYS

1 Credit/Unit

INTENSIVE FAST TRACK 1: WRITTEN COMMUNICATION

CAP 012

66 hours of lecture

Prerequisite: Current CASAS test scores in all skills.

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 or I-BEST. HS21+ students will also receive Occupational Education credit toward their HS21+ diploma. CASAS test score between 211 and 220 in reading. ESL students must score at least 211 in listening. Or successful completion of Intensive Explorations (ESL 045, ESL 057, ESL 049) or Explorations (ESL 046, ESL 048).

INTENSIVE FAST TRACK 1: ORAL COMMUNICATION

CAP 013

33 hours of lecture

Prerequisite: Current CASAS test scores in all skills.

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 or I-BEST. HS21+ students will also receive Occupational Education credit toward their HS21+ diploma. CASAS test score between 211 and 220 in reading. ESL students must score at least 211 in listening OR successful completion of Intensive Explorations (ESL 045, ESL 057, ESL 049) or Explorations (ESL 046, ESL 048).

INTENSIVE

CAP 014

33 hours of lecture

Prerequisite: Current CASAS test scores in all skills.

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 or I-BEST. HS21+ students will also receive Occupational Education credit toward their HS21+ diploma. CASAS test score between 211 and 220 in reading. ESL students must score at least 211 in listening OR successful completion of Intensive Explorations (ESL 045, ESL 047, ESL 049) or Explorations (ESL 046, ESL 048).

INTENSIVE

CAP 015

22 hours of lecture

Prerequisite: Current CASAS test scores in all skills.

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 or I-BEST. HS21+ students will also receive Occupational Education credit toward their HS21+ diploma. CASAS test score between 211 and 220 in reading. ESL students must score at least 211 in listening OR successful completion of Intensive Explorations (ESL 045, ESL 047, ESL 049) or Explorations (ESL 046, ESL 048).

FAST

TRACK

1:

PORTFOLIO

2 Credits/Units

FAST

TRACK

1:

STUDY

SKILLS

2 Credits/Units

FAST TRACK 1: ORAL COMMUNICATION/TECHNOLOGY
CAP 016 6 Credits/Units

66 hours of lecture

Prerequisite: Current CASAS test scores in all skills.

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 or I-BEST. HS21+ students will also receive Occupational Education credit toward their HS21+ diploma. CASAS test score between 211 and 220 in reading. ESL students must score at least 211 in listening. OR successful completion of Intensive Explorations (ESL 045, ESL 047, ESL 049) or Explorations (ESL 046, ESL 048).

FAST TRACK 1: WRITTEN COMMUNICATION/TECHNOLOGY
CAP 018 6 Credits/Units

66 hours of lecture

Prerequisite: Current CASAS test scores in all skills.

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 or I-BEST. HS21+ students will also receive Occupational Education credit toward their HS21+ diploma. CASAS test score between 211 and 220 in reading. ESL students must score at least 211 in listening. OR successful completion of Intensive Explorations (ESL 045, ESL 047, ESL 049) or Explorations (ESL 046, ESL 048).

FAST TRACK2: COMMUNICATION FOR COLLEGE TRANSITION
CAP 021 7 Credits/Units

77 hours of lecture

Prerequisite: Current CASAS test scores in all skills.

Development of both oral and written communication skills both face-to-face and on-line, focusing on college readiness. Upon successful completion of Fast Track 2: Communication for College Transition, students will have gained the skills to transition into Integrated English CAP coursework or I-BEST. HS21+ students will also receive elective credit toward their HS21+ diploma. CASAS test score 221 or higher in reading. OR successful completion of Intensive Fast Track 1 (CAP 011, CAP 012, CAP 013, CAP 014, CAP 015) or Fast Track 1 (CAP 016, CAP 018).

ON-RAMP TO HEALTHCARE
CAP 023 6 Credits/Units

66 hours of lecture

Prerequisite: Current CASAS test scores in all skills.

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. HS21+ students will also receive credit toward their HS21+ diploma. CASAS test score 211 in reading. [PNP]

ON-RAMP TO BUSINESS
CAP 024 6 Credits/Units

66 hours of lecture

Prerequisite: Current CASAS test scores in all skills.

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. HS21+ students will also receive 1 credit toward their HS21+ diploma. CASAS test score 211 in reading. [PNP]

LAB SCIENCE
CAP 029 3 Credits/Units

33 hours of lecture

Prerequisite: Eligibility for CAP 042.

Introduces concepts from biology, chemistry and physics. Explore the scientific method through designing, implementing, and sharing a project using scientific inquiry as well as complete several labs throughout the quarter. Successful completion of CAP 029 will provide 1 credit for a Lab Science toward the HS21+ diploma. [PNP]

FINE ARTS
CAP 030 3 Credits/Units

33 hours of lecture

Prerequisite: CASAS Reading score of 221-255.

For students who want to earn credit toward their HS21+ diploma, prepare for the GED test or improve their skills to transition to college-level courses. Students will gain a deeper understanding of the arts and how to evaluate the impressions gained by exposure to different forms of media. Successful completion of the course will provide 1 Fine Arts credit toward the HS21+ diploma. [PNP]

WASHINGTON STATE HISTORY
CAP 031 3 Credits/Units

33 hours of lecture

Prerequisite: CASAS scores of 221-255.

For students who want to prepare for the GED or the HS21+ diploma in order to enhance the students' lives in an adult secondary education ABE Washington State history course. 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. Successful completion of the course will award 1 credit for WA State History toward the HS21+ diploma.

WASHINGTON STATE HISTORY & FINE ARTS
CAP 032 7 Credits/Units

77 hours of lecture

Prerequisite: CASAS Reading score of 221 or above.

For students who want to earn credits toward their High School 21 diploma, prepare for the GED test or improve their skills to transition to college-level courses. Students will gain a deeper understanding of WA State History and how it relates to Fine Arts. Successful completion of the course will provide 1 credit for WA State History and 1 credit for Fine Arts toward the HS21+ diploma.

US HISTORY & GOVERNMENT
CAP 033 7 Credits/Units

77 hours of lecture

Prerequisite: CASAS Reading score of 221 or above.

For students who want to earn credits toward their High School 21 diploma, prepare for the GED test or improve their skills to transition to college-level courses. Students will gain a deeper understanding of US history and government. Successful completion of the course will provide 1 credit for US History and Government toward the HS21+ diploma.

SCIENCE & CONTEMPORARY WORLD PROBLEMS
CAP 034 7 Credits/Units

77 hours of lecture

Prerequisite: CASAS Reading score of 221 or above.

For students who want to earn credits toward their High School 21 diploma, prepare for the GED test or improve their skills to transition to college-level courses. Students will gain a deeper understanding of the sciences and how they relate to current world problems. Successful completion of the course will provide 1 credit for Science and 1 credit for Contemporary World Problems toward the HS21+ diploma.

INTEGRATED MATH AND OCCUPATIONS
CAP 040 8 Credits/Units

88 hours of lecture

Prerequisite: CASAS Math score up to 220.

For students needing to learn or review math fundamentals. Students will apply their math skills (e.g. whole numbers, fractions, decimals, integers, percents, basic geometry, standard American measurement, basic tables/graphs) in various occupational contexts. Successful completion of the course will provide 1 credit for Math and 1 credit for Occupational Education toward the HS21+ diploma.

INTEGRATED MATH AND SCIENCE
CAP 042 7 Credits/Units

77 hours of lecture

Prerequisite: CASAS Math score of 221-235 or successful completion of CAP 040 or instructor permission.

Students will apply their 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. Successful completion of both CAP 042 and CAP 043 will provide 1 credit for Math and 1 credit for Lab Science toward the HS21+ diploma. Successful completion of CAP 042 without CAP 043 will provide 1 credit for Math and 0.5 elective credit toward the HS21+ diploma.

INTEGRATED MATH AND SCIENCE CAPSTONE
CAP 043 2 Credits/Units

22 hours of lecture

Prerequisite: A grade of 'C' or better in CAP 042, concurrent enrollment in CAP 042 or eligibility to take CAP 046 or higher math.

Supplements the materials in CAP 042 and introduces concepts from biology, chemistry and physics. Students will explore the scientific method through designing, implementing, and presenting a project using scientific inquiry. Successful completion of both CAP 042 and CAP 043 will provide 1 credit for Math and 1 credit for Lab Science toward the HS21+ diploma. Completion of this course without CAP 042 provides a non-lab science credit.

MATH APPLICATIONS
CAP 046 10 Credits/Units

110 hours of lecture

Prerequisite: CASAS Math score of 236 or higher or successful completion of CAP 042.

For students preparing to transition to MATH 107. Students will apply their math skills in appropriate contexts. Topics include complex expressions, equations, inequalities, compound inequalities, graphs and equations using point-slope and slope-intercept form, systems of equations using algebraic and graphing methods, exponential, radical and polynomial expressions and equations, quadratic, exponential and polynomial functions, quadratic equations, inverse and exponential functions, parabolic, exponential and logarithmic functions. Successful completion of the course will provide 1 credit for Math toward the HS21+ diploma.

TRANSITIONAL STUDIES MATH SUPPORT
CAP 049 3 Credits/Units

33 hours of lecture

Concurrent enrollment in CAP 040, CAP 042 or CAP 046.

Prerequisite: Current CASAS Math score.

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 061 7 Credits/Units

77 hours of lecture

Prerequisite: CASAS Reading score of 200-220.

For students who want to prepare for the GED or the HS21+ diploma. Integrates science, health and English writing skills to improve performance in an adult secondary education ABE Washington State Health and English course. Students will gain a deeper understanding of the human body's systems while improving reading and writing skills. Successful completion of the course will provide 1 credit for Health toward the HS21+ diploma.

INTEGRATED ENGLISH & WA STATE HISTORY/FINE ARTS
CAP 064 7 Credits/Units

77 hours of lecture

Prerequisite: CASAS Reading score of 221 or above or successful completion of CAP 061.

For students who want to earn credits toward their High School 21 diploma, prepare for the GED test or improve their skills to transition to college-level courses. Integrates WA State history and Fine Arts with critical reading and writing skills. Successful completion of the course will provide 1-3 credits for English, 1 credit for WA State History and 1 credit for Fine Arts toward the HS21+ diploma.

INTEGRATED ENGLISH AND US HISTORY & GOVERNMENT
CAP 070 7 Credits/Units

77 hours of lecture

Prerequisite: CASAS Reading score of 221 or above or successful completion of CAP 061.

For students who want to earn credits toward their High School 21 diploma, prepare for the GED test or improve their skills to transition to college-level courses. Integrates US history and government with critical reading and writing skills. Successful completion of the course will provide 1-3 credits for English, 1 credit for US History 5 credit for Civics toward the HS21+ diploma.

INTEGRATED ENGLISH & SCIENCE/CWP
CAP 074 7 Credits/Units

77 hours of lecture

Prerequisite: CASAS Reading score of 221 or above or successful completion of CAP 061.

For students who want to earn credits toward their High School 21 diploma, prepare for the GED test or improve their skills to transition to college-level courses. Integrates Science and CWP with critical reading and writing skills. Successful completion of the course will provide 1-3 credits for English, 1 credit for Science and 1 credit for Contemporary World Problems toward the HS21+ diploma.

INTEGRATED ENGLISH/CWP (PP&I)
CAP 077 7 Credits/Units

77 hours of lecture

Prerequisite: Successful completion of CAP 064, 070, 074 or instructor recommendation.

For students who want to prepare for the GED, HS21+ diploma and/or college coursework. Students will 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. Successful completion of this course will provide 1 credit for Contemporary World Problems and 1 elective credit toward the HS21+ diploma.

TRANSITIONAL

CAP 078

22 hours of lecture

Prerequisite: CASAS Reading score of <200-255.

For students who want to prepare for the HS21+ diploma. This course is required in the 1st or 2nd term of a student's HS21+ pathway and is structured around the SBCTC Transitions Standards checklist. Primary goal is to provide specific program requirements, goal setting and promote student success as they transition. Successful completion of the course will provide 0.5 credit for Electives toward the HS21+ diploma.

CAP

CAP 080

110 hours of lecture

Prerequisite: Appropriate placement by ABE, ESL, GED level completion, CASAS testing, or permission of department.

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.

INTEGRATED

CAP 090

77 hours of lecture

Prerequisite: Successful completion of CAP 064, 070, 074 or instructor recommendation.

For students who want to prepare for the GED, HS21+ diploma and/or college coursework. Students will 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. Successful completion of this course will provide 1 credit for Contemporary World Problems and 1 elective credit toward the HS21+ diploma. [PNP]

I-BEST

CAP 091

55 hours of lecture

Prerequisite: Admission into an I-BEST program.

Designed to provide additional instruction and support for student success in I-BEST designated classes. Reviews important concepts and vocabulary introduced during I-BEST classes and skills to communicate clearly and accurately using vocabulary and expressions commonly used in the I-BEST academic, work place and job search environment. Offers activities to strengthen basic skills while studying in an I-BEST program. Students must be concurrently enrolled in an I-BEST designated class. Concurrent with designated I-BEST courses.

HEALTH

CAP 093

22 hours of lecture

Prerequisite: CASAS Reading score of 221 or above.

For students who need to earn health credit for the HS21+ diploma. Students will gain a deeper understanding of a healthy lifestyle. Successful completion of the course will provide health credit toward the HS21+ diploma.

STUDIES**PREPARATION**

2 Credits/Units

OCCUPATIONAL

CAP 094

22 hours of lecture

Prerequisite: CASAS Reading score of 221 or above.

For students who need to earn occupational education credit for the HS21+ diploma. Students will gain a deeper understanding of preparing for a job and working successfully with co-workers. Successful completion of the course will provide occupational education credit toward the HS21+ diploma.

PHYSICAL

CAP 095

22 hours of lecture

Prerequisite: CASAS Reading score of 221 or above.

For students who need to earn physical education credit for the HS21+ diploma. Students will gain a deeper understanding of physical education by creating a personalized self-directed exercise plan. Successful completion of the course will provide physical education credit toward the HS21+ diploma.

ELECTIVES

CAP 096

22 hours of lecture

Prerequisite: CASAS Reading score of 221-255.

For students who need to earn elective credit for the HS21+ diploma. Students will work on independent projects in a variety of subject areas. Successful completion of the course will provide .5-2 elective credits toward the HS21+ diploma.

EDUCATION

2 Credits/Units

EDUCATION

2 Credits/Units

2 Credits/Units

(PP&I)

7 Credits/Units

SEMINAR

5 Credits/Units

2 Credits/Units

COLLEGE PREPARATION (COLL)

COLLEGE	ESSENTIALS:	INTRODUCTION	TO	CLARK
COLL 101			2 Credits/Units	

22 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)

INTRO TO MASS MEDIA

CMST&102

5 Credits/Units

55 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. [HA, SE]

COOPERATIVE

WORK

EXPERIENCE

CMST 199

5 Credits/Units

165 hours of conference

Prerequisite: Consent of Instructional Unit.

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in HDEV 195, 198 or 200 required. [GE]

INTERPERSONAL

COMMUNICATION

CMST&210

5 Credits/Units

55 hours of lecture

Person-to-person communication emphasizing theoretical principles and their application. How self-concept, perception, verbal and non-verbal attributes and attitudes influence communication within the family, between friends, and at work. [HR,OC,SE,HA]

INTERCULTURAL

COMMUNICATION

CMST 216

5 Credits/Units

55 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. [HA, SE]

PUBLIC

SPEAKING

CMST&220

5 Credits/Units

55 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. [OC,HA,SE]

SMALL

GROUP

COMMUNICATION

CMST&230

5 Credits/Units

55 hours of lecture

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. [HR,OC,SE,SS,HA]

SELECTED

CMST 280

55 hours of lecture

The course focuses on 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 for different topics. Individual topics are listed in the term class schedule.

[SE]

SPECIAL

CMST 290

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

ORGANIZATIONAL

CMST 310

55 hours of lecture

Prerequisite: A grade of 'C' or better in CMST 210, CMST 220 or CMST 230.

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. [C]

TOPICS

5 Credits/Units

PROJECTS

5 Credits/Units

COMMUNICATION

5 Credits/Units

COMPUTER AIDED DESIGN AND DRAFTING TECHNOLOGY (CADD)

CADD
CADD 101
22 hours of lab
Combination of off-campus field trips to a variety of businesses and on-campus test-drives of several core CADD software applications seen on the field trips. Focus on exposure and orientation to core CADD software applications, and development of an educational plan. [GE]

ORIENTATION
1 Credit/Unit

CADD
CADD 102
22 hours of lab
Prerequisite: A grade of 'C' or better in CADD 101.
Combination of off-campus field trips to a variety of businesses and on-campus test-drives of several core CADD software applications seen on the field trips. Focus on exposure and orientation to core CADD software applications beyond CADD 101 and development of a career plan. [GE]

CAREERS
1 Credit/Unit

BASIC
CADD 110
16 hours of lecture / 55 hours of lab
Basic operations of the current version of SketchUp. Topics include screen features, drawing and editing 3D objects, using and applying material to surfaces, opening and saving files, and using AutoCAD drawing file data. Recommended for anyone comfortable using a PC. [GE]

SKETCHUP
4 Credits/Units

BASIC
CADD 120
16 hours of lecture / 55 hours of lab
Basic operation of Rhinoceros, a 3D surface modeling software of interest to students in engineering, industrial design, and graphic design. Creating and editing of curves, surfaces, solids, and textures and lighting effects. Includes the use of plug-ins for rendering. Recommended for anyone comfortable using a PC. [GE]

RHINOCEROS
4 Credits/Units

BASIC
CADD 130
16 hours of lecture / 55 hours of lab
Basic operations of the current version of MicroStation. Covers screen features, command terminology, drawing and editing objects, working with 2D and 3D, using reference files, opening and saving drawing files, and printing. Recommended for anyone comfortable using a PC. [GE]

MICROSTATION
4 Credits/Units

BASIC
CADD 140
16 hours of lecture / 55 hours of lab
Basic operations of the current version of AutoCAD. Screen features, drawing and editing objects, working with 2D, using both model space and layouts, dimensioning and dimension styles, using blocks, attributes, and xrefs, opening and saving files, and using templates. Recommended for anyone comfortable using a PC. [GE]

AUTOCAD
4 Credits/Units

ARCHITECTURAL
CADD 141
16 hours of lecture / 55 hours of lab

DRAFTING
1
4 Credits/Units

Prerequisite: A grade of 'C' or better in ENGR 113, and either ENGR 140 or CADD 140.
Beginning foundations of architectural drafting using AutoCAD Architecture. Topics include terminology, architectural symbols and standards, line weights and layer management. A standard multi-sheet drawing set for a residence will be developed and will include a site plan, foundation plan, floor plan, and elevations, and related basic residential construction processes. [GE]

INTERMEDIATE
CADD 142
11 hours of lecture / 22 hours of lab

AUTOCAD
2 Credits/Units

Prerequisite: A grade of 'C' or better in ENGR 140 or CADD 140.
A continuation of AutoCAD. Topics covered include: review and continued work with blocks, attributes, and xrefs; creating and using dynamic blocks; using annotated text and dimension text; and an introduction to 3D.

CIVIL
CADD 143
16 hours of lecture / 55 hours of lab

DRAFTING
1
4 Credits/Units

Prerequisite: A grade of 'C' or better in ENGR 113, and either ENGR 140 or CADD 140.

Beginning foundations of civil drafting concepts and practices. Introduction to 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, basic types and construction of roads, site drainage, sewer systems, potable water, walks, driveways, and fire access. Class projects will use various applications to achieve data tables and calculations; drafting is not platform dependent but is biased towards use of AutoCAD. [GE]

BASIC
CADD 150
16 hours of lecture / 55 hours of lab

SOLIDWORKS
4 Credits/Units

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. Recommended for anyone comfortable using a PC. [GE]

MECHANICAL
CADD 154
16 hours of lecture / 55 hours of lab

DRAFTING
1
4 Credits/Units

Prerequisite: A grade of 'C' or better in ENGR 113, and either ENGR 150 or CADD 150.

Mechanical drafting using SolidWorks. Focus on detailed control in annotating and producing drawings of parts and assemblies. Includes components in mechanical print reading. [GE]

INTERMEDIATE
CADD 155
16 hours of lecture / 55 hours of lab

SOLIDWORKS
-
4 Credits/Units

Prerequisite: CADD 150 or ENGR 150.

System design using SolidWorks in the context of an assembly. Focus on complex modeling of parts and assemblies. [GE]

INTRODUCTION
CADD 160
11 hours of lecture / 22 hours of lab

TO
CAM
2 Credits/Units

Introduction to CAM software for CNC machine operation. Recommended for anyone comfortable using a PC. [GE]

SOLIDWORKS	FOR	THE	TRADES	ARCHITECTURAL	DRAFTING	2
CADD 161			3 Credits/Units	CADD 210		3 Credits/Units
11 hours of lecture / 44 hours of lab						
Prerequisite: Completion of with a grade of 'C' or concurrent enrollment in WELD 110 or MACH 241.						
Intended for machinists, welders, and others involved directly in manufacturing. Provides a core foundation of the use of the SolidWorks CADD application. Focuses on part modeling with an emphasis on evaluation of part models for geometric and other properties. Also includes sheet metal part modeling and file export for subsequent CNC manufacturing.						
BASIC	REVIT:		RESIDENTIAL		CUSTOMIZATION	2
CADD 170			4 Credits/Units	CADD 214		3 Credits/Units
16 hours of lecture / 55 hours of lab						
Basic operations of the current version of Revit, as used in residential architectural design and drafting. Topics include screen features, drawing and editing 3D objects, using sheets and views, file management, and using pre-existing AutoCAD drawing file data. Recommended for anyone comfortable using a PC. [GE]						
REVIT:			COMMERCIAL		TECHNICAL	STATICS
CADD 171			4 Credits/Units	CADD 215		&
16 hours of lecture / 55 hours of lab						
Prerequisite: A grade of 'C' or better in CADD 170.						
Revit Commercial will continue to build on the basic tools covered in the Basic Revit Residential course. This is a project-based course and will focus on building a commercial office building using the basic tools, but also focusing on more advanced tools required to complete a commercial project. Topics include: grids, reflected ceiling plans, interior and exterior elevations sections, interior design, schedules, site rendering, view templates, construction documents setup and work-sharing. [GE]						
ADVANCED			REVIT		COMPUTATIONAL	DESIGN
CADD 172			4 Credits/Units	CADD 216		3 Credits/Units
16 hours of lecture / 55 hours of lab						
Prerequisite: A grade of 'C' or better in CADD 171.						
Continuation of Revit training beyond CADD 170 and CADD 171. Focuses on the following aspects of Revit: family creation, templates, advanced visibility, filters, schematics, and parameters and constraints.						
COOPERATIVE	WORK		EXPERIENCE		CIVIL	DRAFTING
CADD 199			6 Credits/Units	CADD 230		2
198 hours of conference						
Prerequisite: Consent of Instructional Unit and completion of or concurrent enrollment in HDEV 195, 198 or 200 required.						
Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]						
PRESENTATION			GRAPHICS		MECHANICAL	DRAFTING
CADD 207			4 Credits/Units	CADD 240		2
16 hours of lecture / 55 hours of lab						
Prerequisite: A grade of 'C' or better in CADD 141, CADD 143, or CADD 154.						
Concepts of design and graphic principles for developing a variety of visual presentations by applying different graphic forms used for advertising, and showcasing graphic skills by producing portfolio quality work. [GE]						
				SELECTED		TOPICS
				CADD 280		5 Credits/Units
				55 hours of lecture		
				Course focuses on selected topics in EMET. Topics vary, and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit for different topics. [GE]		
				SPECIAL		PROJECTS
				CADD 290		6 Credits/Units
				66 hours of conference		
				Prerequisite: Consent of Instructional Unit.		
				Opportunity to plan, organize and complete special projects approved by the department. [GE]		

CADD	CAPSTONE	PRACTICUM
CADD 299		5 Credits/Units
11 hours of lecture / 88 hours of lab		
Prerequisite: Consent of Instructional Unit.		
Capstone project to expand knowledge by studying selected CADD topics in selected major area of study (architectural, civil, mechanical, or other) and producing a comprehensive portfolio-documented project. Projects must be pre-approved by the instructor. [GE]		

COMPUTER SCIENCE & ENGINEERING (CSE)

ENGINEERING AND COMPUTER SCIENCE ORIENTATION CSE 101 1 Credit/Unit

22 hours of lab

Orientation for students interested in Engineering and Computer Science. Topics include exposure to Engineering and Computer Science educational/career opportunities and challenges, with emphasis on effective planning, communication, teamwork appropriate to these career fields. Credit not allowed for both CSE 101 and ENGR 101. [SE]

INTRO TO ELECTRICAL/COMPUTING CSE 120 5 Credits/Units

44 hours of lecture / 33 hours of lab

Prerequisite: A grade of 'C' or better in College Trigonometry.

Introduction to electrical/computer science and engineering processes, principles, problem-solving techniques, and contemporary tools. Applies in-class learning to hands-on projects and explores current industry trends and implications. [SE]

INTRODUCTION TO C CSE 121 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 151 (MATH 113), ENGR 120, CSE 120, ENGR 109 (ENGR 111) or CTEC 121; or consent of Instructional Unit.

Introduction to the C programming language. Emphasis on program design, verification, and testing. Programming related concepts in computer science will be covered. [SE]

DISCRETE STRUCTURES CSE 215 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in CSE 121 and ENGR 250.

Discrete structures and analysis techniques for computing by building on students' skills in programming and logic. Topics include: functions, relations and their properties; sets, sequences and tuples; probability, counting (permutations and combinations); propositional logic and logical connectives; introduction to predicate logic and its limitations; formal proof strategies (counterexample, contraposition); contradiction, recursion, computational complexity; trees, graphs and traversal strategies; modeling computation (finite state turing machines).

INTRODUCTION TO DATA STRUCTURES CSE 222 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in CSE 121 and CSE 224, or consent of Instructional Unit.

Fundamentals of data structures and advanced programming techniques used in high-level languages such as C. Topics: trees, heaps, hash tables, sorting, searching, recursion, and algorithm analysis. [SE]

DATA STRUCTURES & OBJECT-ORIENTED PROGRAMMING CSE 223 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in CSE 215 and CSE 222, or consent of Instructional Unit.

Study of data structures and the analysis of algorithms, object-oriented programming, concurrency, memory management. [SE]

PROGRAMMING

CSE 224

55 hours of lecture

Prerequisite: A grade of 'C' or better in CSE 121 or consent of Instructional Unit.

Study of tools and techniques that facilitate programming and debugging, including debuggers, profilers, and scripting. [SE]

SPECIAL

CSE 290

55 hours of conference

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize, and complete special projects approved by the department. [SE]

TOOLS

5 Credits/Units

PROJECTS

5 Credits/Units

COMPUTER TECHNOLOGY (CTEC)

COMPUTING

CTEC 101

22 hours of lecture

Prerequisite: Eligibility for ENGL 098.

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 em-mail and worldwide web including how to document and save web pages, and a survey of the purposes of various types of application programs. [GE]

INTRODUCTION

TO

MAC/OS

CTEC 103

3 Credits/Units

33 hours of lecture

Prerequisite: Eligibility for ENGL 098.

Introduction to the Macintosh operating system. Course emphasizes the feel and function of the Macintosh, conveying the Macintosh as a visual environment. Visual cues and identification of the concepts that make a Macintosh unique will be stressed. [GE]

IT

CTEC 104

33 hours of lecture

Prerequisite: Eligibility for ENGL 098.

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

CTEC 106

5 Credits/Units

55 hours of lecture

Prerequisite: Eligibility for ENGL 098.

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

CTEC 111

33 hours of lecture

Prerequisite: Eligibility for ENGL 098.

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.

ESSENTIALS

2 Credits/Units

PROGRAMMING

CTEC 112

55 hours of lecture

Prerequisite: Eligibility for ENGL 101 or PTWR 135 and a 'C' or better in PTCS 110 or a MATH course with a prerequisite of MATH 096 or higher. Course provides a participatory overview of essential foundational information technology and computer programming concepts. Topics include computing as a creative activity, abstraction, principles of computer operations, debugging, algorithmic thinking and problem solving, programming functions and operations, iteration principles, ethics in computing and the limitations of computing. Students will design and code simple programs. [GE]

INTERNET

RESEARCH

AND

LIVING

ONLINE

CTEC 115

3 Credits/Units

33 hours of lecture

Prerequisite: Eligibility for ENGL 098.

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

CTEC 117

4 Credits/Units

22 hours of lecture / 44 hours of lab

Prerequisite: Eligibility for ENGL 098.

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

CTEC 121

5 Credits/Units

55 hours of lecture

Prerequisite: Eligibility for ENGL 101 or PTWR 135 and a grade of 'C' or better in PTCS 110 or a MATH course with a prerequisite of MATH 096 or higher.

Fundamental concepts related to designing and writing computer programs and procedures. Topics include: problem-solving techniques, program design, coding, de-bugging, 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]

HTML

CTEC 122

44 hours of lecture

Prerequisite: Eligibility for ENGL 098.

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, CSS#, web server organization and structure, text editors, images, links, lists, forms, tables, and code validation. [SE]

FUNDAMENTALS

4 Credits/Units

JAVASCRIPT

CTEC 126

5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in CTEC 112, CTEC 121, or CSE 121 and a grade of 'C' or better in CTEC 122.

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]

PHP**WITH****SQL****I**

CTEC 127

5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in CTEC 112, CTEC 121 or CSE 121 and a grade of 'C' or better in CTEC 122.

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

33 hours of lecture

Prerequisite: Eligibility for ENGL 098.

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

33 hours of lecture

Prerequisite: Eligibility for ENGL 098.

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

44 hours of lecture

Prerequisite: A grade of 'C' or better in NTEC 103 or consent of Instructional Unit.

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. Cannot get credit for both NTEC 132 and CTEC 132. [GE]

MICROSOFT**SECURITY****FUNDAMENTALS**

CTEC 133

3 Credits/Units

33 hours of lecture

Prerequisite: Eligibility for ENGL 098.

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****ADMIN**

CTEC 134

5 Credits/Units

55 hours of lecture

Prerequisite: Eligibility for ENGL 098.

Provides a foundational overview of concepts, practices, and operation as associated with designing, developing and administering 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]

MICROSOFT**SOFTWARE****DEVELOPMENT****WITH****C#**

CTEC 135

5 Credits/Units

55 hours of lecture

Prerequisite: Eligibility for ENGL 098.

Fundamental concepts related to developing desktop and web applications with the Microsoft C# programming language including the use of Microsoft SQL relational database management system. Topics covered include: program design, object-oriented and procedural coding, debugging, testing and documentation. Opportunity to earn the Microsoft Software Development Fundamentals Microsoft Technology Associate (MTA) certification as a component of the curriculum. Grade of 'C' or better in CTEC 112, CTEC 121, CSE 121, or consent of Instructional Unit. [GE]

UNIX**POWER****TOOLS**

CTEC 143

5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better CTEC 121 and CTEC 140, or consent of Instructional Unit.

Continuing skills development using various basic UNIX tools in the shell environment; building on skills developed in prerequisite courses, students learn about shell scripts, sed, awk, and regular expressions; preparation for using UNIX or UNIX-like system power tools. [GE]

WEB**SERVER****TECHNOLOGY**

CTEC 145

5 Credits/Units

55 hours of lecture

Prerequisite: Eligibility for ENGL 098.

Foundations of web server technologies with a focus on skills useful for web development. Topics include installation and configuration of Apache, MySQL, and PHP, and best practices in security. Interact with UNIX using basic commands in command line and GUI environments, administrate and maintain web hosting accounts. [GE]

WORDPRESS		I	HELP DESK		TECHNICIAN	II
CTEC 160		5 Credits/Units	CTEC 201			3 Credits/Units
55 hours of lecture			11 hours of lecture / 66 hours of clinical			
Prerequisite: A grade of 'C' or better in PTWR 135, ENGL 101 or consent of Instructional Unit.			Prerequisite: A grade of 'C' or better in CTEC 200 or consent of Instructional Unit.			
An overview of the WordPress platform for individuals seeking to create websites for personal or professional use. Basics on WordPress use, installation, content management, and configuration as well as intermediate and more advanced areas such as WordPress Themes, Plugins, and use of advanced settings. Prior web publishing experience not required. Familiarity with web browsers and email is highly recommended. [GE]			Continuation of CTEC 200 Help Desk Technician I. Technical support work experience for a real world learning environment that supports technology needs for the local community with opportunities and experience to serve in project supervisory roles. All areas of customer technology support environments are emphasized including communication, networking, customer tracking, troubleshooting, documentation and customer relations. Activities include help desk service projects, professional development activities, meeting attendance and managing a help desk. [GE]			
BUSINESS	WEB	PRACTICES	INTRODUCTION	TO	MANAGED	INFORMATION
CTEC 165		4 Credits/Units	CTEC 205			5 Credits/Units
44 hours of lecture			55 hours of lecture			
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. Prerequisite: Eligibility for ENGL 098. [GE]			Prerequisite: A grade of 'C' or better in ENGL 101 or PTWR 135.			
Overview of the role of management information systems in business by supporting a wide range of organizational functions from routine organizational transactions to managerial strategic decision making. Emphasis is on terminology associated with IT and hands-on labwork utilizing common business and IT applications. Familiarity and prior experience with Microsoft Excel spreadsheets and Access databases is highly recommended. [GE]			Overview of the role of management information systems in business by supporting a wide range of organizational functions from routine organizational transactions to managerial strategic decision making. Emphasis is on terminology associated with IT and hands-on labwork utilizing common business and IT applications. Familiarity and prior experience with Microsoft Excel spreadsheets and Access databases is highly recommended. [GE]			
WEB	CONTENT	AND	SOCIAL	MEDIA		
CTEC 166						
55 hours of lecture						
Prerequisite: A grade of 'C' or better in ENGL 101 or PTWR 135; A grade of 'C' or better in CTEC 122 and CTEC 160.			Prerequisite: Eligibility for ENGL 098, a grade of 'C' or better in CTEC 106 or instructor consent.			
Exploration and survey of best practices relating to the creation, curation and promotion of web content. Topics include: audience analysis, interaction design, content strategy and marketing, legal and ethical consideration, social media interactions, web accessibility and professional standards for written communications and design.			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. [GE] [PNP]			
COOPERATIVE	WORK	EXPERIENCE	COMPTIA	A+	FUNDAMENTALS	
CTEC 199		5 Credits/Units	CTEC 213			4 Credits/Units
165 hours of clinical			44 hours of lecture			
Prerequisite: Consent of Instructional Unit and completion of or concurrent enrollment in HDEV 195, 198 or 200 required.			Prerequisite: Eligibility for ENGL 098, a grade of 'C' or better in CTEC 106 or instructor consent.			
Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]			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. [GE] [PNP]			
HELP	DESK	TECHNICIAN	COMPTIA	A+	OPERATING	SYSTEMS & NETWORKING
CTEC 200		3 Credits/Units	CTEC 214			4 Credits/Units
11 hours of lecture / 66 hours of clinical			44 hours of lecture			
Prerequisite: A grade of 'C' or better in CTEC 104 or consent of Instructional Unit.			Prerequisite: Eligibility for ENGL 098, a grade of 'C' or better in CTEC 106 or instructor consent.			
Technical support work experience for a real world learning environment that supports technology needs for the local community. All areas of customer technology support environments are emphasized including communication, networking, customer tracking, troubleshooting, documentation and customer relations. Activities include help desk service projects and professional development activities. [GE]			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. [GE] [PNP]			
PHP	WITH	SQL	PHP	WITH	SQL	II
CTEC 227			CTEC 227			5 Credits/Units
55 hours of lecture			55 hours of lecture			
Prerequisite: A grade of 'C' or better in CTEC 127, or consent of Instructional Unit.			Prerequisite: A grade of 'C' or better in CTEC 127, or consent of Instructional Unit.			
A continuation of the CTEC 127, PHP I course, extending PHP skills with object-oriented programming, API management, PHP security, AJAX integration, and version control. Current best practices in the commercial web industry will be emphasized. [GE]			A continuation of the CTEC 127, PHP I course, extending PHP skills with object-oriented programming, API management, PHP security, AJAX integration, and version control. Current best practices in the commercial web industry will be emphasized. [GE]			

COMPTIA

CTEC 233

55 hours of lecture

Prerequisite: Eligibility for ENGL 098, a grade of 'C' or better in CTEC 131, or consent of Instructional Unit.

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. [GE]

COMPTIA

CTEC 235

55 hours of lecture

Prerequisite: Eligibility for ENGL 098, a grade of 'C' or better in CTEC 233 or consent of Instructional Unit.

Covers critical knowledge and skills that are required to prevent, detect and combat cybersecurity 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. [GE]

UNIX**NETWORK****ADMINISTRATION****& SECURITY**

CTEC 240

55 hours of lecture

Prerequisite: A grade of 'C' or better in CTEC 141, or consent of Instructional Unit.

Skills development for configuring and administering a TCP/IP network. Topics include configuring basic networking, client services, file sharing services, major network services, cryptography, user, file, and network security, and other relevant topics. [GE]

APPLIED**WEB****DEVELOPMENT**

CTEC 265

55 hours of lecture

Prerequisite: A grade of 'C' or better in CTEC 127 and CTEC 126 or consent of Instructional Unit.

The skills and knowledge to interact, use and create Application Programming Interfaces (APIs) and provide integration between programs and services on the web. Content management system programming skills and best practices will also be addressed. [GE]

WEB**AND****INTERFACE****DESIGN****I**

CTEC 270

22 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in CTEC 122.

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.

WEB**AND****INTERFACE****DESIGN****II**

CTEC 271

22 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in CTEC 270.

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]

SECURITY+

5 Credits/Units

SELECTED

CTEC 280

66 hours of lecture

Varying topics. May be repeated for credit. [GE]

SPECIAL

CTEC 290

Prerequisite: Consent of instructional unit.

Opportunity to plan, organize, and complete special projects approved by the department. [GE]

WEB**SKILLS****PORTFOLIO**

CTEC 293

99 hours of clinical

Prerequisite: Concurrent enrollment in, or completion of CTEC 265 with a grade of 'C' or better.

Development of applied web programming skills and a coding portfolio website that will demonstrate a student's proficiency in various aspects of web development. [GE]

CAPSTONE

CTEC 295

33 hours of lecture

Prerequisite: Consent of Instructional Unit.

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]

TOPICS

6 Credits/Units

PROJECTS

5 Credits/Units

EXPERIENCE

3 Credits/Units

1

5 Credits/Units

Concurrent enrollment in 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. Valid Washington State food handlers card.

1

8 Credits/Units

Concurrent enrollment in CUIS 110.

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. Valid Washington State food handlers card.

11

5 Credits/Units

Concurrent enrollment in 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. Valid Washington State food handlers card.

11

8 Credits/Units

Concurrent enrollment in CUIS 120.

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. Valid Washington State food handlers card.

III

5 Credits/Units

Concurrent enrollment in 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. Valid Washington State food handlers card.

8 Credits/Units

Concurrent enrollment in CUIS 130.

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. Valid Washington State food handlers card.

SAUCES

2 Credits/Units

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. Valid Washington State food handlers card.

FABRICATION

3 Credits/Units

Identification of carcass and boxed meats and their fabrication into restaurant cuts. Cutting of poultry, beef, hog, lamb, fish and introduction to sausage production. Valid Washington State food handlers card.

PAIRINGS

2 Credits/Units

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. Valid Washington State food handlers card.

BAKING

2 Credits/Units

Introduction of restaurant style baking including yeast breads, biscuits, scones, muffins, cookies, pies, quick breads, plated desserts and sauces. Basic understanding of baking science. Valid Washington State food handlers card.

EXECUTION

2 Credits/Units

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. Valid Washington State food handlers card.

WINE CUIS 145 33 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.		APPRECIATION 3 Credits/Units ADVANCED CUIS 211 176 hours of lab Concurrent enrollment in CUIS 210. Prerequisite: A grade of 'C' or better in CUIS 130, CUIS 131 and CUIS 200 or consent of Instructional Unit.
CULINARY CUIS 146 33 hours of lecture / 44 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]		ESSENTIALS 5 Credits/Units CULINARY CUIS 211 176 hours of lab Concurrent enrollment in CUIS 210. Prerequisite: A grade of 'C' or better in CUIS 130, CUIS 131 and CUIS 200 or consent of Instructional Unit.
BARBEQUE CUIS 147 22 hours of lecture / 44 hours of lab Prerequisite: Valid ServSafe Certification and successful completion of CUIS 110 and CUIS 111. 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.		MANAGEMENT CUIS 220 22 hours of lecture / 66 hours of lab Concurrent enrollment in CUIS 221. Prerequisite: A grade of 'C' or better in CUIS 210 and CUIS 211 or consent of Instructional Unit.
ADVANCED CUIS 148 11 hours of lecture / 22 hours of lab Prerequisite: Valid ServSafe Certification and successful completion of CUIS 110 and CUIS 111. Hands on practical application of Garde Manger applications including garnishes, carvings and classic chaud froid.		AND MANAGEMENT CUIS 221 176 hours of lab Concurrent enrollment in CUIS 220. Prerequisite: A grade of 'C' or better in CUIS 210 and CUIS 211 or consent of Instructional Unit.
APPLIED CUIS 200 11 hours of lecture / 176 hours of lab Prerequisite: A grade of 'C' or better in CUIS 130 and CUIS 131 or consent of Instructional Unit. Apply acquired knowledge providing food service to the campus community through Kiosk cookery. Students will rotate within various cooking stations to hone culinary skills preparation of second year curriculum. Valid Washington State food handlers card.		THEORY CUIS 221 176 hours of lab Concurrent enrollment in CUIS 220. Prerequisite: A grade of 'C' or better in CUIS 210 and CUIS 211 or consent of Instructional Unit.
ADVANCED CUIS 210 22 hours of lecture / 66 hours of lab Concurrent enrollment in CUIS 211. Prerequisite: A grade of 'C' or better in CUIS 130, CUIS 131, and CUIS 200 or consent of Instructional Unit. 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. Valid Washington State food handlers card.		MANAGEMENT CUIS 221 176 hours of lab Concurrent enrollment in CUIS 220. Prerequisite: A grade of 'C' or better in CUIS 210 and CUIS 211 or consent of Instructional Unit.
		INDUSTRY CUIS 231 132 hours of clinical Concurrent enrollment in CUIS 230. Prerequisite: A grade of 'C' or better in CUIS 220 and CUIS 221 or consent of Instructional Unit.

DENTAL HYGIENE (DH)

SELECTED

DH 280

55 hours of lecture

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. Specific topics are listed in the quarterly class schedule. [PNP]

PHARMACOLOGY

DH 282

11 hours of lecture

Prerequisite: Consent of Dental Hygiene Program.

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]

CLINICAL DENTAL HYGIENE TECHNIQUES I

DH 283

33 hours of lecture / 66 hours of lab

Prerequisite: Consent of the Dental Hygiene Program.

Basic theory and pre-clinical practice at the introductory level in patient assessment, care planning, management, and periodontal therapy. Includes prevention and control of oral disease and proper safety and infection control procedures. [GE]

ORAL

DH 284

22 hours of lecture

Introduction to the evaluation of medical/dental histories in preparation for dental hygiene treatment. Includes the most commonly encountered oral and systemic diseases, pertinent drugs, and introduction in managing dental/medical emergencies. **Prerequisite:** Consent of the Dental Hygiene Program [GE]

PERIODONTICS

DH 285

22 hours of lecture / 66 hours of lab

Introduction to histological and clinical characteristics of normal and diseased periodontium. Introduction to tooth accumulated materials and preventive oral aids. [GE]

DENTAL

DH 286

33 hours of lecture

Prerequisite: Consent of the Dental Hygiene Program.

Anatomy, embryology, and histology of the human dentition and surrounding oral structures as they apply to the practice of dental hygiene. Emphasis on tooth development and associated vocabulary, tooth identification and differentiation, and tooth numbering systems. [GE]

SPECIAL

DH 290

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE] [PNP]

TOPICS

5 Credits/Units

I

1 Credit/Unit

I

6 Credits/Units

MEDICINE

2 Credits/Units

I

3 Credits/Units

ANATOMY

3 Credits/Units

PROJECTS

15 Credits/Units

INTRODUCTION TO DIGITAL MANAGEMENT SYSTEMS

DH 292

1 Credit/Unit

22 hours of lab

Prerequisite: Consent of the Dental Hygiene Program.

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

22 hours of lecture / 22 hours of lab

Prerequisite: Consent of the Dental Hygiene Program.

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

33 hours of lecture

Prerequisite: Consent of the Dental Hygiene Program.

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

22 hours of lecture

Prerequisite: Consent of the Dental Hygiene Program.

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

6 Credits/Units

17 hours of lecture / 99 hours of lab

Prerequisite: Consent of the Dental Hygiene Program.

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

6 Credits/Units

17 hours of lecture / 99 hours of lab

Prerequisite: Consent of the Dental Hygiene Program.

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

97 hours of lab

Prerequisite: Consent of the Dental Hygiene Program.

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]

ORAL		RADIOLOGY	I	PHARMACOLOGY	II
DH 323			3 Credits/Units	DH 383	1 Credit/Unit
22 hours of lecture				11 hours of lecture	
Prerequisite: Consent of the Dental Hygiene Program.				Prerequisite: Consent of the Dental Hygiene Program.	
Radiographic theory, equipment, patient safety, and techniques for exposing, processing, and mounting dental radiographs. [GE]				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]	
ORAL		RADIOLOGY	II	PHARMACOLOGY	
DH 324			1 Credit/Unit	DH 384	1 Credit/Unit
22 hours of lecture / 22 hours of lab				11 hours of lecture	
Prerequisite: Consent of the Dental Hygiene Program.				Prerequisite: Consent of the Dental Hygiene Program.	
Second in a series on radiographic theory application and radiographic image interpretation. Continued experience in exposing, processing and mounting, and critiquing dental radiographs. [GE]				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]	
ORAL		RADIOLOGY	III	DENTAL PUBLIC HEALTH - RESEARCH METHODS I	
DH 331			2 Credits/Units	DH 402	2 Credits/Units
22 hours of lecture				11 hours of lecture / 22 hours of lab	
Prerequisite: Consent of the Dental Hygiene Program.				Prerequisite: Consent of the Dental Hygiene Program.	
Third in a series on radiographic theory application and image interpretation. Includes principles of radiation biology, quality assurance, radiation health and protection. Introduction of principles of contemporary panoramic radiographic techniques and comprehensive analysis of panoramic images. [GE]				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]	
GENERAL	AND	ORAL	PATHOLOGY	DENTAL PUBLIC HEALTH - RESEARCH METHODS II	
DH 344			3 Credits/Units	DH 403	2 Credits/Units
33 hours of lecture				11 hours of lecture / 22 hours of lab	
Prerequisite: Consent of the Dental Hygiene Program.				Prerequisite: Consent of the Dental Hygiene Program.	
Fundamentals of oral pathology including the inflammatory processes, tumor development, metabolic pathways and developmental disturbances. [GE]				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]	
ETHICS	AND	THE	PROFESSION	DENTAL PUBLIC HEALTH - RESEARCH METHODS III	
DH 353			1 Credit/Unit	DH 404	1 Credit/Unit
11 hours of lecture				22 hours of lab	
Prerequisite: Consent of the Dental Hygiene Program.				Prerequisite: Consent of the Hygiene Program.	
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]				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]	
LOCAL	ANESTHESIA	&	PAIN	DENTAL PUBLIC HEALTH - RESEARCH METHODS III	
DH 364			4 Credits/Units	DH 404	1 Credit/Unit
25 hours of lecture / 33 hours of lab				22 hours of lab	
Prerequisite: Consent of the Dental Hygiene Program.				Prerequisite: Consent of the Hygiene Program.	
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]				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]	
CARIOLOGY				CLINICAL DENTAL HYGIENE TECHNIQUES V	
DH 373			2 Credits/Units	DH 412	9 Credits/Units
22 hours of lecture				198 hours of lab	
Prerequisite: Consent of the Dental Hygiene Program.				Prerequisite: Consent of the Dental Hygiene Program.	
Presentation of cause, progression, and prevention of dental caries with an emphasis on fluoride and other remineralization strategies. [GE]				Introduction to development level of advanced instrumentation and patient treatment techniques. [GE]	
				CLINICAL DENTAL HYGIENE TECHNIQUES VI	
				DH 413	9 Credits/Units
				198 hours of lab	
				Prerequisite: Consent of the Dental Hygiene Program.	
				Developmental level of advanced instrumentation and patient treatment techniques. [GE]	

CLINICAL	DENTAL	HYGIENE	TECHNIQUES	VII	NITROUS	OXIDE	SEDATION
DH 414				9 Credits/Units	DH 471		1 Credit/Unit
198 hours of lab					8 hours of lecture / 4 hours of lab		
Demonstration and integration of advanced skills and knowledge with an emphasis on preparation for the practice of dental hygiene. Prerequisite: Consent of the Dental Hygiene Program [GE]					Prerequisite: Consent of the Dental Hygiene Program.		
					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.		
RESTORATIVE		DENTISTRY		I	Minimum of three clinical patient inductions and recoveries required.		
DH 431				2 Credits/Units	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]		
11 hours of lecture / 22 hours of lab							
Prerequisite: Consent of the Dental Hygiene Program.							
Introduction to restorative techniques with emphasis on placement of amalgam and clinical experience with sealant application. [GE]							
RESTORATIVE		DENTISTRY		II	PERIODONTICS		II
DH 432				5 Credits/Units	DH 472		2 Credits/Units
22 hours of lecture / 66 hours of lab					22 hours of lecture		
Prerequisite: Consent of the Dental Hygiene Program.					Prerequisite: Consent of the Dental Hygiene Program.		
Laboratory practice in expanded duties as allowed by Washington State law. Emphasis on placement of amalgam and composite restorations. [GE]					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]		
RESTORATIVE		DENTISTRY		III	PERIODONTICS		III
DH 433				4 Credits/Units	DH 473		2 Credits/Units
11 hours of lecture / 66 hours of lab					22 hours of lecture		
Prerequisite: Consent of the Dental Hygiene Program.					Prerequisite: Consent of the Dental Hygiene Program.		
Clinical and laboratory practice in expanded duties as allowed by Washington State law. Topics include restorative dentistry and associated procedures, dental analgesia, local anesthetic, current dental material evaluation and product selection for use in clinical practice. [GE]					Evidence-based periodontal disease treatment modalities including non-surgical procedures, modulation of the host response, antimicrobials, lasers, and reevaluation and maintenance procedures. [GE]		
RESTORATIVE		DENTISTRY		IV	CAPSTONE		
DH 434				3 Credits/Units	DH 484		3 Credits/Units
11 hours of lecture / 44 hours of lab					33 hours of lecture		
Prerequisite: Consent of the Dental Hygiene Program.					Prerequisite: Consent of the Dental Hygiene Program.		
Mastery of restorative skills to include clinical and lab practice in expanded duties as allowed by Washington State law. Completion of restorative capstone project, encompassing depth and breadth of knowledge acquired from supportive course work. [GE]					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	NEEDS	POPULATIONS		I			
DH 451				1 Credit/Unit			
11 hours of lecture							
Prerequisite: Consent of the Dental Hygiene Program.							
Issues regarding techniques and strategies for identifying, assessing, and treating patients with special needs and developing technological expertise to access special needs information through various media. [GE]							
SPECIAL	NEEDS	POPULATIONS		II			
DH 452				1 Credit/Unit			
11 hours of lecture							
Prerequisite: Consent of the Dental Hygiene Program.							
Researching academic, behavioral, and clinical techniques to determine the performance necessary in all phases of patient treatment for a population with special needs. In-depth independent research on a special needs population, as it relates to dental hygiene care. [GE]							
SPECIAL	NEEDS	POPULATIONS		III			
DH 453				1 Credit/Unit			
11 hours of lecture							
Prerequisite: Consent of the Dental Hygiene Program.							
Expansion of the research in academic, behavioral, and clinical techniques through the development and presentation of a table clinic in order to determine the performance necessary in all phases of patient treatment for a population with special needs. [GE]							

DIESEL TECHNOLOGY (DIES)

CUMMINS

DIES 096

33 hours of lecture

Specialized training in Cummins engine theory, troubleshooting, tune-up, maintenance, repair, and safety.

ENGINES

3 Credits/Units

DIESEL

DIES 111

55 hours of lecture

Prerequisite: Eligibility for ENGL 098 and MATH 030 or MATH 092. 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]

FUNDAMENTALS

5 Credits/Units

DIESEL

DIES 112

55 hours of lecture / 110 hours of lab

Concurrent enrollment in DIES 111 recommended.

Prerequisite: Eligibility for ENGL 098 and MATH 030 or MATH 092. Disassembly, inspection, assembly, and adjustment of various diesel engines used in highway and off-highway vehicles. [GE] [PNP]

PROCEDURES

10 Credits/Units

DIESEL

DIES 113

55 hours of lecture

Concurrent enrollment in DIES 114 recommended.

Prerequisite: Eligibility for ENGL 098 and MATH 030 or MATH 092 and successful completion with a 'C' or better in DIES 111 and 112. 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]

ENGINES/FUEL

SYSTEMS

5 Credits/Units

DIESEL

DIES 114

55 hours of lecture / 110 hours of lab

Concurrent enrollment in DIES 113 recommended.

Prerequisite: Eligibility for ENGL 098 and MATH 030 or MATH 092 and successful completion with a 'C' or better in DIES 111 and 112. Test, adjust, and diagnostics of engines and maintenance practices. [GE] [PNP]

PROCEDURES

10 Credits/Units

DRIVE

DIES 115

55 hours of lecture

Concurrent enrollment in DIES 116 recommended.

Prerequisite: Eligibility for ENGL 098 and MATH 030 or MATH 092 and successful completion with a 'C' or better in DIES 113 and 114. Principles of operation and basic construction of drive train components used in on- and off-highway equipment. [GE]

TRAINS

5 Credits/Units

DIESEL

DIES 116

55 hours of lecture / 110 hours of lab

Concurrent enrollment in DIES 115 recommended.

Prerequisite: Eligibility for ENGL 098 and MATH 030 or MATH 092 and successful completion with a 'C' or better in DIES 113 and 114. Disassembly, inspection, assembly, and adjustments of drive train components. [GE] [PNP]

PROCEDURES

10 Credits/Units

BASIC

DIES 120

22 hours of lecture / 22 hours of lab

Concurrent enrollment in DIES 112.

Prerequisite: Eligibility for ENGL 098 and MATH 030 or MATH 092. Introduction to basic electrical fundamentals needed by technicians to diagnose and repair vehicle electrical systems. [GE]

ELECTRICAL

3 Credits/Units

ELECTRONIC

DIES 121

22 hours of lecture / 22 hours of lab

Concurrent enrollment in DIES 114.

Prerequisite: Eligibility for ENGL 098 and MATH 030 and successful completion with a 'C' or better in DIES 120. Introduction to electronic engine management systems and emission technology. [GE]

ENGINE

MANAGEMENT

SYSTEMS

3 Credits/Units

ELECTRONIC

DIES 122

22 hours of lecture / 22 hours of lab

Concurrent enrollment in DIES 116.

Prerequisite: Eligibility for ENGL 098 and MATH 030 or MATH 092 and successful completion with a 'C' or better in DIES 121. Introduction to electronic controls used in diesel and heavy equipment. [GE]

VEHICLE

CONTROL

SYSTEMS

3 Credits/Units

COOPERATIVE

DIES 199

165 hours of clinical

Prerequisite: Consent of Instructional Unit.

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]

WORK

EXPERIENCE

5 Credits/Units

ELECTRICAL/ELECTRONIC

DIES 221

55 hours of lecture

Concurrent enrollment in DIES 222 recommended.

Charging, starting, lighting, and control circuits and components used on heavy equipment and highway trucks. **Prerequisite:** Eligibility for ENGL 098 and MATH 030 or MATH 092 [GE]

SYSTEMS

5 Credits/Units

DIESEL

DIES 222

33 hours of lecture / 66 hours of lab

Concurrent enrollment in DIES 221 recommended.

Prerequisite: Eligibility for ENGL 098 and MATH 030 or MATH 092. Repair and maintenance of diesel and heavy equipment. Students will participate in customer repair projects. [GE] [PNP]

PROCEDURES

6 Credits/Units

HYDRAULIC

DIES 223

55 hours of lecture

Concurrent enrollment in DIES 224 recommended.

Prerequisite: Eligibility for ENGL 098 and MATH 030 or MATH 092 and successful completion with a 'C' or better in DIES 221 and 222. Theory and principles of operation of mobile hydraulic systems. [GE]

SYSTEMS

5 Credits/Units

DIESEL

DIES 224

55 hours of lecture / 110 hours of lab

Concurrent enrollment in DIES 223 recommended.

Prerequisite: Eligibility for ENGL 098 and MATH 030 or MATH 092 and successful completion with a 'C' or better in DIES 221 and 222. Repair and maintenance of diesel and heavy equipment. Students will participate in customer repair projects. [GE] [PNP]

PROCEDURES

10 Credits/Units

BRAKES, STEERING, AND SUSPENSION
DIES 225 5 Credits/Units

55 hours of lecture

Concurrent enrollment in DIES 226 recommended.

Prerequisite: Eligibility for ENGL 098 and MATH 030 or MATH 092 and successful completion with a 'C' or better in DIES 223 and 224.

Hydraulic and air brake systems, steering and suspension used on highway trucks, and heavy equipment. [GE]

DIESEL PROCEDURES
DIES 226 10 Credits/Units

55 hours of lecture / 110 hours of lab

Concurrent enrollment in DIES 225 recommended.

Prerequisite: Eligibility for ENGL 098 and MATH 030 or MATH 092 and successful completion with a 'C' or better in DIES 223 and 224.

Repair and maintenance of diesel and heavy equipment. Students will participate in customer repair projects. [GE] [PNP]

SELECTED TOPICS
DIES 280 5 Credits/Units

55 hours of lecture

The course focuses on selected topics in Diesel. Topics vary, and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit for different topics. Individual topics are listed in the term class schedule. [GE] [PNP]

SPECIAL PROJECTS
DIES 290 5 Credits/Units

Prerequisite: Consent of Instructional Unit required.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

DIGITAL MEDIA ARTS (DMA)

PHOTOSHOP

DMA 101

22 hours of lecture / 44 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.

RASTER

GRAPHICS

4 Credits/Units

ILLUSTRATOR

DMA 102

22 hours of lecture / 44 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.

VECTOR

GRAPHICS

4 Credits/Units

MOTION

DMA 104

22 hours of lecture / 44 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.

GRAPHICS

AND

ANIMATION

I

4 Credits/Units

PROFESSIONAL

DMA 114

22 hours of lecture / 44 hours of lab

Prerequisite: Consent of Instructional Unit.

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.

PRACTICES

AND

PORTFOLIO

I

4 Credits/Units

COOPERATIVE

DMA 199

132 hours of clinical

Prerequisite: Consent of Instructional Unit.

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.

WORK

EXPERIENCE

4 Credits/Units

VIDEO

DMA 201

22 hours of lecture / 44 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).

AND

SOUND

PRODUCTION

I

4 Credits/Units

VIDEO

DMA 202

22 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in DMA 201 or CGT 201.

Further study in digital video and sound production. Develop advanced proficiency to plan, produce and publish videos that tell a compelling story, provide informative or educational value and/or encourage a call to action. Focus on conceptual thinking, video composition, lighting design, audio editing, professional practices and promotional strategies. May include client projects or team-based experience.

AND

SOUND

PRODUCTION

II

4 Credits/Units

MOTION

DMA 204

22 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in DMA 104 or CGT 104.

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.

GRAPHICS

AND

ANIMATION

II

4 Credits/Units

PROFESSIONAL

DMA 214

22 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in DMA 114 or CGT 214, and Consent of Instructional Unit.

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.

PRACTICES

AND

PORTFOLIO

II

4 Credits/Units

PROFESSIONAL

DMA 215

22 hours of lecture / 44 hours of lab

Prerequisite: Consent of Instructional Unit.

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.

STUDIO

EXPERIENCE

4 Credits/Units

DRAMA (DRMA)

INTRO TO THEATRE
DRMA&101 3 Credits/Units

33 hours of lecture
Overview of theatre. Roles of the actor, director, designers, and playwrights. Evolution of theatre through the ages. [HA, SE]

ACTING I - DRAMA
DRMA 140 4 Credits/Units

33 hours of lecture / 22 hours of lab
Techniques and principles of acting. [HB, SE]

ACTING II - THEATRE
DRMA 141 4 Credits/Units

33 hours of lecture / 22 hours of lab
Prerequisite: DRMA 140 (or THEA 140).
Continuation of DRMA 140. Emphasis on scene study, characterization, and period styles of acting. [HB, SE]

BASIC STAGECRAFT
DRMA 150 4 Credits/Units

22 hours of lecture / 22 hours of lab / 110 hours of conference
Principles and techniques of scenery construction and painting. Students will also learn the use of shop tools. [HB, SE]

STAGE MAKE-UP
DRMA 152 3 Credits/Units

33 hours of lecture
Design and application of stage make-up. Formerly THEA 152. [HB, SE]

INTRODUCTION TO CINEMA
DRMA 154 5 Credits/Units

55 hours of lecture
An introductory course in film history, production techniques, aesthetics, and the social impact of the American film industry from 1900 to the present. [HA]

COOPERATIVE WORK EXPERIENCE
DRMA 199 5 Credits/Units

165 hours of clinical
Prerequisite: Consent of Instructional Unit.
Supervised work experience in the community, completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]

STAGE LIGHTING DESIGN
DRMA 250 3 Credits/Units

33 hours of lecture
Techniques and principles of stage and TV lighting design. Use of instruments and light control systems with a special emphasis on computerized light control. [HB, SE]

INTRODUCTION TO SCRIPT ANALYSIS
DRMA 254 5 Credits/Units

55 hours of lecture
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]

SELECTED TOPICS
DRMA 280 3 Credits/Units

33 hours of lecture
Varying topics in theatre, as listed in the term class schedule. May be repeated for credit. [SE]

SPECIAL
DRMA 290

55 hours of lecture

Prerequisite: Consent of Instructional Unit.

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]

PROJECTS
5 Credits/Units

EARLY CHILDHOOD EDUCATION (ECE)

CHILD DEVELOPMENT: BIRTH TO SIX ECE 100 3 Credits/Units

33 hours of lecture

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]

SCIENCE AND MATHEMATICS FOR YOUNG CHILDREN ECE 102 3 Credits/Units

33 hours of lecture

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]

INDIVIDUALIZED INSTRUCTION I ECE 105 2 Credits/Units

22 hours of lecture

Prerequisite: EDUC 203 (or ECE 104).

Theories and practices for inclusive early childhood education programs. Explores personal perceptions of disabilities and commonly held biases and the impact of environmental influences on ability. [GE]

INDIVIDUALIZED INSTRUCTION II ECE 106 2 Credits/Units

11 hours of lecture / 22 hours of lab

Prerequisite: ECE 105.

Theories and practices for inclusive early childhood programs. Documents a student's interests, strengths, and needs and develops an inclusion plan that supports those areas. [GE]

EARLY CHILDHOOD EDUCATION WORKSHOPS ECE 111 3 Credits/Units

33 hours of lecture

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]

LITERATURE AND STORYTELLING FOR CHILDREN ECE 116 2 Credits/Units

22 hours of lecture

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]

REFLECTIVE PRACTICES IN EARLY LEARNING ECE 133 3 Credits/Units

33 hours of lecture

A comprehensive overview and theoretical exploration of perspectives regarding multiple contexts including race, culture, ethnicity, language, class, gender, sexual orientation, atypical and typical abilities. Focus on biases that may impact learners' work as reflective practitioners working with children and families. Focus on effective anti-bias strategies. Meets General Education transfer requirements. [GE]

PARTNERSHIPS WITH FAMILIES IN EARLY CARE & EDUCATION ECE 135 3 Credits/Units

33 hours of lecture

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]

COOPERATIVE WORK EXPERIENCE ECE 199 3 Credits/Units

99 hours of clinical

Prerequisite: ECE 121, 209 and 210, and consent of Instructional Unit. Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluations. Completion of, or concurrent in, HDEV 195, 198, or 200 required. [GE]

LEARNING EXPERIENCES FOR YOUNG CHILDREN II ECE 211 3 Credits/Units

33 hours of lecture

Concurrent enrollment in ECE 212 required.

Prerequisite: ECED 160, or consent of Instructional Unit.

Further develop curriculum planning processes with a special emphasis on scheduling and project approach planning using observations of children's play and knowledge of child development. Areas of study include science, math, group experiences, music/movement, and outdoors. Conduct case studies and provide peer support and feedback. [GE]

LEARNING EXP FOR YOUNG CHILDREN II LAB ECE 212 3 Credits/Units

66 hours of lab

Concurrent enrollment in ECE 211 required.

Prerequisite: ECE 210, or consent of Instructional Unit.

Lab experience in Early Childhood Education Laboratory School. Plan, implement and analyze plans in relation to relevant topics in ECE 211. [GE]

LEARNING EXPERIENCES FOR YOUNG CHILDREN III ECE 213 3 Credits/Units

33 hours of lecture

Concurrent enrollment in ECE 214 required.

Prerequisite: ECE 211, or consent of Instructional Unit.

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]

LEARNING EXP FOR YOUNG CHILDREN III LAB
ECE 214 3 Credits/Units

66 hours of lab

Concurrent enrollment in ECE 213 required.

Prerequisite: ECE 212, or consent of Instructional Unit.

Lab experiences in Early Childhood Education Laboratory School. Plan, implement and analyze plans in relation to relevant topics in ECE 213.

[GE]

EARLY CHILDHOOD SEMINAR
ECE 215 2 Credits/Units

22 hours of lecture

Concurrent enrollment in ECE 199, 15 hours per week required as field placement for students in teaching degree program.

Prerequisite: ECE 214, or consent of Instructional Unit.

Seminar on professionalism, ethics and issues in teaching and administration. [GE]

SELECTED TOPICS
ECE 280 3 Credits/Units

33 hours of lecture

Selected topics in Early Childhood Education as listed in the term class schedule. May be repeated for credit. [GE]

SPECIAL PROJECTS
ECE 290 3 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

EARLY CHILDHOOD EDUCATION (ECED)

INTRODUCTION TO EARLY CHILDHOOD EDUCATION ECED&105 5 Credits/Units

55 hours of lecture

Explore the foundations of early childhood education. Examine theories defining the field, issues, trends, best practices, and program models. Observe children, professionals and programs in action. [SE]

HEALTH/SAFETY/NUTRITION

ECED&107

5 Credits/Units

55 hours of lecture

Introduction to implementation of equitable health, safety and nutrition standards for the growing child in group care. Focus on federal Child Care Block Grant funding (CCDF) requirements, WA state licensing and Head Start Performance standards. Develop skills necessary to keep children healthy safe, report abuse neglect, and connect families to community resources. [GE]

PRACTICUM-NURTURING

ECED&120

2 Credits/Units

11 hours of lecture / 22 hours of lab

Concurrent enrollment in ECED& 105.

In an early learning setting, engage in establishing nurturing, supportive relationships with all children and professional peers. Focus on children's health safety, promoting growth development, and creating a culturally responsive environment. [SE]

INFANTS/TODDLER

ECED&132

3 Credits/Units

33 hours of lecture

Examine the unique developmental needs of infants and toddlers. Study the role of the caregiver, relationships with families, developmentally appropriate practices, nurturing environments for infants and toddlers, and culturally relevant care. [GE]

FAMILY

CARE

MANAGEMENT

ECED&134

3 Credits/Units

33 hours of lecture

Learn how to manage a family childcare program. Topics include: licensing requirements, record-keeping, relationship building, communication strategies, guiding behavior, and promoting growth and development. [GE]

ADMINISTRATION

OF

ECE

ECED&139

3 Credits/Units

33 hours of lecture

Develop administration skills required to develop, operate, manage and improve early childhood education and care programs. Acquire basic business management skills. Explore resources and supports for meeting Washington State licensing and professional NAEYC standards. [GE]

CURRICULUM

ECED&160

DEVELOPMENT

5 Credits/Units

55 hours of lecture

Investigate learning theory, program planning, tools and methods for curriculum development promoting language, fine/gross motor, social-emotional, cognitive and creative skills and growth in children birth through age 8 utilizing developmentally appropriate and culturally responsive practice. [GE]

LEARNING

ECED&170

33 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]

ENVIRONMENTS

3 Credits/Units

LANGUAGE

AND

LITERACY

ECED&180

3 Credits/Units

33 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 Credits/Units

33 hours of lecture

Practice collecting and presenting observation data of children, teaching practices and learning centers in an early childhood setting. [GE]

ECONOMICS (ECON)

INTRODUCTION TO ECONOMICS ECON 101 3 Credits/Units

33 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. Credit not allowed for both Economics 101 and Economics 110. [SE, SS] [PNP]

INTRODUCTION TO THE GLOBAL ECONOMY ECON 110 5 Credits/Units

55 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. Credit not allowed for both Economics 101 and Economics 110. [SE, SS]

INTERNATIONAL ECONOMICS ECON 120 3 Credits/Units

33 hours of lecture

Prerequisite: A grade of 'C' or better in ECON 101.

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. [SE, SS]

MICRO ECONOMICS ECON&201 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in either ECON 101 or MATH 095 or MATH 096 or consent of Instructional Unit.

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. [SE,SS]

MACRO ECONOMICS ECON&202 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in either ECON 101 or MATH 095 or MATH 096 or consent of Instructional Unit.

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. [SE,SS]

SELECTED TOPICS ECON 280 5 Credits/Units

55 hours of lecture

Focus on selected topics in Economics. Because the course varies in theme and content, it is repeatable for credit. [GE, SE]

SPECIAL ECON 290

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

PROJECTS 5 Credits/Units

MANAGERIAL AND GLOBAL ECONOMICS ECON 405 5 Credits/Units

55 hours of lecture

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. [SS]

EDUCATION (EDUC)

CHILD

EDUC&115

55 hours of lecture

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. [GE]

GUIDING

EDUC&130

33 hours of lecture

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]

SCHOOL

EDUC&136

33 hours of lecture

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]

CHILD,

EDUC&150

33 hours of lecture

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]

COOPERATIVE

EDUC 199

165 hours of clinical

Prerequisite: Consent of Instructional Unit.

Supervised work experience in education. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]

INTRODUCTION

EDUC&201

33 hours of lecture

Concurrent enrollment in EDUC 210 required.

Overview of education as a discipline, a philosophy, and a profession. Recommended for future teachers and paraeducators. [SE]

EXCEPTIONAL

EDUC&203

33 hours of lecture

Introduction to various topics regarding children with special needs and exploration of concepts of inclusion and individualized instruction. [GE]

INTRODUCTORY

EDUC 210

11 hours of lecture / 44 hours of lab

Concurrent enrollment in EDUC& 201 required.

Orientation to teaching and life in the American system of schooling. Supervised volunteer field experience with a weekly, one-hour seminar. [GE]

DEVELOPMENT

5 Credits/Units

BEHAVIOR

3 Credits/Units

CARE

3 Credits/Units

COMMUNITY

3 Credits/Units

EXPERIENCE

5 Credits/Units

EDUCATION

3 Credits/Units

CHILD

3 Credits/Units

EXPERIENCE

3 Credits/Units

SELECTED

EDUC 280

55 hours of lecture

Course focuses on selected topics in Education. Topics vary, and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit for different topics. Individual topics are listed in the quarterly class schedule.

TOPICS

5 Credits/Units

EMERGENCY MEDICAL TECHNICIAN (EMT)

EMERGENCY	MEDICAL	TECHNICIAN	(ACCELERATED)
EMT 103			12 Credits/Units

77 hours of lecture / 110 hours of lab

Training in pre-hospital emergency care with clinical education experience. This is an accelerated EMT program that provides for supervised practice of skills taught in each lesson. As required by the Department of Transportation (DOT), this course is under the supervision of a Medical Program Director and EMT Coordinator. The course meets the requirements of State EMT certification. Course length is approximately 186 clock hours including the four integrated phases of education (lecture, laboratory, clinical and field experience).

ENGINEERING (ENGR)

ENGINEERING AND COMPUTER SCIENCE ORIENTATION ENGR 101 1 Credit/Unit

22 hours of lab

Orientation for students interested in Engineering and Computer Science. Topics include effective planning, communication, teamwork, and exposure to Engineering and Computer Science educational/career opportunities and challenges. Credit not allowed for both ENGR 101 and CSE 101. [SE] [PNP]

INTRODUCTION TO DESIGN ENGR&104 5 Credits/Units

44 hours of lecture / 33 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. Cannot receive credit for both ENGR 104 and PHSC 104. [NS, SE]

INTRO TO AEROSPACE ENGINEERING ENGR 107 2 Credits/Units

11 hours of lecture / 22 hours of lab / 2 hours of conference

Prerequisite: A grade of 'C' or better in College Trigonometry, and a grade of 'C' or better in or concurrent enrollment in, College Algebra.

For students interested in pursuing a degree in aerospace engineering. Topics include history of aviation and spaceflight, careers in aerospace, foundations of physical principles that underlies aerodynamics, dynamic pressure, the standard atmosphere, and lift and drag coefficients. The course includes a team design project. [SE]

INTRODUCTION TO ENGINEERING ENGR 109 5 Credits/Units

55 hours of lecture

Prerequisite: MATH 103 or equivalent, and completion of, or concurrent enrollment in MATH 111 or equivalent.

Introduction to the engineering profession: its branches, principles, and practices. Engineering problem-solving, methods of analysis and design, and an introduction to engineering fundamentals. [SE]

ENGINEERING SKETCHING AND VISUALIZATION ENGR 113 2 Credits/Units

11 hours of lecture / 22 hours of lab

Prerequisite: A grade of 'C' or better in MATH 095 or MATH 096 or equivalent placement score.

Engineering communication and graphics through freehand sketching. Visualization and development of orthographic theory, scales, and lettering. [SE]

GEOMETRIC DIMENSIONING AND TOLERANCING ENGR 115 2 Credits/Units

11 hours of lecture / 22 hours of lab

Prerequisite: A grade of 'C' or better in ENGR 113 and either ENGR 140 or ENGR 150.

Basics of geometric dimensioning and tolerancing: what it is and why use it, GDT symbols and their use, maximum and least material conditions, datums, and geometric characteristics. AutoCAD will be used to dimension drawings using GDT. [SE]

INTRO TO ELECTRICAL/COMPUTER SCI & ENGINEERING ENGR 120 5 Credits/Units

44 hours of lecture / 33 hours of lab

Prerequisite: A grade of 'C' or better in College Trigonometry, and a grade of 'C' or better in or concurrent enrollment in College Algebra.

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. [SE]

FIELD SURVEY I ENGR 121 5 Credits/Units

33 hours of lecture / 44 hours of lab

Concurrent enrollment in ENGR 121 lab required.

Prerequisite: A grade of 'C' or better in MATH 151 (or MATH 113).

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. [SE]

BASIC AUTOCAD ENGR 140 4 Credits/Units

16 hours of lecture / 55 hours of lab

Basic operations of the current version of AutoCAD. Screen features, drawing and editing objects, working with 2D, using both model space and layouts, dimensioning and dimension styles, using blocks, attributes, and xrefs, opening and saving files, and using templates. Recommended for anyone comfortable using a PC. [GE]

BASIC SOLIDWORKS ENGR 150 4 Credits/Units

16 hours of lecture / 55 hours of lab

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. Recommended for anyone with good computer skills. [SE]

COOPERATIVE WORK EXPERIENCE ENGR 199 5 Credits/Units

165 hours of clinical

Prerequisite: Consent of Instructional Unit.

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200. [GE]

ELECTRICAL CIRCUITS ENGR&204 5 Credits/Units

44 hours of lecture / 33 hours of lab

Prerequisite: MATH 152 (or MATH 211).

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, Thevenin/Norton theorems, Operational Amplifier circuits, and Step/Natural/Steady-State circuit response. Use of test and measurement equipment in a laboratory setting. [SE]

FUNDAMENTALS		OF	FLIGHT	THERMODYNAMICS
ENGR 208			3 Credits/Units	ENGR&224
22 hours of lecture / 22 hours of lab				55 hours of lecture
Prerequisite: Concurrent enrollment in or completion of ENGR 107, ENGR 150, and MATH 151 with a grade of 'C' or better in all courses. 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]				Prerequisite: A grade of 'C' or better in MATH 152 and PHYS 241. 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. [SE]
INTRODUCTION	TO	GAS	DYNAMICS	MECHANICS
ENGR 209			3 Credits/Units	ENGR&225
22 hours of lecture / 22 hours of lab				55 hours of lecture
Prerequisite: Completion of with a grade of 'C' or concurrent enrollment in ENGR 207, and MATH 152. 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 Reyleigh flow. The course includes a team design project.				Prerequisite: ENGR 211 or ENGR 214, and MATH 211 or MATH 152. Concepts of stress and strain for deformable objects. Axial, torsional and bending loading, combined loadings. Column loading and stability with other applied topics. [SE]
STATICS				MANUFACTURING
ENGR&214			5 Credits/Units	ENGR 239
55 hours of lecture				33 hours of lecture / 44 hours of lab
Prerequisite: MATH 152 (or MATH 211). 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. [SE]				Introduction to manufacturing processes, emphasizing methods and practices used when machining, welding, and fabricating metals and related materials. [SE]
DYNAMICS				APPLIED NUMERICAL METHODS FOR ENGINEERS
ENGR&215			5 Credits/Units	ENGR 240
55 hours of lecture				33 hours of lecture / 33 hours of lab
Prerequisite: ENGR 214 and MATH 152 (or ENGR 211 and MATH 211). 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. [SE]				Prerequisites: A grade of 'C' or better in MATH 153, ENGR 109, or ENGR 120, or consent of Instructional Unit. Numerical solutions to problems in engineering and science using modern scientific computing tools. Application of mathematical judgment in selecting computational algorithms and communicating results. Use of MATLAB programming for numerical computation. Completion or concurrent enrollment in MATH 215.
INTEGRATED		COMPUTATIONAL	DESIGN	DIGITAL LOGIC DESIGN
ENGR 216			3 Credits/Units	ENGR 250
11 hours of lecture / 44 hours of lab				44 hours of lecture / 33 hours of lab
Prerequisite: Completion of or concurrent enrollment in ENGR 150, and ENGR 214. 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.				Prerequisite: A grade of 'C' or better in ENGR 120 (or CSE 120). 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). Cannot receive credit for both ENGR 237 and ENGR 250. [SE]
MATERIALS			SCIENCE	ELECTRICAL CIRCUITS AND SIGNALS
ENGR 221			5 Credits/Units	ENGR 252
55 hours of lecture				44 hours of lecture / 33 hours of lab
Prerequisite: CHEM 142 (or CHEM 132). Basic structure and properties of materials. Phase equilibrium and transformations. Mechanical properties, electronic structure, thermal, electrical, and magnetic properties. [SE]				Prerequisite: ENGR 204 (or ENGR 251). 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. [SE]

SIGNALS	AND	SYSTEMS
ENGR 253		5 Credits/Units

44 hours of lecture / 33 hours of lab

Prerequisite: ENGR 252.

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. [SE]

DIGITAL	SYSTEMS	AND	MICROPROCESSORS
ENGR 270			5 Credits/Units

44 hours of lecture / 33 hours of lab

Prerequisite: A grade of 'C' or better in ENGR 250 and CSE 121, or consent of Instructional Unit.

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. [SE]

SELECTED	TOPICS
ENGR 280	5 Credits/Units

55 hours of lecture

The course focuses on 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 for different topics. [SE]

SPECIAL	PROJECTS
ENGR 290	6 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

ENGLISH (ENGL)

WRITING

ENGL 097

55 hours of lecture

Prerequisite: Recommending score on college writing skills placement test.

Emphasis on writing complete, correct sentences and unified, coherent paragraphs and short essays. Learn to build writing skills through pre-writing, drafting, revising, and editing, and develop analytical habits of mind, reading comprehension strategies, and digital literacy skills. Short essays and selected readings will be assigned. [CA]

WRITING

ENGL 098

55 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 097, or recommending score on the College writing skills placement test for ENGL 098.

Emphasis on expository writing and increasing control of grammar and mechanics. Skills include summarizing and writing essays. Students develop skills through pre-writing, drafting, revising, and editing. In-class and out-of-class writing required. [CA]

ENGLISH

ENGL&101

55 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 098 or IELP 091 taken at 5 credits or recommending score on the writing skills placement test for ENGL 101.

Exposition and argument, emphasizing critical thinking in response to electronic and print texts. Focus on exploring, developing, and communicating ideas in a voice appropriate to the audience. Students strengthen skills through pre-writing, drafting, revising, and editing. In-class and out-of-class writing required. [CA,SE,CT,WC]

ENGLISH

ENGL&102

55 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 101.

Continued studies in exposition and argument emphasizing the research paper. Focus on analysis and synthesis of electronic and print texts in the context of supporting the writer's ideas with appropriate documentation. Students refine skills through pre-writing, drafting, revising, and editing. [CA,CT,WC,SE]

ADVANCED

ENGL 103

33 hours of lecture

Prerequisite: ENGL 102 (or ENGL 102).

Emphasis on composing essays on complex ideas of cultural importance. Assignments based on reading and research in art, science, philosophy, and politics. [CA,SE]

ENGLISH

ENGL 105

55 hours of lecture

Description and analysis of the structure of English language, using traditional grammar and syntax. Designed to fulfill the grammar requirement for English majors seeking Washington State teacher certification in English. [SE]

FUNDAMENTALS

5 Credits/Units

FUNDAMENTALS

5 Credits/Units

COMPOSITION

5 Credits/Units

COMPOSITION

5 Credits/Units

COMPOSITION

3 Credits/Units

GRAMMAR

5 Credits/Units

WRITING

ENGL 108

33 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 101.

Focus on writing effective research essays analyzing international films. Emphasis on the composition process and the development of writing skills and evaluation sources, including prewriting, drafting, revising, editing, and documenting. Introduction to film terminology and techniques and the major approaches used in writing essays about films, including film history, national cinemas, genres, auteurism, and formalism, and ideological studies. [CA,WC,SE]

COMPOSITION

ENGL 110

55 hours of lecture

Prerequisite: ENGL 101 (ENGL 101).

Continued studies in writing essays of exposition and argument emphasizing the interpretation of literature, with focus on critical reading of literary texts using theories and appropriate use of documented sources to support the writer's ideas. Expanding academic writing skills of pre-writing, drafting, revising, editing, and documenting. [WC,SE]

ETHICS

AND

POLICY

IN

HEALTHCARE

I

ENGL 112

22 hours of lecture

Concurrent enrollment in NURS 110, NURS 111, NURS 113, NURS 114, and NURS 115.

Prerequisite: Consent of the Nursing Department.

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. [HA]

INTRO

ENGL&113

55 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. [HA, GE, SE] [PNP]

INTRO

ENGL&114

55 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. [HA, GE, SE] [PNP]

INTRODUCTION

ENGL 121

55 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. Completion of ENGL 101 recommended, but not required. [HB, SE]

ABOUT

FILM

3 Credits/Units

FOR

LITERATURE

5 Credits/Units

TO

POETRY

5 Credits/Units

TO

DRAMA

5 Credits/Units

TO

CREATIVE

WRITING

5 Credits/Units

FICTION

ENGL 125

55 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. [HB, SE]

WRITING

5 Credits/Units

POETRY

ENGL 126

55 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. [HB, SE]

WRITING

5 Credits/Units

CREATIVE

ENGL 127

55 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. [HB, SE] [PNP]

NONFICTION**WRITING**

5 Credits/Units

GRAPHIC

ENGL 128

55 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. [HB, GE, SE] [PNP]

FICTION**WRITING**

5 Credits/Units

INTRODUCTION**TO****SHORT****FICTION**

ENGL 133

55 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. [HA, SE] [PNP]

5 Credits/Units

INTRODUCTION**TO****NATIVE****AMERICAN****LITERATURE**

ENGL 136

55 hours of lecture

Introduction to Native American literature as a lens for the aesthetics, experience, and history of Native people within Native American literary criticism and larger American historical contexts. By integrating active learning strategies, coursework focuses on the multicultural nature of Native American literature and on the strategies with which Native writers mediate imbalances of power and systems of oppression within the Americas through prose, poetry, and visual texts. Introduces methods and vocabulary of literary analysis to build close reading skills. [GE, HA]

5 Credits/Units

SCIENCE

ENGL 143

55 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. [HA, SE] [PNP]

FICTION**AND****FANTASY**

5 Credits/Units

DETECTIVE

ENGL 145

55 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. [HA, SE] [PNP]

FICTION

5 Credits/Units

INTRODUCTION**TO****MYTHOLOGY**

ENGL 150

55 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. [HA, SE] [PNP]

5 Credits/Units

INTRODUCTION**TO****THE****NOVEL**

ENGL 156

55 hours of lecture

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. [HA, SE] [PNP]

5 Credits/Units

WRITING**FOR****THE****WEB**

ENGL 160

55 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 101.

A survey of best practices for creating reader-centered, purpose-driven web communications: problem solving through the writing process, designing for interactivity, collaborating with other creators and shareholders, measuring and analyzing web metrics, and practicing legal and ethical standards. [PNP]

5 Credits/Units

POPULAR

ENGL 173

55 hours of lecture

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. [HA]

CULTURE

5 Credits/Units

INTRODUCTION TO LGBTQ STUDIES ENGL 175 5 Credits/Units 55 hours of lecture 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. [HA or SS]	TECHNICAL WRITING ENGL&235 5 Credits/Units 55 hours of lecture Prerequisite: A grade of 'C' or better in ENGL 101 or PTWR 135/ENGL 135. 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,SE,WC] [PNP]
NATURE AND THE HUMANITIES ENGL 176 5 Credits/Units 55 hours of lecture 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. [HA]	LITERATURE BY WOMEN ENGL 240 5 Credits/Units 55 hours of lecture Prerequisite: A grade of 'C' or better in ENGL 101. 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. Credit not allowed for both ENGL 140 and ENGL 240. [HA,GE,SE] [PNP]
COOPERATIVE WORK EXPERIENCE ENGL 199 5 Credits/Units 165 hours of clinical Prerequisite: Consent of Instructional Unit. For students interested in careers that emphasize writing, co-op work experience offers credit for supervised work in writing-related jobs. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]	QUEER LITERATURE ENGL 243 5 Credits/Units 55 hours of lecture Prerequisite: A grade of 'C' or better in ENGL 101. An introductory survey of literature relevant to the gay, lesbian, bisexual, and trans communities and their historical predecessors from pre-modern times 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. Credit not allowed for ENGL 254 or ENGL 243. [HA,GE,SE] [PNP]
BRITISH LITERATURE I ENGL&226 5 Credits/Units 55 hours of lecture Prerequisite: A grade of 'C' or better in ENGL 101. 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. Credit not allowed for both ENGL 264 and ENGL 226. [HA,GE,SE][PNP]	AMERICAN LITERATURE I ENGL&244 5 Credits/Units 55 hours of lecture Prerequisite: A grade of 'C' or better in ENGL 101. 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. Credit not allowed for both ENGL 268 and ENGL 244. [HA,GE,SE] [PNP]
BRITISH LITERATURE II ENGL&227 5 Credits/Units 55 hours of lecture Prerequisite: A grade of 'C' or better in ENGL 101. 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. Credit not allowed for both ENGL 265 and ENGL 227. [HA,GE,SE] [PNP]	AMERICAN LITERATURE II ENGL&245 5 Credits/Units 55 hours of lecture Prerequisite: A grade of 'C' or better in ENGL 101. 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. Credit not allowed for both ENGL 269 and ENGL 245. [HA,GE,SE] [PNP]
BRITISH LITERATURE III ENGL&228 5 Credits/Units 55 hours of lecture Prerequisite: A grade of 'C' or better in ENGL 101. 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. Credit not allowed for both ENGL 266 and ENGL 228. [HA,GE,SE][PNP]	AMERICAN LITERATURE III ENGL&246 5 Credits/Units 55 hours of lecture Prerequisite: A grade of 'C' or better in ENGL 101. 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. Credit not allowed for both ENGL 270 and ENGL 246. [HA,GE,SE] [PNP]

INTRODUCTION TO QUEER LITERATURE
ENGL 254 3 Credits/Units

33 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 101 or eligibility for ENGL 102.

An introductory survey of literature relevant to the gay, lesbian, bisexual, and trans communities and their historical predecessors from pre-modern times to the present. [HA, SE] [PNP]

WORLD LITERATURE I
ENGL&254 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 101.

Surveys the literary, cultural, and human significance of influential works of international Western and non-Western literary traditions from the ancient world to the early Middle Ages. 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. Credit not allowed for both ENGL 260 and ENGL 254. [HA,GE,SE] [PNP]

WORLD LITERATURE II
ENGL&255 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 101.

Surveys the literary, cultural, and human significance of influential works of international Western and non-Western literary traditions from the 10th 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. Evaluates in writing world literature in relation to global contexts. Credit not allowed for both ENGL 261 and ENGL 255. [HA,GE,SE] [PNP]

WORLD LITERATURE III
ENGL&256 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 101.

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. Credit not allowed for both ENGL 262 and ENGL 256. [HA,GE,SE] [PNP]

WORLD LITERATURE
ENGL 261 3 Credits/Units

33 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 101 or eligibility for ENGL 102.

Masterpieces from the fifteenth century through the eighteenth century. Literature is read within its historical and cultural settings. [HA, SE]

WORLD LITERATURE
ENGL 262 3 Credits/Units

33 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 101 or eligibility for ENGL 102.

Masterpieces of world literature from the nineteenth century through the contemporary period. Literature is read within its historical and cultural settings. [HA, SE]

BRITISH LITERATURE
ENGL 264 3 Credits/Units

33 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 101 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. [HA, SE]

BRITISH LITERATURE
ENGL 265 3 Credits/Units

33 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 101 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. [HA, SE]

BRITISH LITERATURE
ENGL 266 3 Credits/Units

33 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 101 or eligibility for ENGL 102.

Classics of British literature from the nineteenth century to the present. Literature is read within its historical and cultural settings. [HA, SE]

AMERICAN MULTIETHNIC LIT
ENGL 267 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 101 or eligibility for ENGL 102.

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. [HA,SE] [PNP]

AMERICAN LITERATURE
ENGL 269 3 Credits/Units

33 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 101 or eligibility for ENGL 102.

Survey of American writing from the Civil War through World War I. Literature is read within its historical and cultural setting. [HA, SE]

AMERICAN LITERATURE
ENGL 270 3 Credits/Units

33 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 101 or eligibility for ENGL 102.

Survey of American writing from World War I to the present. Literature is read within its historical and cultural setting. [HA, SE]

PACIFIC NORTHWEST LITERATURE
ENGL 271 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 101 or eligibility in ENGL 102.

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. [HA,SE] [PNP]

INTRODUCTION ENGL 272 55 hours of lecture	TO SHAKESPEARE 5 Credits/Units	SELECTED ENGL 280 33 hours of lecture	TOPICS 3 Credits/Units
Prerequisite: A grade of 'C' or better in ENGL 101 or eligibility for ENGL 102. 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. [HA,SE] [PNP]		Course focuses on selected topics in English. Topics vary, and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit for different topics. [SE]	
ETHICS AND POLICY IN HEALTHCARE II ENGL 273 33 hours of lecture	 3 Credits/Units	SPECIAL ENGL 290	PROJECTS 5 Credits/Units
Concurrent enrollment in NURS 261, NURS 262, NURS 263 and NURS 264. Prerequisite: A grade of 'C' or better in NURS 251, NURS 252, NURS 253 and NURS 254. ENGL 273 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. ENGL 273 is taught concurrently with NURS 261. 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.		Prerequisite: Consent of Instructional Unit. Opportunity to plan, organize, and complete special projects approved by the department. [GE]	
ADVANCED FICTION ENGL 275 55 hours of lecture	 5 Credits/Units	WRITING	
Prerequisite: A grade of 'C' or better in ENGL 121, 125, or 127 or consent of Instructional Unit. 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. [HB, SE]			
ADVANCED POETRY ENGL 276 55 hours of lecture	 5 Credits/Units	WRITING	
Prerequisite: A grade of 'C' or better in ENGL 121 or 126. 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. [HB,SE]			
LITERARY ENGL 277 55 hours of lecture	 5 Credits/Units	PUBLICATION	
Prerequisite: Eligibility for ENGL 101. Exploration of publication strategies with a focus on selecting and editing short fiction, poetry, and creative non-fiction for Clark's art and literary journal, Phoenix. Topics include study of current literary journals, reading and analysis of diverse examples of published writing, development of original writing and interviews, collaborative work on design and layout, and participation in promotion and marketing for the journal. Intended for Phoenix literary staff, creative writing students, and others interested in the literary publication and editing. [HB] [PNP]			

ENGLISH AS A SECOND LANGUAGE (ESL)

ESL EDUCATIONAL INTERVIEWING LEVELS 4-6
ESL 003 2 Credits/Units

22 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 SPECIAL TOPICS
ESL 005 10 Credits/Units

88 hours of lecture / 44 hours of lab

Variable topics in ESL and 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.

INTENSIVE FOUNDATIONS: PROBLEM-SOLVING/TECHNOLOGY
ESL 007 7 Credits/Units

77 hours of lecture

Concurrent enrollment in ESL 009 ESL Foundations: Spoken/Written Communication.

Prerequisite: Current CASAS scores in listening from below 162 to 199. Learn to use basic problem-solving and technology to listen actively, read with understanding, and convey ideas in writing. Upon successful completion of both ESL 007 and ESL 009, students will have gained the skills to transition into Fast Track 1.

INTENSIVE FOUNDATIONS: COMMUNICATION
ESL 009 9 Credits/Units

99 hours of lecture

Concurrent enrollment in ESL 007 ESL Foundations: Problem-solving and Technology.

Prerequisite: Current CASAS scores in reading from below 180 to 200 and CASAS scores in listening up to 199.

Learn to listen actively, speak so others can understand, read with understanding, and convey ideas in writing. Upon successful completion of ESL 007 and ESL 009, students will have gained the skills to transition into Fast Track 1.

ESL I-DEA
ESL 010 18 Credits/Units

99 hours of lecture / 99 hours of lab

Prerequisite: CASAS score below 200 in Listening or Reading. 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.

FOUNDATIONS: COMMUNICATION
ESL 013 6 Credits/Units

66 hours of lecture

Prerequisite: CASAS scores below 200 in Listening and/or Reading. Learn how and/or improve ability to listen, speak, read, and write basic English with the support of two teachers. Upon successful completion of Foundations (ESL 013): Communications and Foundations (ESL 015): Problem-solving and Technology, students will have gained the skills for higher level Transitional Studies courses.

FOUNDATIONS: PROBLEM-SOLVING AND TECHNOLOGY
ESL 015 5 Credits/Units

55 hours of lecture

Prerequisite: CASAS score below 200 in Listening and/or Reading. Learn to apply numeracy, and collaborative reading for basic problem-solving and use technology to improve listening, reading and numeracy. Upon successful completion of Mini-ESL Foundations Part 2: Problem-solving and Technology and Mini-ESL Foundations Part 1: Spoken/Written Communication, students will have gained the skills for higher level Transitional Studies courses.

INTENSIVE EXPLORATIONS: STUDY SKILLS
ESL 045 2 Credits/Units

22 hours of lecture

Concurrent enrollment in ESL 047 and ESL 049.

Prerequisite: Current CASAS test scores in all skills. 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. CASAS Listening test score between 200 and 209. CASAS Reading test score between 201 and 210.

EXPLORATIONS: ORAL COMMUNICATION/TECH
ESL 046 6 Credits/Units

66 hours of lecture

Prerequisite: Current CASAS test scores in all skills. 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. CASAS Listening test score between 200 and 209.

INTENSIVE EXPLORATIONS: ORAL COMMUNICATION/TECH
ESL 047 7 Credits/Units

77 hours of lecture

Concurrent enrollment in ESL 045 and ESL 049.

Prerequisite: Current CASAS test scores in all skills. 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 (both Intensive and Stand-alone courses). Upon successful completion of Intensive Explorations, students will gain the technology (especially computer) and study skills as well as the oral and written communication skills to transition into Fast Track 1 (both Intensive and Stand-alone courses). CASAS Listening test score between 200 and 209.

EXPLORATIONS: WRITTEN COMMUNICATION/TECH
ESL 048 6 Credits/Units

66 hours of lecture

Prerequisite: Current CASAS test scores in all skills. 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 Explorations, students will have gained the technology (especially computer) and the oral and written communication skills to transition into Fast Track One. CASAS Reading test score between 201 and 210. OR successful completion of Foundations or ESL I-DEA.

INTENSIVE **EXPLORATIONS:WRITTENCOMMUNICATION/TECH**

ESL 049 7 Credits/Units

77 hours of lecture

Concurrent enrollment in ESL 045 and ESL 047.

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.

JUMPSTART	READING/WRITING	1-4
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ESL 076 6 Credits/Units

66 hours of lecture

Covers basic strategies to learn to read and comprehend words and word groups in simple text. Also covers basic strategies to write short, structured sentences on familiar topics with some effort but with few errors. Both skills will help students to independently accomplish simple, well-defined, and structured reading and writing activities in a few comfortable and familiar settings.

ESL SELECTED TOPICS

ESL 080 10 Credits/Units

110 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 090 2 Credits/Units

22 hours of lecture

Prerequisite: CASAS Reading test score under 210 and teacher recommendation.

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 093 2 Credits/Units

22 hours of lecture

Prerequisite: Current CASAS test scores in all skills.

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. CASAS Listening score of 200 or higher. CASAS Reading score of 201 or higher. [PNP]

READING, SPEAKING AND US CITIZENSHIP

ESL 095 3 Credits/Units

33 hours of lecture

Prerequisite: Current CASAS scores in all skills.

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. CASAS Listening and Reading scores of 190 or higher.

ENVIRONMENTAL SCIENCE (ENVS)

INTRODUCTION TO ENVIRONMENTAL SCIENCE ENVS&101 5 Credits/Units

33 hours of lecture / 44 hours of lab

Prerequisite: Eligibility for MATH 096.

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. [NS]

INTEGRATED ENVIRONMENTAL SCIENCE ENVS 109 5 Credits/Units

33 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in MATH 030 or eligibility for MATH 092.

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. Designed for non-science majors and addressing the curriculum needs of early childhood educators. [NS]

INTRODUCTION TO SOILS: A LIVING SYSTEM ENVS 201 5 Credits/Units

33 hours of lecture / 44 hours of lab

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. [NS, GE, SE]

NATIVE PLANT PROPAGATION: PRINCIPLES & PRACTICE ENVS 202 3 Credits/Units

33 hours of lecture

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. [NS, GE, SE]

FIELD STUDIES IN ENVIRONMENTAL SCIENCE ENVS 208 8 Credits/Units

22 hours of lecture / 124 hours of lab

Prerequisite: Completion of a 100- or 200-level biology course, environmental science, or geology course with a grade of 'C' or better, or consent of instructor.

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. [NS, GE, SE]

INTRODUCTION TO ECOLOGICAL RESTORATION ENVS 218 5 Credits/Units

33 hours of lecture / 44 hours of lab

Prerequisite: 5 credits in any Environmental Science, Geology or BIOL 101, 140, 141, 142, 143, 145, 150, 208, 221, 222, 223, 224 or BIOL 101 with a grade of 'C' or better, or consent of Instructional Unit.

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. [NS, SE]

ENVIRONMENTAL POLITICS ENVS 231 5 Credits/Units

55 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. [SS, SE]

SPECIAL PROJECTS ENVS 290 5 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize, and complete special projects approved by the department. [GE]

SUSTAINABILITY & ENVIRONMENTAL PRACTICES ENVS 430 5 Credits/Units

44 hours of lecture / 22 hours of lab

Investigate how environmental problems have arisen due to human activities (global warming, air pollution, waste disposal) and their impact on corporate practices, to include the corporate mission, competitive strategy, technology choices, production development decisions, production processes, and corporate responsibilities. Regulations and permits will be reviewed from the perspective of local planning departments. Changes to the environment by using resources at rates that exceed the system's ability to replenish them will also be covered. [NS]

GEOGRAPHY (GEOG)

INTRODUCTION

TO

GEOGRAPHY

GEOG&100

5 Credits/Units

55 hours of lecture

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. [SE, SS]

WORLD

REGIONAL

GEOGRAPHY

GEOG&102

5 Credits/Units

55 hours of lecture

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. [SE, SS]

HUMAN

GEOGRAPHY

GEOG&200

5 Credits/Units

55 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. [SE, SS]

PHYSICAL

GEOGRAPHY

GEOG 205

5 Credits/Units

55 hours of lecture

Foundation for the understanding of fundamental concepts and current ideas in physical geography. The systematic study of patterns and processes that have shaped the Earth's surface by understanding our natural environment, earth-sun-moon relationships, cartography, weather and climate, landforms, soils, oceans, and water and biotic resources. Survey continents, countries, natural resources as well as major physical features of our current global landscape. [NS, SE, SS]

ECONOMIC

GEOGRAPHY

GEOG&207

5 Credits/Units

55 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. Previously GEOG 107. Credit not allowed for GEOG 207, ECON 107 and GEOG 107. [SE, SS] [PNP]

THE GEOPOLITICS OF THE MIDDLE EAST

GEOG 220

5 Credits/Units

55 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 the impact and influence of the rest of the world on the Middle East. Credit not allowed for both GEOG 220 and POLS 220. [SE]

THE

GEOPOLITICS

OF

AFRICA

GEOG 221

5 Credits/Units

55 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. [SE]

THE GEOPOLITICS OF CHINA, JAPAN & EAST ASIA

GEOG 222

5 Credits/Units

55 hours of lecture

Geo-political survey of China, Japan and East 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. This course will also examine the importance and impact of China, Japan and East Asia on the rest of the world, as well as examine the impact and influence of the rest of the world on China, Japan and East Asia. Credit not allowed for both GEOG 222 and POLS 222. [SE]

THE GEOPOLITICS OF SOUTH AND CENTRAL ASIA

GEOG 223

5 Credits/Units

55 hours of lecture

Geo-political survey of South 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. This course will also examine the importance and impact of South and Central Asia on the rest of the world, as well as examine the impact and influence of the rest of the world on South and Central Asia. Credit not allowed for both GEOG 223 and POLS 223. [SE]

GEOPOLITICS OF LATIN AMERICA & CARIBBEAN
GEOG 224 5 Credits/Units

55 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. This course will also 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. [SS,GE,SE]

SELECTED TOPICS
GEOG 280 5 Credits/Units

55 hours of lecture

Course focuses on 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 for different topics. [SE]

SPECIAL PROJECTS
GEOG 290 5 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

GEOLOGY (GEOL)

INTRO **PHYSICAL** **GEOLOGY**
 GEOL&101 5 Credits/Units

33 hours of lecture / 44 hours of lab

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. [NS, SE]

INTRO TO GEOL II: EARTH'S SURFACE PROCESSES
 GEOL 102 5 Credits/Units

33 hours of lecture / 44 hours of lab

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. [NS, SE]

HISTORICAL GEOLOGY: THE EARTH THROUGH TIME
 GEOL&103 5 Credits/Units

33 hours of lecture / 44 hours of lab

Physical, chemical, and biologic 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. [NS,SE]

NORTHWEST **GEOLOGY**
 GEOL 109 5 Credits/Units

55 hours of lecture

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. [NS, SE]

COOPERATIVE **WORK** **EXPERIENCE**
 GEOL 199 3 Credits/Units

99 hours of clinical

Prerequisite: Consent of Instructional Unit.

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]

FIELD **STUDIES** **IN** **GEOLOGY**
 GEOL 218 6 Credits/Units

22 hours of lecture / 88 hours of lab

Prerequisite: Minimum of 10 credits in geology or consent of Instructional Unit.

Field trip program to study the geologic evolution of an area. Emphasis on interpretation of rocks and their structure. Duration, scope and field trip localities will vary. Food and personal gear provided by student. Maxivans provided for travel. Day hikes may be required. [NS, SE]

SPECIAL **PROJECTS**
 GEOL 290 5 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

HEALTH & PHYSICAL EDUCATION (HPE)

OCCUPATIONAL

HPE 220

22 hours of lecture / 22 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. [HPE,GE,SE]

WELLNESS

3 Credits/Units

FITNESS-WELLNESS

HPE 258

3 Credits/Units

22 hours of lecture / 22 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. Fulfills the Health and Physical Education general education requirement. [HPE, SE]

MIND

HPE 266

BODY**HEALTH**

3 Credits/Units

22 hours of lecture / 22 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 meditation, yoga, tai chi and breathing techniques in addition to activities that improve strength and cardiovascular fitness. Fulfills the Health and Physical Education general education requirement. [HPE, SE] [PNP]

SELECTED

HPE 280

TOPICS

5 Credits/Units

55 hours of lecture

Varying topics in Health Physical Education and sports, as listed in the term class schedule. May be repeated for credit. [SE]

SPECIAL

HPE 290

PROJECTS

5 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

HEALTH (HLTH)

FOOD AND YOUR HEALTH
HLTH 100 2 Credits/Units

22 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. [HE, SE] [PNP]

HEALTH FOR ADULT LIVING
HLTH 101 3 Credits/Units

33 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. [HE, SE]

ENVIRONMENTAL HEALTH
HLTH 103 2 Credits/Units

22 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. [HE, SE]

WEIGHT AND YOUR HEALTH
HLTH 104 2 Credits/Units

22 hours of lecture

Exploration of the multiple factors that contribute to weight-related behaviors and body image. Focus on developing a healthy relationship with food and physical activity, and practicing sustainable skills for effective lifestyle management. [HE, SE] [PNP]

HAPPINESS AND YOUR HEALTH
HLTH 108 2 Credits/Units

22 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. [HE, SE]

ADULT CPR AND FIRST AID
HLTH 120 1 Credit/Unit

11 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.

WILDERNESS FIRST AID
HLTH 122 2 Credits/Units

22 hours of lecture

Prerequisite: Proof of current Adult CPR/AED certification (bring to first class).

Foundation of first aid principles and skills necessary to respond to emergencies where immediate emergency medical services are not available, such as wilderness, remote environments, and urban disasters. [GE, SE]

PEDIATRIC FIRST AID & CPR
HLTH 123 1 Credit/Unit

11 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.

HEALTHCARE PROVIDER CPR AND FIRST AID
HLTH 124 1 Credit/Unit

11 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. [PNP]

CO-OP WORK EXPERIENCE
HLTH 199 3 Credits/Units

99 hours of clinical

Prerequisite: Consent of Instructional Unit.

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]

HUMAN SEXUALITY
HLTH 206 2 Credits/Units

22 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. [HE,SE]

WOMEN'S HEALTH
HLTH 207 3 Credits/Units

33 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 well be developed. [HE, SE]

MEN'S HEALTH
HLTH 208 2 Credits/Units

22 hours of lecture

Exploration of men's personal health. Focus on social, cultural and historical influences and on developing personalized behavior change strategies to advance health. [HE, SE]

MULTICULTURAL HEALTH
HLTH 210 3 Credits/Units

33 hours of lecture

Exploration the complex interactions between culture, ethnicity, religion, gender, socioeconomic status, sexual orientation, age, social class, and ability as they relate to health behavior and outcomes. Develop personalized behavior change strategies to advance health. [HA, HE]

CANNABIS AND YOUR HEALTH
HLTH 212 2 Credits/Units

22 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. [HPE, SE]

HEALTHY

HLTH 278

22 hours of lecture

Exploration of the connection between personal choices and successful aging across multiple dimensions of wellness. Focus on developing personalized behavior change strategies to advance health. [HE, SE]

AGING

2 Credits/Units

SELECTED

HLTH 280

33 hours of lecture

Course focuses on 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 for different topics. [SE]

TOPICS

3 Credits/Units

SPECIAL

HLTH 290

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

PROJECTS

5 Credits/Units

HEALTH INFORMATICS (HI)

INTRODUCTION TO US HEALTH CARE SYSTEM HI 201 3 Credits/Units

33 hours of lecture

Introduction to U.S. health care systems: the major components and the interaction of elements within the system, including the history, issues and problems of today's system. Topics include the national context and history of health services, international health systems, the role of government in health care, health insurance, Medicaid, Medicare, managed care, hospitals and facilities, health workforce, medical technologies, access and quality of care and the future of the health care system. Focus on the future direction of healthcare and identifying likely changes. Readings and discussion cover consumer, industry and governmental agendas related to improving the US health care system. [GE]

INTRODUCTION TO HEALTH CARE QUALITY HI 202 3 Credits/Units

33 hours of lecture

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. Presents various national efforts, systems and tools used in quality assessment, performance, improvement and measurement. [GE]

INTRODUCTION TO HEALTH SERVICES MANAGEMENT HI 210 3 Credits/Units

33 hours of lecture

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]

INTRODUCTION TO HEALTH INFORMATICS HI 211 3 Credits/Units

33 hours of lecture

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, allowing interested students to learn its significance, its breadth, and its opportunities. [GE]

HEALTH OCCUPATIONS (HEOC)

BASIC CONCEPTS OF ANATOMY AND PHYSIOLOGY HEOC 100

33 hours of lecture / 22 hours of lab

Introduction to basic anatomical and physiological concepts as they apply to the following health occupations: EMT, Pharmacy Tech, Medical Assisting, and Phlebotomy. Basic overview of all body systems including the respiratory, muscular, urinary, reproductive, digestive, cardiovascular, lymphatic, immune, nervous, skeletal, integumentary and the senses. The course includes a laboratory component that is integral to the course concepts and skills. [GE]

HEALTH CARE DELIVERY & CAREER EXPLORATION HEOC 104

33 hours of lecture

An 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]

AIDS EDUCATION HEOC 120

11 hours of lecture

A comprehensive look at AIDS, etiology, epidemiology, clinical manifestations, treatment, transmission, testing, legal, ethical and psychological issues. Fulfills Washington State Department of Licensing requirement for license renewal for persons governed by Chapter 18.130.RCW. [GE] [PNP]

PHARMACOLOGY FOR HEALTH ASSISTANTS HEOC 130

33 hours of lecture

Prerequisite: BIOL 164 (or 160) or HEOC 100, BMED 110, consent of Health Occupations or Business Technology Advisor.

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] [PNP]

LABORATORY PROCEDURES FOR THE MEDICAL OFFICE HEOC 160

22 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in BTEC 163 or consent of the Health Occupation Advisor.

Specimen collection and processing. Basic laboratory tests: blood count, microscopic urine tests; microbiology specimen handling (including gram smears and basic culture techniques) blood typing and prepared test kit use. Equipment use and maintenance. Re-agent storage and handling. Lab safety emphasized. [GE]

COOPERATIVE WORK EXPERIENCE HEOC 199

165 hours of clinical

Prerequisite: Consent of Instructional Unit.

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]

SELECTED

HEOC 280

55 hours of lecture

Selected topics in Health Occupations. 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

HEOC 290

Prerequisite: Consent of the Science and Health Sciences Dean.

Learning contract with the student to meet specialized needs of the individual. Credit based upon the type of learning activities planned. Credit not applicable toward a major at Clark College. [GE]

TOPICS

5 Credits/Units

PROJECTS

15 Credits/Units

HISTORY (HIST)

WORLD CIVILIZATIONS I
HIST&126 5 Credits/Units

55 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. [SE, SS]

WORLD CIVILIZATIONS II
HIST&127 5 Credits/Units

55 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. [SE, SS]

WORLD CIVILIZATIONS III
HIST&128 5 Credits/Units

55 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. [SE, SS]

UNITED STATES HISTORY I
HIST&146 5 Credits/Units

55 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. [SE, SS]

UNITED STATES HISTORY II
HIST&147 5 Credits/Units

55 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. [SE, SS]

UNITED STATES HISTORY III
HIST&148 5 Credits/Units

55 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. [SE, SS]

COOPERATIVE WORK EXPERIENCE
HIST 199 3 Credits/Units

99 hours of clinical

Prerequisite: Consent of Instructional Unit.

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]

PACIFIC NORTHWEST HISTORY
HIST&214 5 Credits/Units

55 hours of lecture

Survey of the political, cultural, economic and social development of the Pacific Northwest with special emphasis on Washington State history. [SE] [PNP]

WOMEN IN U.S. HISTORY
HIST&215 5 Credits/Units

55 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. [SE,SS] [PNP]

NATIVE AMERICAN HISTORY
HIST&219 5 Credits/Units

55 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. [SE]

EAST ASIAN HISTORY
HIST 221 5 Credits/Units

55 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. [SE]

HISTORY OF GENOCIDE
HIST 231 3 Credits/Units

33 hours of lecture

Examination of several incidences of genocide beginning with the extermination of the Herero of Namibia in the late 19th century; utilizing the definition of genocide developed by Raphael Lemkin and adopted by the United Nations; developing criteria for recognizing when and where genocide has occurred, based on reading and lectures; developing criteria to identify a genocide in the making; designing an action plan to extend the lessons of the course. [SE, SS]

WOMEN IN WORLD HISTORY I
HIST 251 5 Credits/Units

55 hours of lecture

A survey course 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. [SS, SE]

WOMEN IN WORLD HISTORY II
HIST 252 5 Credits/Units

55 hours of lecture

A survey course 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. [SS, SE]

AMERICAN	DIPLOMATIC	HISTORY
HIST 255		5 Credits/Units

55 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. [SE]

AFRICAN	HISTORY
HIST 260	5 Credits/Units

55 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. Prior completion of HIST 126, 127, or 128 (or HIST 101, 102 or 103) recommended. [SE] [PNP]

AFRICAN-AMERICAN	HISTORY
HIST 275	5 Credits/Units

55 hours of lecture

Survey of the history of the African-American experience from 1619 to the present. [SE] [PNP]

SELECTED	TOPICS
HIST 280	5 Credits/Units

55 hours of lecture

Selected topics in History as listed in the term class schedule. May be repeated for credit. [SE]

HISTORY	OF	LATIN	AMERICA
HIST 285			5 Credits/Units

55 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. [SE]

SPECIAL	PROJECTS
HIST 290	5 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

HONORS (HONS)

HONORS	SEMINAR:	SELECTED	TOPICS
HONS 280			5 Credits/Units

55 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. [SE]

SPECIAL	PROJECTS:	HONORS
HONS 290		6 Credits/Units

Prerequisite: Consent of the Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department.

HUMAN DEVELOPMENT (HDEV)

CAREER AND LIFE PLANNING

HDEV 100

3 Credits/Units

33 hours of lecture

Examination of personal values, interests, personality preferences, skills and abilities for the purpose of determining career, educational and leisure activities. Introduction to career development theory, occupational information resources and decision-making strategies. Credit not allowed for both HDEV 100 and 101. [GE]

CAREER

HDEV 101

EXPLORATION

2 Credits/Units

22 hours of lecture

Strategies for career choice and change: utilizing career assessment tools, personal preferences, and occupational resources to make informed career and educational decisions. Credit not allowed for both HDEV 100 and 101. [GE]

ANGER

AND

CONFLICT

MANAGEMENT

HDEV 103

2 Credits/Units

22 hours of lecture

Develop self-control and positive personal power. Learn about personal anger triggers, appropriate versus inappropriate anger, family dynamics, communication, assertiveness, and conflict management strategies. Learn to use anger instead of letting it use you! Does not fulfill any court-mandated anger management course requirement. [GE,HR]

SELF-ESTEEM

HDEV 105

2 Credits/Units

22 hours of lecture

Guided experience in self-motivation, values clarification, and empathetic regard for others. Structured small groups. [GE,HR]

MOTIVATION

AND

STUDY

SKILLS

HDEV 116

2 Credits/Units

22 hours of lecture

Strategies for developing student behaviors and attitudes consistent with achieving success in college. Topics include campus resources to support student success; building effective study skills; developing skills for academic planning; time management and stress management. Appropriate for any student, particularly those working to improve basic skills and abilities necessary for higher level college courses. Credit not allowed for both HDEV 116 and 117. [GE]

COLLEGE

HDEV 117

SUCCESS

3 Credits/Units

33 hours of lecture

Strategies for successful student performance, including goal setting, academic planning, critical thinking and stress management. Focus on building effective academic skills of planning, memorizing, reading, note taking and test taking; identifying, utilizing, and evaluating campus resources and support services; fostering student responsibility for individual learning and behaviors promoting student achievement. College-level reading skills recommended. Credit not allowed for both HDEV 116 and HDEV 117. [GE]

PRACTICAL REASONING AND DECISION MAKING

HDEV 120

3 Credits/Units

33 hours of lecture

Develop, analyze, evaluate and apply critical thinking to academic, career and personal pursuits. College level reading and eligibility for ENGL 101 are strongly recommended. [GE] [PNP]

RELATIONSHIPS

HDEV 123

2 Credits/Units

22 hours of lecture

Strategies for strengthening relationships of all types. Designed to help participants explore relationship patterns and styles; information and skill building to facilitate more successful and satisfying relationships both personally and professionally. [GE,HR]

BASIC

HDEV 125

MINDFULNESS

SKILLS

2 Credits/Units

22 hours of lecture

Mindfulness skills practice enhances physical and psychological wellbeing. Students will learn basic theory and application of these techniques for an effective mindfulness practice. [GE] [PNP]

ASSERTIVENESS

HDEV 155

3 Credits/Units

33 hours of lecture

Teaches skills needed to achieve personal goals related to assertive behavior. Focuses on reducing emotional blocks and changing thoughts, feelings, and behavior to enable one to act in their own best interest and to express themselves in challenging situations without excessive anxiety or anger. Role play is used to demonstrate and practice skills. Recommended for both those who find it difficult to speak up and those who appear abrasive. [GE, HR]

INTRO TO SERVICE LEARNING & CIVIC ENGAGEMENT

HDEV 175

2 Credits/Units

22 hours of lecture

The concept of service learning and its potential for inspiring civic engagement and community-based problem solving. Effective democratic citizenship demands awareness, knowledge, involvement, problem solving, and leadership. Through the development of a Community Action Project, we will explore all of these factors and their contributions to the development of democratic citizenship. Note: 10 hour service project requirement. [GE,HR]

STRESS

HDEV 186

MANAGEMENT

1 Credit/Unit

11 hours of lecture

Stress is an inevitable part of life affecting health, productivity, and relationships. Too little or too much stress can cause problems. Discover your unique reactions to stress and new options for handling stressful situations. [GE,HR]

WORKPLACE

HDEV 195

SUCCESS

1 Credit/Unit

11 hours of lecture

Learn how to analyze your current work experiences to increase your success and potential for advancement. Gain knowledge specific to your work demands, develop transferable skills in human relations, information, and resource management. Satisfies the concurrent enrollment requirements for Co-op Work Experience. [GE,HR]

PORTFOLIO

HDEV 198

11 hours of lecture

A career/employment portfolio will be developed, including a career goals statement, qualifications brief, resume, work samples, recommendations and references. Learn to effectively use the portfolio to achieve employment goals. Satisfies the concurrent enrollment requirement for co-op work experience. [GE,HR]

DEVELOPMENT

1 Credit/Unit

COOPERATIVE**WORK****EXPERIENCE**

HDEV 199

5 Credits/Units

165 hours of clinical

Concurrent enrollment in HDEV 195, 198 or 200 required.

Prerequisite: Consent of Instructional Unit.

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Course may be repeated for credit. Up to 15 credits may be used as general elective credit. [GE]

PROFESSIONAL**DEVELOPMENT**

HDEV 200

2 Credits/Units

22 hours of lecture

Job search strategies and techniques using the latest techniques and technologies, will be discussed and practiced, including preparing an electronic resume for the Internet, e-mail and computer scanner. Various methods to conduct your personalized labor market research, prepare effective cover letters, and how to secure informational or employment interviews will be learned. Guest speakers from local business and industry to speak about etiquette and ethics in the work place. May satisfy concurrent enrollment for Co-op Work Experience. [GE,HR]

SELECTED**TOPICS**

HDEV 280

3 Credits/Units

33 hours of lecture

Variety of topics in human development as listed in the term class schedule. May be repeated for credit. [GE]

SPECIAL**PROJECTS**

HDEV 290

5 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by department 15 credits maximum. [GE]

HUMAN SERVICES SUBSTANCE ABUSE (HSSA)

INTRO	TO	ADDICTIVE	DRUGS
HSSA&101			5 Credits/Units
55 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]			

INTENSIVE ENGLISH LANGUAGE PROGRAM (IELP)

ESSENTIAL

IELP 061

55 hours of lecture

Prerequisite: Written assessment score of 0-2 and CaMLA EPT score of 1 to 39; or consent of Instructional Unit.

For learners of English language who need to develop/improve writing skills at the beginning to low-intermediate level of academic English. Designed for students who have some prior English study, rather than true beginners. The goal is to develop writing skills for general and academic purposes, with emphasis on sentence and paragraph level writing. Students will improve written fluency as well as accuracy in writing, grammar, and vocabulary use.

WRITING

5 Credits/Units

ESSENTIAL

IELP 062

55 hours of lecture

Prerequisite: CaMLA EPT score of 1 to 39; or consent of Instructional Unit.

For learners of English language who need to develop/improve 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. Students will develop skills and strategies for speaking and comprehending spoken English in general, and informal and formal academic contexts including conversations, small group and class discussion. They will also learn how and/or improve ability to listen actively, speak so others can understand and develop skills to improve communication across cultural boundaries.

ORAL

COMMUNICATION

5 Credits/Units

ESSENTIAL

IELP 063

55 hours of lecture

Prerequisite: CaMLA EPT score of 1 to 39; or consent of Instructional Unit.

This course is for learners of English language who need to develop/improve reading skills at the beginning to low-intermediate level of academic English. This course meets the needs of students who have had some prior English study, rather than true beginners. The primary goal of this course is to develop reading ability for general and academic reading, and improve comprehension of a range of simple, single and multi-paragraph texts. This course prepares students for IELP 073.

READING

5 Credits/Units

ESSENTIAL

IELP 064

33 hours of lecture

Prerequisite: Written assessment score of 0-2 and CaMLA EPT score of 1 to 39; or consent of Instructional Unit.

For learners of English language who need to develop/improve all language skills at the beginning to low-intermediate level of academic English. Meets the needs of students who have had some prior English study, rather than true beginners. The primary goal is to develop/improve English skills, while exploring basic content in units and beginning to utilize learning technology at Clark as well as developing basic problem solving skills.

INTEGRATED

SKILLS

3 Credits/Units

INTERMEDIATE

IELP 071

55 hours of lecture

Prerequisite: Written assessment score of 3 and CaMLA EPT score of 40-54; a grade of 'C' or better in IELP 061; or consent of Instructional Unit. For learners of English language who need to improve writing skills at the intermediate level of academic English. Includes review and mastery of skills developed in IELP 061. The goal is to develop writing skills for general and academic purposes, with emphasis on paragraph, short essay, and other short text writing. Students will improve written fluency as well as accuracy in writing, grammar, and vocabulary use. Credit not allowed for both ENL 081 and IELP 071.

WRITING

5 Credits/Units

INTERMEDIATE

IELP 072

55 hours of lecture

Prerequisite: A grade of 'C' or better in IELP 062; CaMLA EPT score of 40-54; or consent of Instructional Unit.

For learners of English language who need to develop/improve oral communication skills at the intermediate level of academic English. Students will develop skills and strategies to carry out some complex medium-length communication tasks in informal and formal academic contexts including conversations, small group, class discussion and short presentations and will learn how and/or improve ability to listen actively, speak so others can understand and develop skills to improve communication across cultural boundaries. Credit not allowed for both ENL 082 and IELP 072.

ORAL

COMMUNICATION

5 Credits/Units

INTERMEDIATE

IELP 073

55 hours of lecture

Prerequisite: CaMLA EPT score of 49-54; a grade of 'C' or better in IELP 063; or consent of Instructional Unit.

For learners of English who need to improve reading skills at the intermediate level of academic English. The primary goal is to develop reading ability for general and academic reading, and improve comprehension of a range of authentic and some modified multi-paragraph texts. Credit not available for both ENL 099A-Reading and IELP 073.

READING

5 Credits/Units

INTERMEDIATE

IELP 074

33 hours of lecture

Concurrent enrollment in IELP 071, 072, and 073 required for international program students to maintain credit level unless alternatives are approved by International Programs office.

Prerequisite: Written assessment score of 3 and CaMLA EPT score of 40-54; a grade of 'C' or better in IELP 064; or consent of Instructional Unit.

For learners of English language who need to improve all language skills at the intermediate level of academic English. The primary goal is to improve English skills, while exploring academic content, utilizing learning technology and developing problem solving skills.

INTEGRATED

SKILLS

3 Credits/Units

ADVANCED IELP 081 55 hours of lecture Prerequisite: Written assessment score of 4 and CaMLa EPT score of 55-64; a grade of 'C' or better in IELP 071; or consent of Instructional Unit. For non-native speakers of English who need to improve writing skills at the advanced level of academic English. Includes review and mastery of skills developed in IELP 071. The goal is to develop writing skills for academic purposes, with emphasis on complex sentences and mid-length texts such as essays and other types of academic writing. Students will improve written fluency as well as accuracy in writing, grammar, and vocabulary use. Credit not allowed for both ENL 091 and IELP 081.	WRITING 5 Credits/Units	UPPER IELP 092 55 hours of lecture Prerequisite: A grade of 'C' or better in IELP 082; CaMLA EPT score of 65-74; or consent of Instructional Unit. For learners of English language who need to develop/improve oral communication skills at the upper advanced level of academic English. Students will develop skills and strategies to carry out complex, extended and unstructured communication tasks in informal and formal academic contexts (academic multi-party conversation, group discussion, and simple academic informational or persuasive presentations). Learn how and/or improve ability to listen actively, speak so others can understand and develop skills to improve communication across cultural boundaries in preparation for transfer into college-level courses.	ADVANCED	ORAL	COMMUNICATION 5 Credits/Units
ADVANCED IELP 082 55 hours of lecture Prerequisite: A grade of 'C' or better in IELP 072; CaMLA EPT score of 55-64; or consent of Instructional Unit. For learners of English language who need to develop/improve oral communication skills at the advanced level of academic English. Students will develop skills and strategies to carry out complex extended communication tasks in informal and formal academic contexts (conversation, group discussion, and simple academic informational or persuasive presentations), improve their ability to listen actively, speak so others can understand and develop skills to improve communication across cultural boundaries. Credit not allowed for both ENL 092 and IELP 082.	ORAL	COMMUNICATION 5 Credits/Units	UPPER IELP 093 55 hours of lecture Prerequisite: CaMLA EPT score of 65-74; a grade of 'C' or better in IELP 083; or consent of Instructional Unit. For learners of English language who need to improve reading skills at the upper advanced level of academic English. The primary goal is to develop reading ability for academic reading, and improve comprehension of a range of authentic, multi-paragraph, multi-page college-level materials in preparation for transfer into college-level courses.	ADVANCED	READING 5 Credits/Units
ADVANCED IELP 083 55 hours of lecture Prerequisite: CaMLA EPT score of 55-64; a grade of 'C' or better in IELP 073; or consent of Instructional Unit. For learners of English language who need to improve reading skills at the advanced level of academic English. The primary is to develop reading ability for general and academic reading and improve comprehension of a range of authentic, basic college-level materials. Credit not allowed for both ENL 099 and IELP 083.	READING 5 Credits/Units	UPPER IELP 094 33 hours of lecture Prerequisite: Written assessment score of 5 and CaMLA EPT score of 65-74; a grade of 'C' or better in IELP 084; or consent of Instructional Unit. For learners of English language who want to improve all language skills at the upper advanced level of academic English. The primary goal is to develop upper advanced English skills, while exploring a wide range of college level content, utilizing learning technology and developing problem solving skills in preparation for transfer into college-level courses.	ADVANCED	INTEGRATED	SKILLS 3 Credits/Units
ADVANCED IELP 084 33 hours of lecture Prerequisite: Written assessment score of 4 and CaMLA EPT score of 55-64; a grade of 'C' or better in IELP 074; or consent of Instructional Unit. For learners of English language who need to improve all language skills at the advanced level of academic English. The primary goal is to develop advanced English skills, while exploring a range of academic content, utilizing learning technology and developing problem solving skills.	INTEGRATED	SKILLS 3 Credits/Units	UPPER IELP 091 55 hours of lecture Prerequisite: Written assessment score of 5 and CaMLA EPT score of 65-74; a grade of 'C' or better in IELP 081; or consent of Instructional Unit. For learners of English language who need to improve writing skills at the upper advanced level of academic English. Includes review and mastery of skills developed in IELP 081. The goal is to develop writing skills for academic purposes, with emphasis on complex sentences and mid-length texts such as essays and other types of academic writing. Students will improve written fluency as well as accuracy in writing, grammar and vocabulary use in preparation for transfer into college-level courses.	ADVANCED	WRITING 5 Credits/Units

JAPANESE (JAPN)

JAPANESE

JAPN&121

5 Credits/Units

55 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. [HA, SE]

JAPANESE

JAPN&122

5 Credits/Units

55 hours of lecture

Continuation of JAPN 121. Not open to native speakers except with instructor's permission. Completion of JAPN 121 or equivalent required. [HA, SE]

JAPANESE

JAPN&123

5 Credits/Units

55 hours of lecture

Continuation of JAPN 122. Not open to native speakers except with instructor's permission. Completion of JAPN 122 or equivalent required. [HA, SE]

STUDY

ABROAD

ORIENTATION

JAPN 150

1 Credit/Unit

11 hours of lecture

Prerequisite: A grade of 'C' or better or concurrent enrollment in JAPN 122 or above; or consent of Instructional Unit.

Preparing students to travel with the Clark College study abroad program in Japan. Successful completion of this course required for students to participate in the travel abroad program. Application and acceptance into the study abroad program also required. [SE]

JAPANESE

READING

AND

WRITING

JAPN 151

1 Credit/Unit

11 hours of lecture

Reading and writing about various themes and topics in Japanese and English. Focus on manga; short literature, Japanese cultural readings, and letters from Japan. Instruction in English. No prior Japanese experience necessary. [SE] [PNP]

JAPANESE

READING

AND

WRITING

JAPN 152

1 Credit/Unit

11 hours of lecture

Prerequisite: A grade of 'C' or better in JAPN 151.

Continuation of reading and writing about various themes and topics in Japanese and English. Focus on manga, short literature, Japanese cultural readings, and letters from Japan. Instruction in English. No prior experience in Japanese necessary. [SE] [PNP]

JAPANESE

READING

AND

WRITING

JAPN 153

1 Credit/Unit

11 hours of lecture

Prerequisite: A grade of 'C' or better in JAPN 152.

Continuation of reading and writing about various themes and topics in Japanese and English. Focus on manga, short literature, Japanese cultural readings, and letters from Japan. Instruction in English. No prior experience in Japanese necessary. [SE] [PNP]

JAPANESE

CULTURE

AND

SOCIETY

JAPN 171

5 Credits/Units

55 hours of lecture

Introductory study of Japanese culture and society with various topics. Includes learning the traditional elements that have shaped Japanese values such as history, religion, and art. Expands to discuss the social changes and current social issues. Topics include education, gender roles, family structure, etc. Hands-on study is included such as Japanese etiquette, tea ceremony, and calligraphy. [SE]

COOPERATIVE

WORK

EXPERIENCE

JAPN 199

8 Credits/Units

264 hours of clinical

Prerequisite: Consent of Instructional Unit.

Summer cooperative work experience in Japan. Requires use of Japanese language. Enroll in this course Spring quarter prior to participation abroad. [GE, SE]

JAPANESE

JAPN&221

5 Credits/Units

55 hours of lecture

Continuation of First-Year Japanese: speaking, reading and writing with primary emphasis on oral communication. [HA, SE]

JAPANESE

JAPN&222

5 Credits/Units

55 hours of lecture

Prerequisite: JAPN 221 or equivalent.

Continuation of First-Year Japanese: speaking, reading and writing with primary emphasis on oral communication. [HA, SE]

JAPANESE

JAPN&223

5 Credits/Units

55 hours of lecture

Prerequisite: JAPN 222 or equivalent.

Continuation of First-Year Japanese: speaking, reading and writing with primary emphasis on oral communication. [HA, SE]

SELECTED

JAPN 280

TOPICS

5 Credits/Units

55 hours of lecture

Course focuses on 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 for different topics. [SE]

SPECIAL

JAPN 290

PROJECTS

5 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department.

JOURNALISM (JOUR)

INTRODUCTION **TO** **JOURNALISM**
JOUR 101
55 hours of lecture
3 Credits/Units

Prerequisite: ENGL 101 (or ENGL 101) eligibility required.

Introduction to skills fundamental to journalism and news writing, 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. [HA, SE]

COLLEGE **NEWS** **PRODUCTION**
JOUR 110
66 hours of lab
3 Credits/Units

Prerequisite: A grade of 'C' or better in JOUR 101, or equivalent, or consent of the Instructional Unit.

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
55 hours of lecture
5 Credits/Units

Prerequisite: A grade of 'C' or better in JOUR 101 or consent of the Instructional Unit.

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. [HA, GE, SE]

COLLEGE **NEWS** **PRODUCTION**
JOUR 120
66 hours of lab
3 Credits/Units

Prerequisite: A grade of 'C' or better in JOUR 101, and successful completion of JOUR 110 or its equivalent, or consent of the Instructional Unit.

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 130
66 hours of lab
3 Credits/Units

Prerequisite: A grade of 'C' or better in JOUR 101, and successful completion of JOUR 120 or its equivalent, or consent of the Instructional Unit.

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
165 hours of clinical
5 Credits/Units

Prerequisite: Consent of Instructional Unit.

Supervised work experience in newspaper or other journalism position. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]

ADVANCED **NEWSWRITING**
JOUR 201
33 hours of lecture
3 Credits/Units

Prerequisite: JOUR 101.

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
66 hours of lab
3 Credits/Units

Prerequisite: A grade of 'C' or better in JOUR 101, and successful completion of JOUR 130 or its equivalent, or consent of the Instructional Unit.

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
66 hours of lab
3 Credits/Units

Prerequisite: A grade of 'C' or better in JOUR 101, and successful completion of JOUR 210 or its equivalent, or consent of the Instructional Unit.

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		3 Credits/Units
66 hours of lab		
Prerequisite: A grade of 'C' or better in JOUR 101, and successful completion of JOUR 220 or its equivalent, or consent of the Instructional Unit.		
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]		
NEWS		EDITING
JOUR 272		3 Credits/Units
33 hours of lecture		
Prerequisite: ENGL 135 (or ENGL 111) or JOUR 101.		
Basic editing skills. Emphasis on proofreading, clarity, trimming headlines. Basic modular layout, editor responsibilities and Associated Press Style. [GE]		
SELECTED		TOPICS:
JOUR 280		3 Credits/Units
33 hours of lecture		
The course focuses on 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 for different topics. Individual topics are listed in the term class schedule. [GE]		
SPECIAL		PROJECTS
JOUR 290		5 Credits/Units
Prerequisite: Consent of Instructional Unit.		
Opportunity to plan, organize, and complete special projects approved by the department. [GE]		

MACHINING TECHNOLOGY (MACH)

BASIC GENERAL MACHINING PROCESSES

MACH 111

22 hours of lecture / 66 hours of lab

Instruction and practical application in general shop safety, safe practices and dangers of a machine shop environment. Demonstrations of proper use of micrometers and measurement tools. Procedures for deburring parts. Types of drill bits and their uses. Drill bit sharpening. Use of bandsaws and bandsaw blade welders. [GE]

BASIC ENGINE LATHE PROCESSES I

MACH 112

22 hours of lecture / 66 hours of lab

Prerequisite: A grade of 'C' or better in MACH 111 or concurrent enrollment in MACH 111.

Instruction and practical application of engine lathe nomenclature and safety. Calculate speeds and feeds for use with an engine lathe. Setup and operation of engine lathe for the basic operations of turning, facing and drilling. [GE]

BASIC VERTICAL MILLING PROCESSES I

MACH 113

22 hours of lecture / 66 hours of lab

Prerequisite: A grade of 'C' or better in MACH 111 or concurrent enrollment in MACH 111.

Instruction and practical application using nomenclature and safety for the vertical mill. Setup indicators and edge finders. Operations to include squaring of a work piece, drilling and reaming holes in various materials. [GE]

BASIC ENGINE LATHE PROCESSES II

MACH 122

22 hours of lecture / 66 hours of lab

Prerequisite: MACH 111 and MACH 112.

Instruction and practice to use engine lathe for turning material both concentric and straight, creating square shoulders, and facing a part. Drilling with the tailstock. Cutting external UNF and UNC threads. The use and care of taps. [GE]

BASIC VERTICAL MILLING PROCESSES II

MACH 123

22 hours of lecture / 66 hours of lab

Prerequisite: MACH 111 and MACH 113.

Instruction and practical application using the vertical mill for drilling procedures, squaring of a workpiece, and reaming operations. Practice in machine setups to complete these operations. [GE]

BASIC SURFACE GRINDER PROCESSES

MACH 131

22 hours of lecture / 66 hours of lab

Prerequisite: A grade of 'C' or better in MACH 111.

Instruction and practice of safe usage of the surface grinders. Instruction of nomenclature for surface grinders. The use and care of handtools for inspection and setup of the surface grinder. Identify and safely use grinding wheels to grind workpiece flat and parallel, setup and operation to dress various shapes. [GE]

BASIC ENGINE LATHE PROCESSES III

MACH 132

22 hours of lecture / 66 hours of lab

Prerequisite: MACH 111, MACH 112 and MACH 122.

Instruction and practical application using the engine lathe with four jaw chucks, cutting multiple start and acme threads. Use of formulas and different methods for cutting tapers. [GE]

BASIC VERTICAL MILLING PROCESSES III

MACH 133

22 hours of lecture / 66 hours of lab

Instruction and practical application using the vertical milling machine with an indexing head. Application of form cutting tools, keyway cutters, and face milling. **Prerequisite:** MACH 111, MACH 113 and MACH 123 [GE]

COOPERATIVE WORK EXPERIENCE

MACH 199

165 hours of clinical

Prerequisite: Consent of Instructional Unit.

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]

ELEMENTARY METALLURGY

MACH 235

22 hours of lecture

Concurrent enrollment in MACH 236 required.

Introduction to physical metallurgy, oriented towards the machinist trade. Covers destructive and non-destructive testing, steel manufacturing and its classification, identification methods, alloy steel, cast and wrought iron, heat treating. Cannot receive credit for MTEC 235 and WELD 235 and MACH 235. [GE]

ELEMENTARY METALLURGY LAB

MACH 236

44 hours of lab

Concurrent enrollment in MACH 235 required.

Application of concepts and topics covered in MACH 235, including metallography, heat treatment, and testing of materials. Cannot receive credit for MTEC 236 and WELD 236 and MACH 236. [GE]

ADVANCED PRECISION MEASUREMENT

MACH 241

22 hours of lecture / 66 hours of lab

Introducing the concepts and vocabulary of basic measuring systems and tools, basic tolerance, print reading, calibration fundamentals, surface measurements, threads and thread inspection, hole inspection, optical comparator operation and use, CMM operation and use and GDT basics and inspection techniques. All required modules will be completed on the Tooling U website. Before moving on, the student will complete each module with 80% or higher and a certificate. [GE]

INTRO TO CNC LATHE CONVERSATIONAL PROGRAMMING

MACH 242

22 hours of lecture / 66 hours of lab

Prerequisite: Completion of the 100-level Machining series or consent of Instructional Unit.

Setup and operation of Haas TL-1 CNC Lathe. Creating and editing Intuitive Programming System conversational programs. [GE]

INTRO TO CNC MILL CONVERSATIONAL PROGRAMMING
MACH 243 5 Credits/Units

22 hours of lecture / 66 hours of lab

Prerequisite: Completion of the 100-level Machining series or consent of Instructional Unit.

Setup and operation of TRAK bed mill. Creating and editing PROTO TRAK conversational programs. [GE]

TOOLING CONCEPTS
MACH 251 5 Credits/Units

22 hours of lecture / 66 hours of lab

Concepts of metal removal, quality systems, and workholding. [GE]

CNC LATHE SETUP AND OPERATION
MACH 252 5 Credits/Units

22 hours of lecture / 66 hours of lab

Prerequisite: Completion of the 100-level Machining series or consent of Instructional Unit.

Instruction and practical application for the safe setup, operation, and Interactive Graphics Function programming of HAAS ST-10 CNC lathe. Produce and edit NC programs on the CNC lathe. [GE]

CNC MILLING SETUP AND OPERATION
MACH 253 5 Credits/Units

22 hours of lecture / 66 hours of lab

Prerequisite: Completion of the 100-level Machining series or consent of Instructional Unit.

Setup and operation of the Haas vertical mill. Manually create and edit M and G code numerical control programs for the Haas vertical mill. [GE]

ADVANCED EDM PROCESSES
MACH 261 5 Credits/Units

22 hours of lecture / 66 hours of lab

Prerequisite: Completion of the 100-level Machining series or consent of Instructional Unit.

Instruction and practical application for the safe setup, operation, and Mastercam software programming of the Charmilles Wire Electric Discharge Machine (EDM). Produce and edit Mastercam NC programs for the Charmilles Wire EDM. Cannot receive credit for both MACH 261 and 231. [GE]

ADVANCED CNC LATHE PROGRAMMING
MACH 262 5 Credits/Units

22 hours of lecture / 66 hours of lab

Prerequisite: Completion of the 100-level Machining series or consent of Instructional Unit.

Instruction and practical application for the safe setup, operation, and Mastercam software programming of Okuma CNC lathe. Produce and edit Mastercam NC programs for the Okuma CNC lathe. Cannot receive credit for both MACH 262 and 232. [GE]

ADVANCED MILLING 3D PROGRAMMING AND MACHINING
MACH 263 5 Credits/Units

22 hours of lecture / 66 hours of lab

Prerequisite: Completion of the 100-level Machining series or consent of Instructional Unit.

Use 2D and 3D geometry within cam software (Mastercam) to produce CNC programs for vertical mills. Cannot receive credit for both MACH 263 and 233. [GE]

SELECTED TOPICS
MACH 280 5 Credits/Units

55 hours of lecture

Prerequisite: Consent of Instructional Unit.

Selected topics in Machining as listed in the term class schedule.

Repeatable for credit. [GE]

SPECIAL PROJECTS
MACH 290 6 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

MANAGEMENT (MGMT)

PRINCIPLES

OF

MANAGEMENT

MGMT 101

3 Credits/Units

33 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

33 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

33 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

33 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

33 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

22 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

33 hours of lecture

Study of the supervisor's role in the training and professional 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]

LEADERSHIP

MGMT 122

33 hours of lecture

Developing practical leadership skills to influence the organizational performance for managers and non-managers. Topics include leadership roles and styles; the communication process; team building and group interactions; and organizational politics, power, and influence. Applications include leading in business, not-for-profit organizations, clubs, and social organizations. [GE,HR]

TEAM

BUILDING

AND

GROUP

BEHAVIOR

MGMT 125

3 Credits/Units

33 hours of lecture

Methods for creating, developing, and nurturing work groups and teams in the workplace to achieve organizational objectives. Focus on the effective roles of the supervisor and team members. Topics include group behavior for problem-solving, group learning, conflict resolution, and team interactions and communications. [GE,HR]

PROJECT

MANAGEMENT

MGMT 126

4 Credits/Units

44 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

33 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

33 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

33 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]

COOPERATIVE

WORK

EXPERIENCE

MGMT 199

5 Credits/Units

165 hours of clinical

Prerequisite: Completion of one class with a 'C' or better in Business, Economics, or Management.

Up to 5 credits for supervised work training in an approved job.

Completion of or concurrent enrollment in BTEC 147 or HDEV 195, 198, or 200 required. Written consent of Instructional Unit. [GE]

SELECTED	TOPICS
MGMT 280	5 Credits/Units
55 hours of lecture	
Varying topics in supervisory management, as listed in the term class schedule. May be repeated for credit. [GE]	
SPECIAL	PROJECTS
MGMT 290	5 Credits/Units
Prerequisite: Consent of Instructional Unit.	
Opportunity to plan, organize and complete special projects approved by the department. [GE]	

MATHEMATICS (MATH)

ELEMENTARY

MATH 090

55 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 030 or MATH 092 or CAP 042, or recommending score on placement test.

Numeric and algebraic expressions, linear equations and inequalities, in one variable, the coordinate plane, lines, systems of linear equations and inequalities in two variables, functions, integer exponents, polynomials. Designed for the student who is prepared to take algebra at an accelerated pace.

ALGEBRA

MATH 091

55 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 089 or MATH 090 or MATH 092 or eligibility for MATH 097.

A continuation of MATH 089. Integer exponents, polynomials, factoring, rational expressions, evaluating and graphing functions.

APPLIED

MATH 092

55 hours of lecture

Prerequisite: A grade of 'C' or better in CAP 042 or MATH 030, or recommending score on placement test.

Provides students with a foundation in elementary algebra skills and applications, and prepares them for intermediate algebra. Topics include: numeracy; 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]

ALGEBRA

MATH 093

55 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 091.

A continuation of MATH 091. Radical expressions, rational exponents, quadratic equations, exponential and logarithmic functions.

INTERMEDIATE

MATH 095

55 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 090 or MATH 091 or CAP 046, or recommending score on placement test.

A continuation of MATH 090. Factoring, rational expressions, radical expressions, rational exponents, quadratic equations, exponential and logarithmic functions. Designed for the student who is prepared to take algebra at an accelerated pace. [CP]

APPLIED

MATH 096

55 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 092 or 089 or 090 or 091, or CAP 046, or recommending score on placement test.

Covers intermediate algebra skills and 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]

ALGEBRA

5 Credits/Units

II

5 Credits/Units

ALGEBRA

5 Credits/Units

III

5 Credits/Units

ALGEBRA

5 Credits/Units

ALGEBRA

5 Credits/Units

INTERMEDIATE

MATH 097

55 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 089 or MATH 090 or MATH 092 or eligibility for MATH 095.

Polynomials, dimensional analysis, proportions, functions, radicals, quadratic equations and inequalities, exponential and logarithmic functions, and an introduction to statistics, in preparation for MATH 107. This course may only be used as a prerequisite for MATH 107.

COLLEGE

MATH 102

55 hours of lecture / 55 hours of conference

Prerequisite: A grade of 'C' or better in MATH 096, recommending score on the placement test, or consent of the mathematics department.

Covers the same topics as college trigonometry (Math 103), with additional instructional time spent on essential pre-college topics which are not covered in the applied algebra sequence (MATH 092, MATH 096). 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. [CP, Q, SE]

COLLEGE

MATH 103

55 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 093 or 095 or 096, or recommending score on placement test.

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. [Q, SE]

FINITE

MATH 104

55 hours of lecture / 55 hours of conference

Prerequisite: A grade of 'C' or better in MATH 096, recommending score on the placement test, or consent of the mathematics department.

Covers the same topics as finite mathematics (MATH 105), with additional instructional time spent on essential pre-college topics which are not covered in the applied algebra sequence (MATH 092, MATH 096). Lines; linear systems; matrices; linear programming using geometric and simplex methods; mathematics of finance; polynomial, rational, exponential and logarithmic functions and models. [CP, Q, SE]

FINITE

MATH 105

55 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 093 or 095 or 096, or recommending score on placement test.

Lines; linear systems; matrices; linear programming using geometric and simplex methods; mathematics of finance; polynomial, rational, exponential and logarithmic functions and models. [Q, SE]

ALGEBRA

IN

SOCIETY

5 Credits/Units

TRIG

WITH

SUPPLEMENTAL

INSTRUCTION

5 Credits/Units

TRIGONOMETRY

5 Credits/Units

INSTRUCTION

5 Credits/Units

MATHEMATICS

5 Credits/Units

MATH	IN	SOCIETY	MATH	FOR	ELEMENTARY	TEACHERS
MATH&107		5 Credits/Units	MATH 124			5 Credits/Units
55 hours of lecture			55 hours of lecture			
Prerequisite: A grade of 'C' or better in MATH 093 or 095 or 096 or 097, or a grade of 'B' or better in CAP 046, or recommending score on placement test.			Prerequisite: A grade of 'C' or better in MATH 122.			
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. [Q, SE]			The third of a three-term sequence of courses designed for prospective elementary school teachers. Focus on integers, decimals, number theory; elementary statistics, combinatorics and probability; functions and their graphs. Study of data analysis and probability including problem solving techniques and concepts in algebra. May be taken concurrently with MATH 123, the second course in the sequence. [Q, SE]			
COLLEGE	ALGEBRA	WITH	SUPPLEMENTAL	INSTRUCTION		
MATH 110				5 Credits/Units		
55 hours of lecture / 55 hours of conference						
Prerequisite: A grade of 'C' or better in MATH 096, recommending score on the placement test, or consent of the mathematics department.			Prerequisite: A grade of 'C' or better in MATH 103 and 111, or recommending score on placement test.			
Covers the same topics as college algebra (MATH 111), with additional instructional time spent on essential pre-college topics which are not covered in the applied algebra sequence (MATH 092, MATH 096). 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 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, Q, SE]			Survey of differentiation and integration with applications to problems in Biology and Environmental Science. Please see advisor for transferability. [Q, SE]			
COLLEGE			ALGEBRA			
MATH 111			5 Credits/Units			
55 hours of lecture						
Prerequisite: A grade of 'C' or better in MATH 093 or 095, or recommending score on placement test.			Prerequisite: A grade of 'C' or better in MATH 146.			
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. [Q, SE]			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. [Q]			
MATH	FOR	ELEMENTARY	TEACHERS			
MATH 122			5 Credits/Units			
55 hours of lecture						
Prerequisite: A grade of 'C' or better in MATH 093 or MATH 095 or 096, or recommending score on placement test.			Prerequisite: A grade of 'C' or better in Finite Math or College Algebra or recommending score on placement test.			
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. [Q, SE]			Introductory calculus with applications for business, life sciences, and social sciences. Differential, integral, and elementary multivariate calculus. Credit allowed for only one of MATH 140, MATH 106 and MATH 148. [Q, SE]			
MATH	FOR	ELEMENTARY	TEACHERS			
MATH 123			5 Credits/Units			
55 hours of lecture						
Prerequisite: A grade of 'C' or better in MATH 122.			Prerequisite: A grade of 'C' or better in College Trigonometry and College Algebra or recommending score on placement test.			
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. [Q, SE]			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. Credit not allowed for both MATH 113 and MATH 151. [Q, SE]			
			CALCULUS	FOR	LIFE	SCIENCES
			MATH 140			6 Credits/Units
			66 hours of lecture			
			Prerequisite: A grade of 'C' or better in MATH 103 and 111, or recommending score on placement test.			
			Survey of differentiation and integration with applications to problems in Biology and Environmental Science. Please see advisor for transferability. [Q, SE]			
			INTRODUCTION	TO	STATISTICS	
			MATH&146		5 Credits/Units	
			55 hours of lecture			
			Prerequisite: A grade of 'C' or better in MATH 093 or 095 or 096, or recommending score on placement test.			
			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. [Q]			
			STATISTICS		II	
			MATH 147		3 Credits/Units	
			33 hours of lecture			
			Prerequisite: A grade of 'C' or better in MATH 146.			
			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. [Q]			
			BUSINESS		CALCULUS	
			MATH&148		5 Credits/Units	
			55 hours of lecture			
			Prerequisite: A grade of 'C' or better in Finite Math or College Algebra or recommending score on placement test.			
			Introductory calculus with applications for business, life sciences, and social sciences. Differential, integral, and elementary multivariate calculus. Credit allowed for only one of MATH 140, MATH 106 and MATH 148. [Q, SE]			
			CALCULUS		I	
			MATH&151		5 Credits/Units	
			55 hours of lecture			
			Prerequisite: A grade of 'C' or better in College Trigonometry and College Algebra or recommending score on placement test.			
			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. Credit not allowed for both MATH 113 and MATH 151. [Q, SE]			

CALCULUS

MATH&152

5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 151 (MATH 113).

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. Credit not allowed for both MATH 211 and MATH 152. [Q, SE]

CALCULUS

MATH&153

5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 152 (MATH 211).

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. Credit not allowed for both MATH 212 and MATH 153. [Q, SE]

COOPERATIVE**WORK****EXPERIENCE**

MATH 199

5 Credits/Units

165 hours of clinical

Prerequisite: Consent of Instructional Unit.

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]

LINEAR**ALGEBRA**

MATH 215

5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 152 (MATH 211).

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. Credit not allowed for both MATH 215 and MATH 216. [Q, SE]

DIFFERENTIAL**EQUATIONS**

MATH 221

5 Credits/Units

55 hours of lecture

Prerequisite: Concurrent enrollment in MATH 254 (MATH 213) or a grade of 'C' or better in MATH 254 (MATH 213).

Elementary theory and applications of ordinary differential equations. Linear equations, linear systems, Laplace transforms, boundary value problems, series and iterative methods. Credit not allowed for both MATH 221 and MATH 241. [Q, SE]

CALCULUS**IV**

MATH&254

5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 153 (or MATH 212).

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. Credit not allowed for both MATH 213 and MATH 254. [Q, SE]

SELECTED**TOPICS**

MATH 280

5 Credits/Units

55 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. [SE]

SPECIAL**PROJECTS**

MATH 290

5 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

MECHATRONICS (MTX)

INDUSTRIAL

MTX 100

11 hours of lecture

Concurrent enrollment in MTX 101 or consent of Instructional Unit.

Prerequisite: A grade of 'C' or better in MATH 090, 091, or CAP 042 or eligibility for MATH 096.

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

MTX 101

11 hours of lecture / 44 hours of lab

Concurrent enrollment in MTX 100 or consent of Instructional Unit.

Prerequisite: A grade of 'C' or better in ENGL 098 and MATH 096 or higher, or eligibility for ENGL 101 and College level MATH.

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

MTX 102

22 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in MTX 100, MTX 101, MATH 096 or PTCS 110 or equivalent.

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

MTX 103

11 hours of lecture / 22 hours of lab

Concurrent enrollment in MTX 100 or consent of Instructional Unit.

Prerequisite: A grade of 'C' or better in MATH 096 or higher or eligibility for College level MATH.

Fundamentals of measurement tools. Topics include basic measurement, S.I. and U.S. customary measurement, precision measurement tools and dimensional gauging. [GE]

BASIC

MTX 105

22 hours of lecture / 22 hours of lab

Concurrent enrollment in MTX 100 or consent of Instructional Unit.

Fundamentals of hydraulics. Topics include hydraulic power systems, hydraulic circuits, principles of hydraulic pressure and flow and various types of hydraulic valves. [GE]

FLUID

MTX 106

22 hours of lecture / 44 hours of lab

Prerequisite: Concurrent enrollment in or completion of with a grade of 'C' or better in MTX 100 or consent of Instructional Unit.

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]

SAFETY

1 Credit/Unit

FUNDAMENTALS

3 Credits/Units

FUNDAMENTALS

4 Credits/Units

TOOLS

2 Credits/Units

HYDRAULICS

3 Credits/Units

SYSTEMS

4 Credits/Units

BASIC

MTX 107

11 hours of lecture / 22 hours of lab

Concurrent enrollment in MTX 102.

Prerequisite: Successful completion of MTX 100 and MTX 101 or consent of Instructional Unit.

Fundamentals of pneumatics. Topics include pneumatic power systems, basic pneumatic circuits principles of pneumatic pressure and flow and pneumatic speed control. [GE]

ELECTRIC

MTX 110

22 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in MTX 102 or consent of Instructional Unit.

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]

ELECTRICAL

MTX 113

11 hours of lecture / 22 hours of lab

Concurrent enrollment in MTX 102.

Prerequisite: Successful completion of MTX 100 and MTX 101 or consent of Instructional Unit.

Fundamentals of electrical power distribution as it relates to mechatronics. Topics include an introduction to raceways, conduit bending, rigid conduit, flexible conduit, conductors, disconnects, overcurrent protection, conduit sizing, and wire pulling techniques. [GE]

MECHATRONICS

MTX 117

11 hours of lecture / 22 hours of lab

Prerequisite: Successful completion of MTX 102 or consent of Instructional Unit.

Fundamentals of mechatronics. Topics include automation operations, control systems, mechatronic safety, component adjustments, manual operation, pneumatic and electric pick and place. [GE]

MECHANICAL

MTX 120

22 hours of lecture / 22 hours of lab

Prerequisite: Successful completion of MTX 102 or consent of Instructional Unit.

Introduction to mechanical drive systems. Topics include mechanical power transmission safety, machine installation, motor mounting, shaft speed measurement, torque and power measurement, v-belt, chain and spur gear drives and other topics as well. Advantages of each system type will be discussed and compared. [GE]

SEMICONDUCTORS

MTX 121

11 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in MTX 101 and MTX 102 or consent of Instructional Unit.

Fundamentals and applications of diodes, transistors and special-purpose semiconductor devices. Includes hands-on experience in semiconductor circuit construction, measurement and troubleshooting. [GE]

PNEUMATICS

2 Credits/Units

CONTROL 1
4 Credits/Units

POWER 1
2 Credits/Units

DISTRIBUTION 1
2 Credits/Units

DRIVES 1
3 Credits/Units

SYSTEMS 1
3 Credits/Units

PICK	AND	PLACE	ROBOT	ROBOTIC	SYSTEMS
MTX 123			3 Credits/Units	MTX 140	4 Credits/Units
11 hours of lecture / 44 hours of lab				22 hours of lecture / 44 hours of lab	
Prerequisite: Successful completion of MTX 102 or consent of Instructional Unit.				Prerequisite: A grade of 'C' or better in MTX 102, consent of Instructional Unit.	
Fundamentals of the pick and place robot using the SMC system.				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. [GE]				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]	
SERVO			ROBOT		
MTX 125			3 Credits/Units		
22 hours of lecture / 22 hours of lab					
Prerequisite: Successful completion of MTX 102 or consent of Instructional Unit.					
Introduction to the articulated arm servo robot using the SMC system.					
Topics include basic robot operation, teach point programming, PC software programming, application development, flexible manufacturing cells, quality control and production control. [GE]					
PIPING				ELECTRICAL	POWER & DISTRIBUTION SYSTEMS
MTX 127			2 Credits/Units	MTX 145	4 Credits/Units
11 hours of lecture / 22 hours of lab				22 hours of lecture / 44 hours of lab	
Concurrent enrollment in MTX 102.				Prerequisite: A grade of 'C' or better in MTX 100, MTX 101, and MTX 102 or consent of Instructional Unit.	
Prerequisite: Successful completion of MTX 100 and MTX 101 or consent of Instructional Unit.				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]	
Fundamentals of piping. Topics include metal piping systems, metal piping installation, metal tubing systems and hoses. [GE]					
PROGRAMMABLE	LOGIC	CONTROLLERS	1	MECHANICAL	DRIVES
MTX 130			4 Credits/Units	MTX 150	2 Credits/Units
22 hours of lecture / 44 hours of lab				11 hours of lecture / 22 hours of lab	
Prerequisite: A grade of 'C' or better in MTX 102 and MATH 096 or consent of Instructional Unit.				Prerequisite: A grade of 'C' or better in MTX 120 or consent of Instructional Unit.	
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]				Intermediate concepts of mechanical drive systems. Topics include heavy-duty v-belts, v-belt selection and maintenance, synchronous belt drives, lubrication concepts, precision shaft alignment techniques and heavy duty chain drives. Advantages of each system type will be discussed and compared. [GE]	
SIEMENS	PLC	LVL	I	DC	DRIVES
MTX 132			4 Credits/Units	MTX 153	4 Credits/Units
22 hours of lecture / 44 hours of lab				22 hours of lecture / 44 hours of lab	
Prerequisite: A grade of 'C' or better in MTX 100, MTX 101, and MTX 102 or consent of Instructional Unit.				Prerequisite: Successful completion of MTX 102 or consent of Instructional Unit.	
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]				Introduction to DC drives. Topics include DC motion control, SCR control, DC spindle drives, DC axis drives and DC pulse width modulation drives. [GE]	
INDUSTRIAL	ELECTRICAL		WIRING	ELECTRIC	MOTOR CONTROL
MTX 135			3 Credits/Units	MTX 165	4 Credits/Units
11 hours of lecture / 44 hours of lab				22 hours of lecture / 44 hours of lab	
Prerequisite: Successful completion of MTX 102 or consent of Instructional Unit.				Prerequisite: A grade of 'C' or better in MTX 110 or consent of Instructional Unit.	
Fundamentals of industrial electrical wiring. Topics include electrical prints, electrical panels, wiring between panels, wire color coding, control system wiring and wire bundling. A final grade of 'C' or better is required for degree or certification consideration. [GE]				Introduction to electric motor control troubleshooting techniques. Techniques include control component, motor starter and systems troubleshooting methods. Related topics include various motor braking methods and power distribution. [GE]	

MECHATRONICS	SYSTEMS	FUNDAMENTALS	ELECTRO-FLUID	POWER
MTX 175		3 Credits/Units	MTX 210	4 Credits/Units
22 hours of lecture / 22 hours of lab			22 hours of lecture / 44 hours of lab	
Prerequisite: A grade of 'C' or better in MTX 101, MTX 102, and MTX 121, or consent of Instructional Unit.			Prerequisite: Successful completion of MTX 102 with a grade of 'C' or better or consent of Instructional Unit.	
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]			Fundamentals of electro-fluid power. Topics include electrical control systems, basic control devices, power devices, control relays, sequencing, timer and pressure control and circuit applications. [GE]	
MECHANICAL		SYSTEMS	MECHATRONICS	2
MTX 180		5 Credits/Units	MTX 216	5 Credits/Units
22 hours of lecture / 66 hours of lab			33 hours of lecture / 44 hours of lab	
Prerequisite: A grade of 'C' or better in MTX 100, MTX 101, and MTX 102 or consent of Instructional Unit.			Prerequisite: A grade of 'C' or better in MTX 110, MTX 121, MTX 140 or consent of Instructional Unit.	
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]			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]	
CO-OP	WORK	EXPERIENCE	WORKPLACE	ORGANIZATION
MTX 199		5 Credits/Units	MTX 220	AND
165 hours of clinical			11 hours of lecture / 22 hours of lab	
Prerequisite: Completion of, or concurrent enrollment in HDEV 105, 198 or 200 required.			Prerequisite: Successful completion of MTX 102 with a grade of 'C' or better or consent of Instructional Unit.	
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. Consent of Instructional Unit. [GE]			Introduction to the enterprise system: topics include technology sectors, team concepts, product design, business presentation and business presentation software. [GE]	
FLOW	PROCESS	CONTROL	SEMICONDUCTORS	2
MTX 205		5 Credits/Units	MTX 221	3 Credits/Units
33 hours of lecture / 44 hours of lab			11 hours of lecture / 44 hours of lab	
Prerequisite: Successful completion of MTX 102 with a grade of 'C' or better or consent of Instructional Unit.			Prerequisite: A grade of 'C' or better in MTX 121, or consent of Instructional Unit.	
Introduction to level/flow process control using the SMC system. 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 as well as other concepts. [GE]			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]	
THERMAL	PROCESS	CONTROL	WORK	TEAMS
MTX 207		5 Credits/Units	MTX 223	AND
33 hours of lecture / 44 hours of lab			22 hours of lecture / 22 hours of lab	
Prerequisite: Successful completion of MTX 102 with a grade of 'C' or better or consent of Instructional Unit.			Prerequisite: Successful completion of MTX 102 with a grade of 'C' or better or consent of Instructional Unit.	
Introduction to thermal process control using the SMC system. Topics include process control concepts, safety, instrument tag fundamental, piping and instrumentation diagrams, thermal energy, basic temperature control elements, final control elements, temperature sensors, and temperature transmitters. [GE]			Intermediate concepts of the enterprise system. Topics include team development, team problem solving, product design analysis and engineering impacts. [GE]	
PRODUCT			DESIGN	
3 Credits/Units				

MOTOR	DRIVE	SYSTEMS	PROCESS	CONTROL	SYSTEMS
MTX 224		5 Credits/Units	MTX 240		6 Credits/Units
22 hours of lecture / 66 hours of lab			33 hours of lecture / 66 hours of lab		
Prerequisite: A grade of 'C' or better in MTX 102 and MTX 121 or consent of Instructional Unit.			Prerequisite: A grade of 'C' or better in PTCS 110 and MTX 102 or consent of Instructional Unit.		
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]			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]		
SPEED	CONTROL	SYSTEMS	ADVANCED	PROGRAMMABLE	LOGIC
MTX 225		2 Credits/Units	MTX 250		
11 hours of lecture / 22 hours of lab			22 hours of lecture / 44 hours of lab		4 Credits/Units
Prerequisite: A grade of 'C' or better in MTX 101, 102, and 121; or concurrent enrollment in MTX 101, 102, and 121; or consent of Instructional Unit.			Prerequisite: A grade of 'C' or better in MATH 096 or equivalent.		
Introduction to speed control systems. Topics include variable frequency AC drives, VFD speed and torque, VFD acceleration, deceleration, braking, VFD fault diagnostics and troubleshooting as well as SCR motor control. [GE]			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]		
MECHANICAL	DRIVES	3	ADVANCED	PNEUMATICS	AND
MTX 227		4 Credits/Units	MTX 260		VACUUM
22 hours of lecture / 44 hours of lab			22 hours of lecture / 22 hours of lab		3 Credits/Units
Prerequisite: A grade of 'C' or better in MTX 150 or consent of Instructional Unit.			Prerequisite: A grade of 'C' or better in MTX 107, equivalent, or consent of Instructional Unit.		
Introduction to various bearing types as used in mechanical drive systems as well as advanced gear drives. Topics include plain bearings, ball bearings, roller bearings and anti-friction bearings, as well as gaskets and seals and advanced gear drives. [GE]			Advanced concepts of pneumatics and vacuum concepts as well as troubleshooting as they apply to industry standards using the SMC training system. Topics include moving loads pneumatically, vacuum systems, air compressors, air preparation troubleshooting, troubleshooting pneumatic cylinders, motor and rotary actuator troubleshooting, vacuum system troubleshooting and other topics as well. [GE]		
LASER		ALIGNMENT	CAPSTONE		
MTX 230		2 Credits/Units	MTX 270		3 Credits/Units
11 hours of lecture / 22 hours of lab			66 hours of lab		
Prerequisite: A grade of 'C' or better in MTX 110, MTX 165, MTX 180 or consent of Instructional Unit.			Prerequisite: Consent of Instructional Unit.		
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]			Integration of Mechatronics course concepts and skills. Activities include five weeks of lab time for a student team to create a manufacturing scenario using the SMC automated manufacturing equipment. [GE]		
DIGITAL	ELECTRONICS	FUNDAMENTALS	ADVANCED	FLUID	POWER
MTX 232		3 Credits/Units	MTX 275		SYSTEMS
11 hours of lecture / 44 hours of lab			22 hours of lecture / 66 hours of lab		5 Credits/Units
Prerequisite: A grade of 'C' or better in MTX 101, MTX 102, and MTX 121 or consent of Instructional Unit.			Prerequisite: A grade of 'C' or better in MTX 106.		
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]			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		5 Credits/Units
			55 hours of conference		
			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 ter class schedules. [SE]		

PROJECT MANAGEMENT AND LEAN MANUFACTURING
 MTX 285 2 Credits/Units

11 hours of lecture / 22 hours of lab

Prerequisite: Successful completion of MTX 102 with a grade of 'C' or better or consent of Instructional Unit.

Introduction to project management within the enterprise system.

Various topics include project management, lean manufacturing and industrial engineering systems. [GE]

SPECIAL PROJECTS
 MTX 290 5 Credits/Units

55 hours of conference

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize, and complete special projects approved by the department. [GE]

MANUFACTURING SYSTEM PRINCIPLES
 MTX 292 4 Credits/Units

33 hours of lecture / 22 hours of lab

Prerequisite: A grade of 'C' or better in PTCS 110 or MATH 096 or equivalent, MTX 121 and PTWR 135 or consent of Instructional Unit.

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]

ORGANIZATIONAL ENTREPRENEURSHIP
 MTX 295 3 Credits/Units

22 hours of lecture / 22 hours of lab

Prerequisite: A grade of 'C' or better in MTX 101, 102, 121; or concurrent enrollment in MTX 101, 102, and 121; or consent of Instructional Unit.

Introduction to economics and marketing techniques applicable to the business enterprise. Topics include enterprise economics, marketing basics and entrepreneurship. [GE]

CAPSTONE/FINAL PROJECT
 MTX 296 4 Credits/Units

11 hours of lecture / 66 hours of lab

Prerequisite: Instructor permission only.

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]

METEOROLOGY (METR)

ATMOSPHERE AND THE ENVIRONMENT
METR 101 5 Credits/Units

44 hours of lecture / 22 hours of lab

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. [NS, SE]

GLOBAL CLIMATE CHANGE
METR 201 5 Credits/Units

33 hours of lecture / 44 hours of lab

Prerequisite: Eligibility for MATH 092 (Applied Elementary Algebra).

An introduction to Earth's complex climate system and how it has changed over time. The role of the atmosphere, oceans, biosphere, geosphere, and extraterrestrial factors on Earth's present climate will be examined, as well as the impacts to human and biological systems. Data and instrumentation used to measure and describe Earth's present and past climate will be explored. Future climate predictions will be discussed along with potential adaption and mitigation efforts. [NS,GE,SE]

SPECIAL PROJECTS
METR 290 5 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan and complete special projects approved by the Instructional Unit. [GE]

MUSIC (MUSC)

FUNDAMENTALS

MUSC 098

22 hours of lecture

Fundamentals of reading and writing music including clefs, pitch, scales, chords and rhythm.

OF

MUSIC

2 Credits/Units

SPECIAL

MUSC 100

55 hours of lecture

Special workshops on various musical topics as listed in the term class schedule. [HA, SE]

SEMINARS

5 Credits/Units

BEGINNING

MUSC 101

22 hours of lecture

Beginning-level study of the piano. [HB, SE]

PIANO

CLASS

2 Credits/Units

READING

MUSC 103

44 hours of lab

Learn or improve reading of musical rhythms. Self-paced, individualized instruction using tapes. Placement in program via pre-test. Covers basic to professional level. [HB, SE]

RHYTHM

LAB

2 Credits/Units

MUSIC

MUSC&104

33 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. [HA, SE]

APPRECIATION

3 Credits/Units

MUSIC

MUSC 106

33 hours of lecture

Introduction to music as a teaching tool for young children, and to the importance of music in the educational development of children. Students develop skills in reading music, working with the musical abilities of young children, and using music in the classroom. [HB, SE]

IN

EARLY

CHILDHOOD

EDUCATION

3 Credits/Units

BEGINNING

MUSC 110

22 hours of lecture

Beginning-level study of the guitar. [HB, SE]

GUITAR

CLASS

2 Credits/Units

BEGINNING

MUSC 115

11 hours of lecture / 22 hours of lab

Basic technique and knowledge about singing. No previous experience or music study required. [HB, SE]

VOICE

CLASS

2 Credits/Units

MUSIC

MUSC 116

55 hours of lecture

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. [HA, SE]

HISTORY:

MIDDLE

AGES

TO

BAROQUE

5 Credits/Units

MUSIC

MUSC 117

55 hours of lecture

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. [HA, SE]

HISTORY:

CLASSICAL/ROMANTIC

5 Credits/Units

MUSIC

MUSC 118

55 hours of lecture

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. [SE, HA]

HISTORY:

TWENTIETH

CENTURY

5 Credits/Units

EAR

MUSC&121

22 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. [HB, SE]

TRAINING

1

1 Credit/Unit

EAR

MUSC&122

22 hours of lab

Prerequisite: MUSC 121 or consent of Instructional Unit. 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. [HB, SE]

TRAINING

2

1 Credit/Unit

EAR

MUSC&123

22 hours of lab

Prerequisite: MUSC 122 or consent of Instructional Unit. 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. [HB, SE]

TRAINING

3

1 Credit/Unit

ROCK

MUSC 125

33 hours of lecture

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. [HA, SE]

MUSIC

3 Credits/Units

WORLD

MUSC 127

33 hours of lecture

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. [HA, SE]

FOLK

MUSIC

3 Credits/Units

JAZZ

MUSC 135

33 hours of lecture

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. [HA, SE]

APPRECIATION

3 Credits/Units

APPLIED

MUSC 175

11 hours of lecture

Prerequisite: MUSC 201 and written consent of Instructional Unit required.

Private piano lessons. For students with some previous keyboard experience. [HB, SE]

PIANO

1 Credit/Unit

CONCERT

MUSC 180

11 hours of lecture / 22 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. [HB, SE]

BAND

2 Credits/Units

CONCERT

MUSC 181

11 hours of lecture / 22 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. [HB, SE]

BAND

2 Credits/Units

CONCERT

MUSC 182

11 hours of lecture / 22 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. [HB, SE]

BAND

2 Credits/Units

CONCERT

MUSC 183

11 hours of lecture / 22 hours of lab

Prerequisite: Audition or consent of Instructional Unit.

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. [HB, SE]

CHOIR

2 Credits/Units

CONCERT

MUSC 184

11 hours of lecture / 22 hours of lab

Prerequisite: Audition or consent of Instructional Unit.

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. [HB, SE]

CHOIR

2 Credits/Units

CONCERT

MUSC 185

11 hours of lecture / 22 hours of lab

Prerequisite: Audition or consent of Instructional Unit.

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. [HB, SE]

CHOIR

2 Credits/Units

JAZZ

MUSC 186

11 hours of lecture / 22 hours of lab

Improvisation on one or more of the traditional jazz band instruments or through vocal interpretation. [HB, SE]

IMPROVISATION

2 Credits/Units

INSTRUMENTAL

MUSC 193

11 hours of lecture / 22 hours of lab

Combination of woodwinds and brasses organized as performing groups.

Experience in ensemble playing. Familiarization with literature for ensembles. [HB, SE]

ENSEMBLE

2 Credits/Units

JAZZ

MUSC 195

11 hours of lecture / 22 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. [HB, SE]

ENSEMBLE

2 Credits/Units

JAZZ

MUSC 196

11 hours of lecture / 22 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. [HB, SE]

ENSEMBLE

2 Credits/Units

JAZZ

MUSC 197

11 hours of lecture / 22 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. [HB, SE]

ENSEMBLE

2 Credits/Units

INTERMEDIATE

MUSC 201

22 hours of lecture

Prerequisite: MUSC 101 or consent of Instructional Unit.

Intermediate-level study of the piano. [HB, SE]

PIANO**CLASS**

2 Credits/Units

ADVANCED	PIANO	CLASS	CLARK	COLLEGE	CHORALE
MUSC 202		2 Credits/Units	MUSC 237		2 Credits/Units
22 hours of lecture			11 hours of lecture / 22 hours of lab		
Prerequisite: MUSC 201 or consent of Instructional Unit.			Prerequisite: Audition or consent of Instructional Unit.		
A continuation of instruction from Intermediate Piano. Baroque, classic, romantic, and contemporary repertoire, jazz stylings and fake books. [HB, SE]			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. [HB, SE] [PNP]		
INTERMEDIATE	GUITAR	CLASS	CLARK	COLLEGE	CHORALE
MUSC 210		2 Credits/Units	MUSC 238		2 Credits/Units
22 hours of lecture			11 hours of lecture / 22 hours of lab		
Prerequisite: MUSC 110 or consent of Instructional Unit.			Prerequisite: Audition or consent of Instructional Unit.		
Intermediate-level study of the guitar. [HB, SE]			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. [HB, SE] [PNP]		
EAR	TRAINING	4	CLARK	COLLEGE	CHORALE
MUSC&221		1 Credit/Unit	MUSC 239		2 Credits/Units
22 hours of lab			11 hours of lecture / 22 hours of lab		
Prerequisite: MUSC 123.			Prerequisite: Audition or consent of Instructional Unit.		
Continuation of MUSC 123. Trains students to write what they hear in harmonic and polyphonic textures. Examples coordinated with theory classes. [HB, SE]			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. [HB, SE] [PNP]		
EAR	TRAINING	5	CLARK	COLLEGE	CHORALE
MUSC&222		1 Credit/Unit	MUSC 250		2 Credits/Units
22 hours of lab			11 hours of lecture / 22 hours of lab		
Prerequisite: MUSC 221.			Prerequisite: Audition or consent of Instructional Unit.		
Trains students to write what they hear in harmonic and polyphonic textures. Examples coordinated with theory classes. [HB, SE]			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. [HB, SE] [PNP]		
EAR	TRAINING	6	ORCHESTRA		
MUSC&223		1 Credit/Unit	MUSC 251		2 Credits/Units
22 hours of lab			11 hours of lecture / 22 hours of lab		
Prerequisite: MUSC 222.			Performance of orchestral literature from a variety of periods and styles. [HB, SE]		
Trains students to write what they hear in harmonic and polyphonic textures. Examples coordinated with theory classes. [HB, SE]			ORCHESTRA		
MUSIC	THEORY	IV	MUSC 252		2 Credits/Units
MUSC&231		3 Credits/Units	11 hours of lecture / 22 hours of lab		
33 hours of lecture			Performance of orchestral literature from a variety of periods and styles. [HB, SE]		
Concurrent enrollment in MUSC& 221 required.			ORCHESTRA		
Prerequisite: MUSC 143 or consent of division.			MUSC 253		2 Credits/Units
Extended chromatic chords, borrowed chords, Neapolitan 6th chords, augmented 6th chords, and study of two part inventions and fugue. [HA, SE]			11 hours of lecture / 22 hours of lab		
MUSIC	THEORY	V	Prerequisite: Audition or consent of Instructional Unit.	CHORAL	ENSEMBLE
MUSC&232		3 Credits/Units	Performance of choral music from a variety of periods and styles written for women's voices. [HB, SE] [PNP]		2 Credits/Units
33 hours of lecture			WOMEN'S		
Concurrent enrollment in MUSC& 222 required.			MUSC 254		2 Credits/Units
Prerequisite: MUSC 231 or consent of Instructional Unit.			11 hours of lecture / 22 hours of lab		
Study of altered dominants, chromatic mediants, variation form, sonata form, and rondo form. [HA, SE]			Prerequisite: Audition or consent of Instructional Unit.		
MUSIC	THEORY	VI	Performance of choral music from a variety of periods and styles written for women's voices. [HB, SE] [PNP]	CHORAL	ENSEMBLE
MUSC&233		3 Credits/Units	WOMEN'S		
33 hours of lecture			MUSC 255		2 Credits/Units
Concurrent enrollment in MUSC& 223 required.			11 hours of lecture / 22 hours of lab		
Prerequisite: MUSC 232 or consent of Instructional Unit.			Prerequisite: Audition or consent of Instructional Unit.		
Extensions of harmonic language and compositional style of the 20th/21st century, including atonal forms. [HA, SE]			Performance of choral music from a variety of periods and styles written for women's voices. [HB, SE] [PNP]		

WOMEN'S	CHORAL	ENSEMBLE	CONCERT	BAND
MUSC 255		2 Credits/Units	MUSC 281	2 Credits/Units
11 hours of lecture / 22 hours of lab			11 hours of lecture / 22 hours of lab	
Prerequisite: Audition or consent of Instructional Unit.			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. [HB, SE]	
APPLIED		VOICE		
MUSC 270		1 Credit/Unit		
11 hours of lecture				
Prerequisite: Written consent of Instructional Unit required.				
Private voice lessons. [HB, SE]				
APPLIED		VOICE	CONCERT	BAND
MUSC 271		1 Credit/Unit	MUSC 282	2 Credits/Units
11 hours of lecture			11 hours of lecture / 22 hours of lab	
Prerequisite: Written consent of Instructional Unit required.			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. [HB, SE]	
Private voice lessons. [HB, SE]				
APPLIED		VOICE		
MUSC 272		1 Credit/Unit		
11 hours of lecture				
Prerequisite: Written consent of Instructional Unit required.				
Private voice lessons. [HB, SE]			CONCERT	CHOIR
APPLIED		PIANO	MUSC 283	2 Credits/Units
MUSC 273		1 Credit/Unit	11 hours of lecture / 22 hours of lab	
11 hours of lecture			Prerequisite: Audition or consent of Instructional Unit.	
Prerequisite: MUSC 201 and consent of Instructional Unit.			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. [HB, SE]	
Private piano lessons. For students with some previous keyboard experience. [HB, SE]				
APPLIED		PIANO	CONCERT	CHOIR
MUSC 274		1 Credit/Unit	MUSC 284	2 Credits/Units
11 hours of lecture			11 hours of lecture / 22 hours of lab	
Prerequisite: MUSC 201 and consent of Instructional Unit.			Prerequisite: Audition or consent of Instructional Unit.	
Private piano lessons. For students with some previous keyboard experience. [HB, SE]			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. [HB, SE]	
APPLIED		PIANO	CONCERT	CHOIR
MUSC 275		1 Credit/Unit	MUSC 285	2 Credits/Units
11 hours of lecture			11 hours of lecture / 22 hours of lab	
Prerequisite: MUSC 201 and consent of Instructional Unit.			Prerequisite: Audition or consent of Instructional Unit.	
Private piano lessons. For students with some previous keyboard experience. [HB, SE]			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. [HB, SE]	
CONCERT		BAND		
MUSC 280		2 Credits/Units		
11 hours of lecture / 22 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. [HB, SE]				
			SPECIAL	PROJECTS
			MUSC 290	5 Credits/Units
			Prerequisite: Consent of Instructional Unit.	
			Opportunity to plan, organize and complete special projects approved by the department. [HB, GE]	

JAZZ MUSC 295 11 hours of lecture / 22 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. [HB, SE]	ENSEMBLE 2 Credits/Units	APPLIED MUSCA106 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private guitar lessons. [HB, SE]	INSTRUMENT:GUITAR 1 Credit/Unit
		APPLIED MUSCA107 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private clarinet lessons. [HB, SE]	INSTRUMENT:CLARINET 1 Credit/Unit
JAZZ MUSC 296 11 hours of lecture / 22 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. [HB, SE]	ENSEMBLE 2 Credits/Units	APPLIED MUSCA108 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private bass lessons. [HB, SE]	INSTRUMENT:BASS 1 Credit/Unit
		APPLIED MUSCA109 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private horn lessons. [HB, SE]	INSTRUMENT:HORN 1 Credit/Unit
JAZZ MUSC 297 11 hours of lecture / 22 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. [HB, SE]	ENSEMBLE 2 Credits/Units	APPLIED MUSCA110 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private bassoon lessons. [HB, SE]	INSTRUMENT:BASSOON 1 Credit/Unit
		APPLIED MUSCA111 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private trombone lessons. [HB, SE]	INSTRUMENT:TROMBONE 1 Credit/Unit
APPLIED MUSCA101 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private flute lessons. [HA, SE]	INSTRUMENT:FLUTE 1 Credit/Unit	APPLIED MUSCA112 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private sax lessons. [HB, SE]	INSTRUMENT:SAX 1 Credit/Unit
		APPLIED MUSCA113 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private percussion lessons. [HB, SE]	INSTRUMENT:PERCUSSION 1 Credit/Unit
APPLIED MUSCA102 11 hours of lecture Prerequisite: Written consent of Instructional Unit. Private violin lessons. [HB, SE]	INSTRUMENT:VIOLIN 1 Credit/Unit	APPLIED MUSCA114 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private oboe lessons. [HB, SE]	INSTRUMENT:OBOE 1 Credit/Unit
		APPLIED MUSCA115 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private euphonium lessons. [HB, SE]	INSTRUMENT:EUPHONIUM 1 Credit/Unit
APPLIED MUSCA103 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private cello lessons. [HB, SE]	INSTRUMENT:CELLO 1 Credit/Unit	APPLIED MUSCA116 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private tuba lessons. [HB, SE]	INSTRUMENT:TUBA 1 Credit/Unit
APPLIED MUSCA104 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private viola lessons. [HB, SE]	INSTRUMENT:VIOLA 1 Credit/Unit		
APPLIED MUSCA105 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private trumpet lessons. [HB, SE]	INSTRUMENT:TRUMPET 1 Credit/Unit		

APPLIED MUSCA131 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private flute lessons. Continuation of MUSCA 101. [HB, SE]	INSTRUMENT:FLUTE 1 Credit/Unit	APPLIED MUSCA142 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private sax lessons. Continuation of MUSCA 112. [HB, SE]	INSTRUMENT:SAX 1 Credit/Unit
APPLIED MUSCA132 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private violin lessons. Continuation of MUSCA 102. [HB, SE]	INSTRUMENT:VIOLIN 1 Credit/Unit	APPLIED MUSCA143 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private percussion lessons. Continuation of MUSCA 113. [HB, SE]	INSTRUMENT:PERCUSSION 1 Credit/Unit
APPLIED MUSCA133 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private cello lessons. Continuation of MUSCA 103. [HB, SE]	INSTRUMENT:CELLO 1 Credit/Unit	APPLIED MUSCA144 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private oboe lessons. Continuation of MUSCA 114. [HB, SE]	INSTRUMENT:OBOE 1 Credit/Unit
APPLIED MUSCA134 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private viola lessons. Continuation of MUSCA 104. [HB, SE]	INSTRUMENT:VIOLA 1 Credit/Unit	APPLIED MUSCA145 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private euphonium lessons. Continuation of MUSCA 115. [HB, SE]	INSTRUMENT:EUPHONIUM 1 Credit/Unit
APPLIED MUSCA135 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private trumpet lessons. Continuation of MUSCA 105. [HB, SE]	INSTRUMENT:TRUMPET 1 Credit/Unit	APPLIED MUSCA146 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private tuba lessons. Continuation of MUSCA 116. [HB, SE]	INSTRUMENT:TUBA 1 Credit/Unit
APPLIED MUSCA136 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private guitar lessons. Continuation of MUSCA 106. [HB, SE]	INSTRUMENT:GUITAR 1 Credit/Unit	APPLIED MUSCA171 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private flute lessons. Continuation of MUSCA 131. [HB, SE]	INSTRUMENT:FLUTE 1 Credit/Unit
APPLIED MUSCA137 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private clarinet lessons. Continuation of MUSCA 107. [HB, SE]	INSTRUMENT:CLARINET 1 Credit/Unit	APPLIED MUSCA172 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private violin lessons. Continuation of MUSCA 132. [HB, SE]	INSTRUMENT:VIOLIN 1 Credit/Unit
APPLIED MUSCA138 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private bass lessons. Continuation of MUSCA 108. [HB, SE]	INSTRUMENT:BASS 1 Credit/Unit	APPLIED MUSCA173 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private cello lessons. Continuation of MUSCA 133. [HB, SE]	INSTRUMENT:CELLO 1 Credit/Unit
APPLIED MUSCA139 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private horn lessons. Continuation of MUSCA 109. [HB, SE]	INSTRUMENT:HORN 1 Credit/Unit	APPLIED MUSCA174 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private viola lessons. Continuation of MUSCA 134. [HB, SE]	INSTRUMENT:VIOLA 1 Credit/Unit
APPLIED MUSCA140 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private bassoon lessons. Continuation of MUSCA 110. [HB, SE]	INSTRUMENT:BASSOON 1 Credit/Unit	APPLIED MUSCA175 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private trumpet lessons. Continuation of MUSCA 135. [HB, SE]	INSTRUMENT:TRUMPET 1 Credit/Unit
APPLIED MUSCA141 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private trombone lessons. Continuation of MUSCA 111. [HB, SE]	INSTRUMENT:TROMBONE 1 Credit/Unit	APPLIED MUSCA176 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private guitar lessons. Continuation of MUSCA 136. [HB, SE]	INSTRUMENT:GUITAR 1 Credit/Unit

APPLIED MUSCA177 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private clarinet lessons. Continuation of MUSCA 137. [HB, SE]	INSTRUMENT:CLARINET 1 Credit/Unit	APPLIED MUSCA202 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private violin lessons. Continuation of MUSCA 172. [HB, SE]	INSTRUMENT:VIOLIN 1 Credit/Unit
APPLIED MUSCA178 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private bass lessons. Continuation of MUSCA 138. [HB, SE]	INSTRUMENT:BASS 1 Credit/Unit	APPLIED MUSCA203 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private cello lessons. Continuation of MUSCA 173. [HB, SE]	INSTRUMENT:CELLO 1 Credit/Unit
APPLIED MUSCA179 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private horn lessons. Continuation of MUSCA 139. [HB, SE]	INSTRUMENT:HORN 1 Credit/Unit	APPLIED MUSCA204 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private viola lessons. Continuation of MUSCA 174. [HB, SE]	INSTRUMENT:VIOLA 1 Credit/Unit
APPLIED MUSCA180 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private bassoon lessons. Continuation of MUSCA 140. [HB, SE]	INSTRUMENT:BASSOON 1 Credit/Unit	APPLIED MUSCA205 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private trumpet lessons. Continuation of MUSCA 175. [HB, SE]	INSTRUMENT:TRUMPET 1 Credit/Unit
APPLIED MUSCA181 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private trombone lessons. Continuation of MUSCA 141. [HB, SE]	INSTRUMENT:TROMBONE 1 Credit/Unit	APPLIED MUSCA206 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private guitar lessons. Continuation of MUSCA 176. [HB, SE]	INSTRUMENT:GUITAR 1 Credit/Unit
APPLIED MUSCA182 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private sax lessons. Continuation of MUSCA 142. [HB, SE]	INSTRUMENT:SAX 1 Credit/Unit	APPLIED MUSCA207 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private clarinet lessons. Continuation of MUSCA 177. [HB, SE]	INSTRUMENT:CLARINET 1 Credit/Unit
APPLIED MUSCA183 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private percussion lessons. Continuation of MUSCA 143. [HB, SE]	INSTRUMENT:PERCUSSION 1 Credit/Unit	APPLIED MUSCA208 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private bass lessons. Continuation of MUSCA 178. [HB, SE]	INSTRUMENT:BASS 1 Credit/Unit
APPLIED MUSCA184 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private oboe lessons. Continuation of MUSCA 144. [HB, SE]	INSTRUMENT:OBOE 1 Credit/Unit	APPLIED MUSCA209 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private horn lessons. Continuation of MUSCA 179. [HB, SE]	INSTRUMENT:HORN 1 Credit/Unit
APPLIED MUSCA185 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private euphonium lessons. Continuation of MUSCA 145. [HB, SE]	INSTRUMENT:EUPHONIUM 1 Credit/Unit	APPLIED MUSCA210 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private bassoon lessons. Continuation of MUSCA 180. [HB, SE]	INSTRUMENT:BASSOON 1 Credit/Unit
APPLIED MUSCA186 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private tuba lessons. Continuation of MUSCA 146. [HB, SE]	INSTRUMENT:TUBA 1 Credit/Unit	APPLIED MUSCA211 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private trombone lessons. Continuation of MUSCA 181. [HB, SE]	INSTRUMENT:TROMBONE 1 Credit/Unit
APPLIED MUSCA201 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private flute lessons. Continuation of MUSCA 171. [HB, SE]	INSTRUMENT:FLUTE 1 Credit/Unit	APPLIED MUSCA212 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private sax lessons. Continuation of MUSCA 182. [HB, SE]	INSTRUMENT:SAX 1 Credit/Unit

APPLIED MUSCA213 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private percussion lessons. Continuation of MUSCA 183. [HB, SE]	INSTRUMENT:PERCUSSION 1 Credit/Unit	APPLIED MUSCA238 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private clarinet lessons. Continuation of MUSCA 208. [HB, SE]	INSTRUMENT:BASS 1 Credit/Unit
APPLIED MUSCA214 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private oboe lessons. Continuation of MUSCA 184. [HB, SE]	INSTRUMENT:OBOE 1 Credit/Unit	APPLIED MUSCA239 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private horn lessons. Continuation of MUSCA 209. [HB, SE]	INSTRUMENT:HORN 1 Credit/Unit
APPLIED MUSCA215 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private euphonium lessons. Continuation of MUSCA 185. [HB, SE]	INSTRUMENT:EUPHONIUM 1 Credit/Unit	APPLIED MUSCA240 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private bassoon lessons. Continuation of MUSCA 210. [HB, SE]	INSTRUMENT:BASSOON 1 Credit/Unit
APPLIED MUSCA216 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private tuba lessons. Continuation of MUSCA 186. [HB, SE]	INSTRUMENT:TUBA 1 Credit/Unit	APPLIED MUSCA241 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private trombone lessons. Continuation of MUSCA 211. [HB, SE]	INSTRUMENT:TROMBONE 1 Credit/Unit
APPLIED MUSCA231 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private flute lessons. Continuation of MUSCA 201. [HB, SE]	INSTRUMENT:FLUTE 1 Credit/Unit	APPLIED MUSCA242 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private sax lessons. Continuation of MUSCA 212. [HB, SE]	INSTRUMENT:SAX 1 Credit/Unit
APPLIED MUSCA232 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private violin lessons. Continuation of MUSCA 202. [HB, SE]	INSTRUMENT:VIOLIN 1 Credit/Unit	APPLIED MUSCA243 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private percussion lessons. Continuation of MUSCA 213. [HB, SE]	INSTRUMENT:PERCUSSION 1 Credit/Unit
APPLIED MUSCA233 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private cello lessons. Continuation of MUSCA 203. [HB, SE]	INSTRUMENT:CELLO 1 Credit/Unit	APPLIED MUSCA244 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private oboe lessons. Continuation of MUSCA 214. [HB, SE]	INSTRUMENT:OBOE 1 Credit/Unit
APPLIED MUSCA234 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private viola lessons. Continuation of MUSCA 204. [HB, SE]	INSTRUMENT:VIOLA 1 Credit/Unit	APPLIED MUSCA245 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private euphonium lessons. Continuation of MUSCA 215. [HB, SE]	INSTRUMENT:EUPHONIUM 1 Credit/Unit
APPLIED MUSCA235 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private trumpet lessons. Continuation of MUSCA 205. [HB, SE]	INSTRUMENT:TRUMPET 1 Credit/Unit	APPLIED MUSCA246 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private tuba lessons. Continuation of MUSCA 216. [HB, SE]	INSTRUMENT:TUBA 1 Credit/Unit
APPLIED MUSCA236 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private guitar lessons. Continuation of MUSCA 206. [HB, SE]	INSTRUMENT:GUITAR 1 Credit/Unit	APPLIED MUSCA271 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private flute lessons. Continuation of MUSCA 231. [HB, SE]	INSTRUMENT:FLUTE 1 Credit/Unit
APPLIED MUSCA237 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private clarinet lessons. Continuation of MUSCA 207. [HB, SE]	INSTRUMENT:CLARINET 1 Credit/Unit	APPLIED MUSCA272 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private violin lessons. Continuation of MUSCA 232. [HB, SE]	INSTRUMENT:VIOLIN 1 Credit/Unit

APPLIED MUSCA273 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private cello lessons. Continuation of MUSCA 233. [HB, SE]	INSTRUMENT:CELLO 1 Credit/Unit	APPLIED MUSCA284 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private oboe lessons. Continuation of MUSCA 244. [HB, SE]	INSTRUMENT:OBOE 1 Credit/Unit
APPLIED MUSCA274 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private viola lessons. Continuation of MUSCA 234. [HB, SE]	INSTRUMENT:VIOLA 1 Credit/Unit	APPLIED MUSCA285 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private euphonium lessons. Continuation of MUSCA 245. [HB, SE]	INSTRUMENT:EUPHONIUM 1 Credit/Unit
APPLIED MUSCA275 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private trumpet lessons. Continuation of MUSCA 235. [HB, SE]	INSTRUMENT:TRUMPET 1 Credit/Unit	APPLIED MUSCA286 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private tuba lessons. Continuation of MUSCA 246. [HB, SE]	INSTRUMENT:TUBA 1 Credit/Unit
APPLIED MUSCA276 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private guitar lessons. Continuation of MUSCA 236. [HB, SE]	INSTRUMENT:GUITAR 1 Credit/Unit		
APPLIED MUSCA277 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private clarinet lessons. Continuation of MUSCA 237. [HB, SE]	INSTRUMENT:CLARINET 1 Credit/Unit		
APPLIED MUSCA278 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private clarinet lessons. Continuation of MUSCA 238. [HB, SE]	INSTRUMENT:BASS 1 Credit/Unit		
APPLIED MUSCA279 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private horn lessons. Continuation of MUSCA 239. [HB, SE]	INSTRUMENT:HORN 1 Credit/Unit		
APPLIED MUSCA280 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private bassoon lessons. Continuation of MUSCA 240. [HB, SE]	INSTRUMENT:BASSOON 1 Credit/Unit		
APPLIED MUSCA281 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private trombone lessons. Continuation of MUSCA 241. [HB, SE]	INSTRUMENT:TROMBONE 1 Credit/Unit		
APPLIED MUSCA282 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private sax lessons. Continuation of MUSCA 242. [HB, SE]	INSTRUMENT:SAX 1 Credit/Unit		
APPLIED MUSCA283 11 hours of lecture Prerequisite: Written consent of Instructional Unit required. Private percussion lessons. Continuation of MUSCA 243. [HB, SE]	INSTRUMENT:PERCUSSION 1 Credit/Unit		

NETWORK TECHNOLOGY (NTEC)

IP SUBNETTING

NTEC 103

22 hours of lecture / 22 hours of lab

Prerequisite: A grade of 'C' or better in CAP 042 or eligible for MATH 089 or MATH 092.

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. No prior computer or network knowledge or experience is required. [GE]

INFORMATION SECURITY FUNDAMENTALS

NTEC 125

22 hours of lecture / 22 hours of lab

Prerequisite: A grade of 'C' or better in NTEC 103, or consent of Instructional Unit.

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.

WINDOWS MTA SERVER ADMINISTRATION FUNDAMENTALS

NTEC 132

22 hours of lecture / 22 hours of lab

Prerequisite: A grade of 'C' or better or concurrent enrollment in NTEC 103 or consent of Instructional Unit.

Help students prepare for the Microsoft Technology Associate (MTA) Exam by building an understanding of server installation, server roles, active directory, storage, server performance management, and server maintenance. [GE]

CLOUD COMPUTING FUNDAMENTALS

NTEC 142

22 hours of lecture / 22 hours of lab

Prerequisite: A grade of 'C' or better in NTEC 103, or consent of Instructional Unit.

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. [GE]

LINUX

NTEC 151

44 hours of lecture / 44 hours of lab

Prerequisite: Eligibility for MATH 030 or MATH 092, or consent of Instructional Unit.

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. [GE]

COOPERATIVE WORK EXPERIENCE

NTEC 199

198 hours of clinical

Prerequisite: Completion of or concurrent enrollment in HDEV 195 and 198 or 200 and consent of Instructional Unit.

Supervised work experience in an approved job. Completion of specific learning objectives and employee evaluation. [GE] [PNP]

DEPLOYING LINUX SERVER SERVICES

NTEC 220

44 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in NTEC 151, or consent of Instructional Unit.

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. [GE]

CISCO CCNA 1:INTRODUCTION TO NETWORKS

NTEC 221

44 hours of lecture / 44 hours of lab

Prerequisite: Completion of NTEC 103 with a grade of 'C' or better, or concurrent enrollment in NTEC 103, or consent of Instructional Unit.

Introduction to the architecture, structure, functions, components, and models of the Internet, and other computer networks. Covers the principles and structure of IP addressing. The fundamentals of Ethernet concepts, media, and operations are introduced to provide foundation for the basics of network administration. Students will learn to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. Part one of a two-course sequence that helps prepare students for the CCENT (Cisco Certified Entry Networking Technician) industry certification, and part one of a four-course sequence that helps prepare students for the CCNA Routing Switching industry certification. [GE]

CISCO CCNA 2: ROUTING & SWITCHING ESSENTIALS

NTEC 222

44 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in NTEC 221, or consent of Instructional Unit.

Learn the architecture, components, and operations of routers and switches in a small network, how to configure a router and a switch for basic functionality; troubleshoot routers and switches; resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. Part two of a two-course sequence that helps prepare students for the CCENT (Cisco Certified Entry Networking Technician) industry certification, and part two of a four-course sequence that helps prepare students for the CCNA Routing Switching industry certification. [GE]

CISCO NTEC 223 44 hours of lecture / 44 hours of lab Prerequisite: A grade of 'C' or better in NTEC 222, or consent of Instructional Unit. Describes the architecture, components, and operations of routers and switches in a larger and more complex network. Students learn the following: how to configure routers and switches for advanced functionality; to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, STP, and VTP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement DHCP and DNS operations in a network. This course is part-three of a four-course sequence that helps prepare students for the CCNA Routing Switching industry certification. [GE]	CCNA 3: 6 Credits/Units	SCALING NETWORKS	MICROSOFT NTEC 234 44 hours of lecture / 44 hours of lab Prerequisite: A grade of 'C' or better in NTEC 132 and NTEC 103, or consent of Instructional Unit. Covers installing and configuring Windows Server. Introduction to Active Directory Domain Services, Managing Active Directory Domain Services Objects, Automating Active Directory Domain Services Administrative, Implementing Networking Services, Implementing Local Storage, Implementing File and Print Services, Implementing Group Policy, Implementing Server Virtualization with Hyper-V. This course is part-one of a three-course sequence that helps prepare students for the MCSA (Microsoft Certified Solutions Associate) industry certification. [GE]	SERVER	ADMINISTRATOR	1 6 Credits/Units
CISCO NTEC 224 44 hours of lecture / 44 hours of lab Prerequisite: A grade of 'C' or better in NTEC 222, or consent of Instructional Unit. Discusses the WAN technologies and network services required by converged applications in a complex network. Enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students team the following: how to configure and troubleshoot network devices, resolve common issues with data link protocols; develop the knowledge and skills needed to implement IPSec and virtual private network (VPN) operations in a complex network. This course is part-four of a four-course sequence that helps prepare students for the CCNA Routing Switching industry certification. [GE]	CCNA 4: 6 Credits/Units	CONNECTING NETWORKS	MICROSOFT NTEC 235 44 hours of lecture / 44 hours of lab Prerequisite: A grade of 'C' or better in both NTEC 132 and NTEC 103, or consent of Instructional Unit. Covers the following: administration of Windows Server; Implementing a Group Policy infrastructure; managing User and Service Accounts; maintaining Active Directory Domain Services; configuring and troubleshooting DNS; configuring and troubleshooting Remote Access; installing, configuring and troubleshooting the Network Policy Server role; optimizing File Services; increasing File System Security; implementing Update Management. This course is part-two of a three-course sequence that helps prepare students for the MCSA (Microsoft Certified Solutions Associate) industry certification. [GE]	SERVER	ADMINISTRATOR	2 6 Credits/Units
CISCO NTEC 225 44 hours of lecture / 44 hours of lab Prerequisite: A grade of 'C' or better in NTEC 222, or consent of Instructional Unit. Preparation to obtain CCNA Security Certification. Course meets the needs of IT professionals responsible for network security. Developing skills for job roles such as Network Security Specialists, Security Administrators, and Network Security Support Engineers. Skills include installation, troubleshooting and monitoring of network devices to maintain integrity, confidentiality and availability of data and devices. Competency in the technologies that Cisco uses in its security structure. Introduction to core security technologies as well as how to develop security policies and mitigate risks. [GE]	CCNA	SECURITY 6 Credits/Units	MICROSOFT NTEC 236 44 hours of lecture / 44 hours of lab Prerequisite: A grade of 'C' or better in NTEC 132 and NTEC 103, or consent of Instructional Unit. Covers configuration of advanced Windows Server services. Focus on implementing the following: Advanced Network Service, Advanced File Services, Dynamic Access Control, Network Load Balancing, Failover Clustering, Disaster Recovery, AD CS and AD FS. This course is part-three of a three-course sequence that helps prepare students for the MCSA (Microsoft Certified Solutions Associate) industry certification. [GE]	SERVER	ADMINISTRATOR	3 6 Credits/Units
CISCO NTEC 226 44 hours of lecture / 44 hours of lab Prerequisite: A grade of 'C' or better in NTEC 222, or consent of Instructional Unit. Preparation to obtain Cisco CCNA Voice certification. Required skill set for specialized job roles in voice technologies such as voice technologies administrator, voice engineer, and voice manager; in-demand skills in VoIP technologies such as IP PBX, IP telephony, handset, call control, and voicemail solutions; and exposure to the Cisco Unified Communications architecture and design covering mobility, presence, and TelePresence applications. [GE]	CCNA	VOICE 6 Credits/Units	MICROSOFT NTEC 238 22 hours of lecture / 44 hours of lab Prerequisite: A grade of 'C' or better or concurrent enrollment in NTEC 103 and NTEC 132, or consent of Instructional Unit. Covers the skills necessary for installing and configuring Microsoft's SQL Server along with setting up a database and associated objects. Course focuses upon the role of Database Administrator in managing procedures to ensure that data is consistently, reliably available, and recoverable. Students will manage SQL Server instances and databases. Also includes optimizing and troubleshooting SQL Server, implementing basic security and data integrity measures, and granting data access privileges to individual users. [GE]	SQL	SERVER	ADMINISTRATION 4 Credits/Units

CYBERSECURITY PROGRAMMING & SCRIPTING FOUNDATION

NTEC 361

5 Credits/Units

33 hours of lecture / 44 hours of lab

Prerequisite: Consent of Instructional Unit.

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

33 hours of lecture / 44 hours of lab

Prerequisite: Successful completion of NTEC 361 with a grade of 'C' or better, or approval of Instructional Unit.

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

33 hours of lecture / 44 hours of lab

Prerequisite: Successful completion of both NTEC 361 and NTEC 364 with a grade of 'C' or better, or approval of Instructional Unit.

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

33 hours of lecture / 44 hours of lab

Prerequisite: Successful completion of NTEC 321 with a grade of 'C' or better, or approval of Instructional Unit.

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

33 hours of lecture / 44 hours of lab

Prerequisite: Successful completion of both NTEC 361 and NTEC 371 with a grade of 'C' or better, or approval of Instructional Unit.

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

33 hours of lecture / 44 hours of lab

Prerequisite: Successful completion of both NTEC 361 and NTEC 371 with a grade of 'C' or better, or approval of Instructional Unit.

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 a organization. May prepare students to attain the industry certification CompTIA CySA+. [GE]

CYBERSECURITY OPERATIONS

NTEC 475

5 Credits/Units

33 hours of lecture / 44 hours of lab

Prerequisite: Successful completion of both NTEC 472 and NTEC 473 with a grade of 'C' or better, or approval of Instructional Unit.

Focuses on how to monitor, detect and respond to cybersecurity threats with specific instruction in cyptography, host-based security analysis, security monitoring, computer forensics, attack methods and incident reporting and handling. May prepare students to attain the industry certification Cisco CCNA CyberOps. [GE]

CAPSTONE PROJECT

NTEC 499

5 Credits/Units

33 hours of lecture / 44 hours of lab

Prerequisite: Successful completion of both NTEC 472 and NTEC 473 with a grade of 'C' or better, or approval of Instructional Unit.

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 students's experience in developing and implementing the capstone project. [GE]

NURSING (NURS)

FOUNDATIONS OF NURSING CONCEPTS

NURS 110

2 Credits/Units

22 hours of lecture

Concurrent enrollment in NURS 111, 113, 114, and 115 and ENGL 112.

Prerequisite: Consent of Instructional Unit, completion of MATH 146 and PSYC 100 with a grade of 'C' or better.

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]

FOUNDATIONS OF CLINICAL NURSING

NURS 111

2 Credits/Units

44 hours of lab

Concurrent enrollment is required in NURS 110, 113, 114, 115 and ENGL 112.

Prerequisite: Consent of Instructional Unit, completion of MATH 146 and PSYC with a grade of 'C' or better.

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

NURS 113

3 Credits/Units

33 hours of lecture

Concurrent enrollment in NURS 110, 111, 114, 115 and ENGL 112.

Prerequisite: Consent of Instructional Unit, completion of MATH 146 and PSYC 100 with a grade of 'C' or better.

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

NURS 114

1 Credit/Unit

22 hours of lab

Concurrent enrollment in NURS 110, 111, 113, 115 and ENGL 112.

Prerequisite: Consent of Instructional Unit, completion of MATH 146 and PSYC 100 with a grade of 'C' or better.

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

NURS 115

2 Credits/Units

44 hours of lab

Concurrent enrollment in NURS 110, 111, 113, 114 and ENGL 112.

Prerequisite: Consent of Instructional Unit, completion of MATH 146 and PSYC 100 with a grade of 'C' or better.

Supervised skills practice and competency achievement in the nursing skills lab. These courses are linked; failure in one course, with a grade of 'C-' or lower or 'U', requires repeat of all concurrent courses. [GE]

FAMILY-CENTERED

NURS 122

22 hours of lecture

Concurrent enrollment in NURS 123, 127, 128, PSYC 122 and 124.

Prerequisite: A grade of 'C' or better in NURS 110, 113, 114, 115 and ENGL 112 and a 'S' grade in NURS 111 or consent of Instructional Unit. Theory and the nursing process related to the care of healthy children and their families. Physiologic and psychological adaption during the childbearing and childrearing years, emphasis on the nurse's role in health promotion and education in the care of culturally diverse families in the community. These courses are linked; failure in one course, with a grade of 'C-' or lower or 'U', requires repeat of all concurrent courses. [GE]

FAMILY-CENTERED CLINICAL NURSING

NURS 123

4 Credits/Units

88 hours of lab

Concurrent enrollment in NURS 122, 127, 128, PSYC 122 and 124.

Prerequisite: A grade of 'C' or better in NURS 110, 113, 114, 115 and ENGL 112 and an 'S' in NURS 111 or consent of Instructional Unit.

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

NURS 127

1 Credit/Unit

22 hours of lab

Concurrent enrollment in NURS 122, 123, 128, PSYC 122 and 124.

Prerequisite: A grade of 'C' or better in NURS 110, 113, 114, 115 and ENGL 112 and an 'S' in NURS 111 or consent of Instructional Unit.

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

NURS 128

2 Credits/Units

44 hours of lab

Concurrent enrollment in NURS 122, 123, 127, PSYC 122 and 124.

Prerequisite: A grade of 'C' or better in NURS 110, 113, 114, 115 and ENGL 112 and an 'S' in NURS 111 or consent of Instructional Unit.

Practice and nursing skill achievement of NURS 127 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 NURSING CONCEPTS 1

NURS 135

3 Credits/Units

33 hours of lecture

Concurrent enrollment in NURS 136, 137, 138 and NUTR 139.

Prerequisites: A grade of 'C' or better in NURS 122, 127, 128, PSYC 122 and 124 and an 'S' in NURS 123 or consent of Instructional Unit.

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	I	MEDICAL/SURGICAL	CLINICAL	NURSING	II
NURS 136		5 Credits/Units		NURS 242		8 Credits/Units	
110 hours of lab				176 hours of lab			
Concurrent enrollment in NURS 135, 137, 138 and NUTR 139.				Concurrent enrollment in NURS 241 and NUTR 240.			
Prerequisite: A grade of 'C' or better in NURS 122, 127, 128, PSYC 122 and 124 and an 'S' in NURS 123 or consent of Instructional Unit.				Prerequisite: A grade of 'C' or better in NURS 135, 137, 138 and NUTR 139 and an 'S' in NURS 136 or consent of Instructional Unit.			
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]				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]			
NURSING	SKILLS	APPLICATION	III	MEDICAL-SURGICAL	NURSING	CONCEPTS	III
NURS 137		1 Credit/Unit		NURS 251		2 Credits/Units	
22 hours of lab				22 hours of lecture			
Concurrent enrollment in NURS 135, 136, 138 and NUTR 139.				Concurrent enrollment in NURS 252 and PSYC 253.			
Prerequisite: A grade of 'C' or better in NURS 122, 127, 128, PSYC 122 and 124 and an 'C' in NURS 123 or consent of Instructional Unit.				Prerequisite: A grade of 'C' or better in NURS 241 and NUTR 240 and an 'S' in NURS 242 or consent of Instructional Unit.			
Instruction and practice of nursing skills 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]				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]			
NURSING	SKILLS	LAB	III	ADVANCED	HOLISTIC	CLINICAL	NURSING
NURS 138		2 Credits/Units		NURS 252		8 Credits/Units	
44 hours of lab				176 hours of lab			
Concurrent enrollment in NURS 135, 136, 137 and NUTR 139.				Concurrent enrollment in NURS 251 and PSYC 253.			
Prerequisite: A grade of 'C' or better in NURS 122, 127, 128, PSYC 122 and 124 and an 'S' in NURS 123 or consent of Instructional Unit.				Prerequisite: A grade of 'C' or better in NURS 241 and NUTR 240 and an 'S' in NURS 242 or consent of Instructional Unit.			
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]				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]			
COOPERATIVE	WORK	EXPERIENCE		PROFESSIONAL	LEADERSHIP	TRANSITION	TO PRACTICE
NURS 199		5 Credits/Units		NURS 261		1 Credit/Unit	
165 hours of clinical				11 hours of lecture			
Prerequisite: Consent of Instructional Unit.				Concurrent enrollment in NURS 262, 263, 264 and ENGL 273.			
Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]				Prerequisite: A grade of 'C' or better in NURS 251 and PSYC 253 and an 'S' in NURS 252, or consent of Instructional Unit.			
MEDICAL-SURGICAL	NURSING	CONCEPTS	II				
NURS 241		3 Credits/Units					
33 hours of lecture							
Concurrent enrollment in NURS 242 and NUTR 240.							
Prerequisite: A grade of 'C' or better in NURS 135, 137, 138 and NUTR 139 and an 'S' in NURS 136 or consent of Instructional Unit.							
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]							

PROFESSIONAL	LEADERSHIP	SENIOR	PRACTICUM
NURS 262			6 Credits/Units

132 hours of lab

Concurrent enrollment in NURS 261, 263, 264 and ENGL 273.

Prerequisite: A grade of 'C' or better in NURS 251 and PSYC 253 and an 'S' in NURS 252, or consent of Instructional Unit.

Advanced client care in a specialty of the student's interest. Clinical areas include acute care, critical care and care of clients in the community setting. Emphasis is on developing leadership skills and independent practice as a professional nurse. 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	ROLE	IN	COMMUNITY	SERVICE
NURS 263				1 Credit/Unit

22 hours of lab

Concurrent enrollment in NURS 261, 262, 264 and ENGL 273.

Prerequisite: A grade of 'C' or better in NURS 251 and PSYC 253 and an 'S' in NURS 252, or consent of Instructional Unit.

Emphasis is on the role of the nurse serving her/his community as a volunteer and client advocate. The student will perform community service and work with agencies that provide services in our community for our at risk populations. The student also will have the opportunity to mentor novice peers in the nursing program. These courses are linked; failure in one, with a grade of 'C-' or lower or 'U', requires repeat of all concurrent courses. [GE]

CAPSTONE	NCLEX	PREPARATION
NURS 264		1 Credit/Unit

11 hours of lecture

Concurrent enrollment in NURS 261, 262, 263 and ENGL 273.

Prerequisite: A grade of 'C' or better in NURS 251 and PSYC 253 and an 'S' in NURS 252, or consent of Instructional Unit.

A ten-hour course geared toward helping the student prepare for the NCLEX test. This course will include strategies for success, key critical-thinking strategies, as well as review of content, questions and rationales. These courses are linked; failure in one course, with a grade of 'C-' or lower or 'U', requires repeat of all concurrent courses. [GE]

SELECTED	TOPICS
NURS 280	5 Credits/Units

55 hours of lecture

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 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the faculty of the department. [GE]

NUTRITION (NUTR)

NUTRITION

NUTR&101

3 Credits/Units

33 hours of lecture

Prerequisite: A grade of 'C' or better in CHEM 121 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. [NS]

NUTRITION

IN

HEALTHCARE

I

NUTR 139

1 Credit/Unit

11 hours of lecture

Concurrent enrollment in NURS 135, 136, 137, 138.

Prerequisite: A grade of 'C' or better in NUTR 101 and successful completion of the 1st and 2nd terms of the Nursing Program.

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.

NUTRITION

IN

HEALTHCARE

II

NUTR 240

1 Credit/Unit

11 hours of lecture

Concurrent enrollment in NURS 241 and 242.

Prerequisite: A grade of 'C' or better in NUTR 101, NUTR 139 and successful completion of the first year of the Nursing Program.

Builds on the concepts introduced in NUTR 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. [NS]

PHARMACY TECHNICIAN (PHAR)

OVERVIEW OF PHARMACY

22 hours of lecture

Overview of pharmacy with particular focus on the technician in pharmacy practice settings including job roles, resources and ethical standards of practice. [GE]

A MINI DOSE OF PHARMACY

11 hours of lecture

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]

INTRODUCTION TO PHARMACY

44 hours of lecture

Prerequisite: A grade of 'C' or better in BMED 110 and consent of Instructional Unit.

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]

PHARMACY CALCULATIONS

33 hours of lecture

Prerequisite: Consent of HEOC advisor.

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]

PHARMACOLOGY I

55 hours of lecture

Prerequisite: A grade of 'C' or better in PHAR 105.

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]

PHARMACY PRACTICE AND TECHNOLOGY

33 hours of lecture / 22 hours of lab

Prerequisite: Consent of HEOC advisor.

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]

PHARMACY EXTERNSHIP I

PHAR 118

132 hours of clinical

Concurrent enrollment in PHAR 119 required.

Prerequisite: A grade of 'C' or better in PHAR 105 and consent of Instructional Unit.

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]

PHARMACY EXTERNSHIP SEMINAR I

PHAR 119

22 hours of lecture

Concurrent enrollment in PHAR 118 and written consent of Instructional Unit.

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]

PHARMACOLOGY II

PHAR 122

55 hours of lecture

Prerequisite: Completion of PHAR 112 and written consent of the Instructional Unit required.

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]

PHARMACY LAW

PHAR 123

22 hours of lecture

Prerequisite: written consent of Instructional Unit required.

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]

PHARMACY COMPOUNDING

PHAR 127

33 hours of lecture

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]

PHARMACY EXTERNSHIP II

PHAR 128

132 hours of clinical

Concurrent enrollment in PHAR 129 required.

Prerequisite: Completion of PHAR 105 and written consent of Instructional Unit required.

Continued practical, on-the-job instruction in the knowledge base required of a pharmacy (technician) in the work force. [GE]

PHARMACY	EXTERNSHIP	SEMINAR	II
PHAR 129			2 Credits/Units
22 hours of lecture			
Concurrent enrollment in PHAR 128 and written consent of Instructional Unit required.			
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]			
SELECTED			TOPICS
PHAR 280			5 Credits/Units
55 hours of lecture			
Selected topics in pharmacy. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, is is repeatable for credit. Specific topics are listed in the quarterly class schedule. [GE] [PNP]			
SPECIAL			PROJECTS
PHAR 290			15 Credits/Units
Prerequisite: Consent of Instructional Unit required.			
Opportunity to plan, organize and complete special projects approved by the faculty of the department. [GE] [PNP]			

PHILOSOPHY (PHIL)

INTRODUCTION TO PHILOSOPHY PHIL&101 5 Credits/Units

55 hours of lecture

Introduction to some of the major questions, controversies, and problems discussed in philosophy. Examine various philosophical theses by developing reasoned arguments for and against them. Learn through this course not only what some other people have thought about interesting questions, but also how to do philosophy - how to think well and critically about important matters concerning action and belief. [HA, SE]

CRITICAL THINKING PHIL&115 5 Credits/Units

55 hours of lecture

Focus on looking at the arguments encountered on a daily basis, through news, social media, friends and family members, etc. Learn to consider these encounters critically, determining whether an argument is actually being given, is worth accepting, and/or contains fallacious reasoning. Learn about mistakes in logic and reasoning, how to determine who counts as an expert, and what makes a claim justified. Consider common roadblocks to critical thinking, including confirmation bias, stereotyping, and more. A central purpose is to learn about tools to independently assess daily information to help make better decisions both personally and on a social level. [HB][PNP]

TRADITIONAL LOGIC PHIL&117 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 093 or 095 or 096, or eligibility for college level math, or equivalent placement demonstrated is required.

Focus on sentence logic with proofs and Aristotelian logic with Venn Diagrams. Includes formulation of propositions, logical inference, syllogisms (categorical, hypothetical, etc.), and fallacies. [SE]

SYMBOLIC LOGIC PHIL&120 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 093, MATH 095, MATH 096 or eligibility for college level math.

Rigorous examination of logical theory emphasizing modern symbolic or formal logic. Content includes truth-functional logic, propositional logic with proofs, and predicate logic with quantifiers and proofs. Applications include computer science, cognitive science, artificial intelligence, linguistics, mathematics, law, engineering, and philosophy. [HA, Q, SE]

INTRODUCTION TO ANCIENT AND MEDIEVAL PHILOSOPHY PHIL 215 5 Credits/Units

55 hours of lecture

Introduces ancient western philosophy from its Greek roots through its development in Socrates, Plato, and Aristotle, and others. Examine various philosophical theses critically and explore longstanding arguments still relevant today that pertain to morality, social justice, and the limits of what one can know. [HA, SE]

INTRODUCTION TO EARLY MODERN PHILOSOPHY PHIL 216 5 Credits/Units

55 hours of lecture

Introduction to selected great thinkers and ideas of the sixteenth, seventeenth and eighteenth centuries, including the collapse of the medieval synthesis leading to the rise of the modern scientific mentality, followed by an examination of the philosophical struggle between the rationalism and the empiricism. [HA, SE]

INTRODUCTION TO LATE MODERN PHILOSOPHY PHIL 217 5 Credits/Units

55 hours of lecture

Introduces major thinkers and ideas of the nineteenth and twentieth century. Various philosophical movements are explored, including German idealism, process philosophy, political philosophy, and existentialism. [HA, SE]

ETHICS PHIL 240 5 Credits/Units

55 hours of lecture

Introduction to ethical behavior that is grounded in thoughtful philosophical argument. Learn about ethical theories from a variety of philosophical backgrounds and learn to apply the values prominent in the theories to everyday action. [HA, SE]

PHILOSOPHY OF RELIGION PHIL 251 5 Credits/Units

55 hours of lecture

Explores the concept of God, the nature of religious experience, the difficulties inherent in the use of religious language, classical proofs for the existence of God, the relationship between faith and reason, and the problem of evil. [HA, SE]

SELECTED TOPICS PHIL 280 5 Credits/Units

55 hours of lecture

Varying topics in philosophy, as listed in the term class schedule. May be repeated for credit. [HA, SE]

SPECIAL PROJECTS PHIL 290 5 Credits/Units

Prerequisite: Completion of two philosophy courses and consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [HA, GE]

ETHICS IN MANAGEMENT PHIL 420 5 Credits/Units

55 hours of lecture

Examines the role of ethics and social responsibility in the management of public and private sectors of organizations and businesses. Theoretical concepts in business ethics will be applied to real-world situations based on challenges managers face. An emphasis on contemporary trends and corporate responsibilities with respect to ethical, legal, economic, regulatory conditions, and the needs of stakeholders in the global marketplace will be included. Case studies will be used to explore real-world ethical and social responsibility situations. [HA]

PHLEBOTOMY (PHLE)

PHLEBOTOMY	EDUCATION	W/LAB
PHLE 115		3 Credits/Units

22 hours of lecture / 22 hours of lab

Prerequisite: High school completion or equivalent; ENGL 098 or higher (or placement into ENGL 101 or higher); consent from the Credentials Office and acceptance into the Phlebotomy Program.

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

11 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better or concurrent enrollment in PHLE 115 and consent of department chair.

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

150 hours of clinical

Prerequisite: A grade of 'C' or better in PHLE 115 and PHLE 116, approval of all requirements for clinical placement, and consent of the department chair.

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. Cannot receive credit for both PHLE 197 and HEOC 197. [GE]

PHLEBOTOMY	CLINICAL	SEMINAR
PHLE 198		1 Credit/Unit

11 hours of lecture

Concurrent enrollment in PHLE 197 is required.

Prerequisite: A grade of 'C' or better in PHLE 115 and PHLE 116, approval of all requirements for clinical placement, and consent of the department chair.

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]

PHYSICAL EDUCATION (PE)

CARDIO

PE 100

22 hours of lab

Basic group exercise to music, primarily targeting cardiovascular conditioning. [PE,SE][PNP]

INTRODUCTION

PE 101

22 hours of lab

Develop fitness through running, emphasizing various training methods, individual program development, and health benefits. [PE,SE][PNP]

FITNESS

PE 102

44 hours of lab

Emphasis on walking programs, including interval training, power walking, and race walking. Walking technique and health benefits also discussed. [PE,SE][PNP]

BENCH

PE 103

22 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. [PE,SE][PNP]

CIRCUIT

PE 104

22 hours of lab

An individualized systematic approach to cardiovascular fitness through the use of multiple weight machines and aerobic equipment. Pre and post fitness assessments conducted. [PE,SE][PNP]

SPEED,

PE 107

22 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. [PE,SE][PNP]

INDEPENDENT

PE 108

44 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. [PE,SE][PNP]

FUNCTIONAL

PE 111

22 hours of lab

Utilizing functional movement patterns to improve core stabilization, posture, and balance. [PE,SE][PNP]

STRENGTH

PE 112

22 hours of lab

Utilizing body weight and portable fitness equipment to improve muscular strength, tone, and flexibility. [PE,SE][PNP]

CONDITIONING

1 Credit/Unit

RUNNING

1 Credit/Unit

WALKING

2 Credits/Units

AEROBICS

1 Credit/Unit

FITNESS

1 Credit/Unit

QUICKNESS

1 Credit/Unit

PROGRAM

2 Credits/Units

FITNESS

1 Credit/Unit

STRETCH

1 Credit/Unit

TOTAL

PE 113

44 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. [PE,SE][PNP]

WEIGHT

PE 115

22 hours of lab

Strength development through basic exercise and lift techniques. Beginning theories and techniques in fitness conditioning, body building, and power lifting. [PE,SE][PNP]

FITNESS

PE 116

22 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. [PE,SE][PNP]

WEIGHT

PE 117

44 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. [PE,SE][PNP]

CROSS

PE 118

44 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. [PE,SE][PNP]

CARDIO

PE 120

22 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. [PE,SE][PNP]

YOGA

PE 121

22 hours of lab

Introduction to hatha yoga (physical yoga) with an emphasis on postures, breathing and body-mind centering. [PE,SE][PNP]

HEALTHY

PE 123

22 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,SE][PNP]

BODY

CONDITIONING

2 Credits/Units

TRAINING-GENERAL

1 Credit/Unit

CENTER

BASICS

1 Credit/Unit

TRAINING-POWER

LIFTING

2 Credits/Units

TRAINING

2 Credits/Units

KICKBOXING-BEGINNING

1 Credit/Unit

1 Credit/Unit

HEART-BEGINNING

1 Credit/Unit

PILATES-BEGINNING

PE 124 1 Credit/Unit
 22 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. [PE,SE][PNP]

ROCK

PE 125 1 Credit/Unit
 22 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. [PE,SE][PNP]

KETTLEBELL

PE 126 1 Credit/Unit
 22 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. [HPE,PE,SE][PNP]

BOOT

PE 129 2 Credits/Units
 44 hours of lab
 Introduction to physical fitness for military purposes; emphasis on basic conditioning and discipline. This course is open to all students. [PE,SE][PNP]

BASKETBALL

PE 140 1 Credit/Unit
 22 hours of lab
 Ball handling, shooting, passing, offensive and defensive techniques, rules, strategy and competitive play. [PE,SE][PNP]

BOWLING

PE 143 1 Credit/Unit
 22 hours of lab
 Techniques, styles of play, rules of courtesy, scoring and competitive games. [PE,SE][PNP]

FENCING-FOIL

PE 147 1 Credit/Unit
 22 hours of lab
 Movement of fencing plus defense, offense, rules of bouting, officiating, and competition. [PE,SE][PNP]

GOLF

PE 148 1 Credit/Unit
 22 hours of lab
 Fundamentals and practice of golf. Focuses on full-swing fundamentals, chipping, pitching, putting, golf strategies, and rules of the game. [PE,SE][PNP]

SOCCER

PE 150 1 Credit/Unit
 22 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. [PE,SE][PNP]

SOFTBALL

PE 153 1 Credit/Unit
 22 hours of lab
 Skills, rules and team play. [PE,SE][PNP]

TENNIS

PE 155 1 Credit/Unit
 22 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. [PE,SE][PNP]

VOLLEYBALL

PE 158 1 Credit/Unit
 22 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. [PE,SE][PNP]

BILLIARDS-BEGINNING

PE 162 1 Credit/Unit
 22 hours of lab
 Introduction to fundamental skills and strategies. Development of individual skills including stance, form, technique, vocabulary, and strategy. [PE,SE][PNP]

ULTIMATE

PE 163 1 Credit/Unit
 22 hours of lab
 Ultimate Frisbee fundamentals: individual skill development, rules, game play, and strategies. [PE,SE][PNP]

AQUA

PE 171 1 Credit/Unit
 22 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. [PE,SE][PNP]

SCUBA-BEGINNING

PE 173 2 Credits/Units
 11 hours of lecture / 22 hours of lab
Prerequisite: Swimming ability.
 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. [PE,SE][PNP]

BEGINNING

PE 175 1 Credit/Unit
 22 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. [PE,SE][PNP]

SWIMMING-INTERMEDIATE

PE 176 1 Credit/Unit
 22 hours of lab
 Continuation of PE 175 for students who need additional instruction and practice to improve and increase their swimming skill and confidence. [PE,SE][PNP]

FRISBEE-BEGINNING

1 Credit/Unit

EXERCISE

1 Credit/Unit

SWIMMING

1 Credit/Unit

SWIM PE 179 22 hours of lab Prerequisite: Ability to swim comfortably in the deep end of pool. Emphasizes swimming fitness through lap swimming. Students will participate in a workout designed to address their particular fitness and skill level. [PE,SE][PNP]	CONDITIONING-BEGINNING 1 Credit/Unit	SPEED, PE 207 22 hours of lab Prerequisite: PE 107. Additional drills to further advance personal ability in running, quickness, speed. Includes advanced plyometric training techniques. [PE,SE][PNP]	AGILITY, AND	QUICKNESS 1 Credit/Unit
HIKING PE 182 22 hours of lab Experience hiking off-campus on designated trails. Course emphasizes basic safety and survival skills and practices low-impact hiking methods. [PE,SE][PNP]	1 Credit/Unit	INDEPENDENT PE 208 44 hours of lab Prerequisite: PE 108. 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. [PE,SE][PNP]	FITNESS - INTERMEDIATE 2 Credits/Units	
ROWING-BEGINNING PE 183 22 hours of lab Prerequisite: Must pass swimming test prior to first class. 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. [PE,SE][PNP]	1 Credit/Unit	FUNCTIONAL PE 211 22 hours of lab Prerequisite: PE 111. Continuation of PE 111. Utilizing functional movement patterns to improve core stabilization, posture, and balance. More advanced techniques introduced. [PE,SE][PNP]	FITNESS 1 Credit/Unit	
COOPERATIVE PE 199 165 hours of clinical Prerequisite: Consent of Instructional Unit. Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [PE,GE][PNP]	WORK EXPERIENCE 5 Credits/Units	STRENGTH PE 212 22 hours of lab Prerequisite: PE 112. Continuation of PE 112. Utilizing body weight and portable fitness equipment to improve muscular strength, tone, and flexibility. [PE,SE][PNP]	AND STRETCH 1 Credit/Unit	
CARDIO PE 200 22 hours of lab Prerequisite: PE 100. Intermediate group exercise to music, primarily targeting cardiovascular conditioning. [PE,SE][PNP]	CONDITIONING-INTERMEDIATE 1 Credit/Unit	TOTAL PE 213 44 hours of lab Prerequisite: PE 113. Continuation of individualized conditioning program for developing the various components of fitness. Additional focus on learning principles of fitness to create personalized workouts. [PE,SE][PNP]	BODY CONDITIONING-INT 2 Credits/Units	
FITNESS PE 202 44 hours of lab Prerequisite: PE 102. Intermediate fitness walking with emphasis on walking programs and technique. [PE,SE][PNP]	WALKING-INTERMEDIATE 2 Credits/Units	TRIATHLON PE 214 44 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. [PE,SE][PNP]	TRAINING 2 Credits/Units	
BENCH PE 203 22 hours of lab Prerequisite: PE 103. Intermediate high-intensity/low impact exercise program using a bench step promoting overall body strength and cardiovascular fitness. [PE,SE][PNP]	STEP AEROBICS-INTERMEDIATE 1 Credit/Unit	WEIGHT PE 215 22 hours of lab Designed for the student who is interested in a more in-depth approach to advanced weight training exercises, programs, and systems. [PE,SE][PNP]	TRAINING-GENERAL II 1 Credit/Unit	
CIRCUIT PE 204 22 hours of lab Prerequisite: PE 104. An individualized systematic approach to cardiovascular fitness through the use of multiple weight machines and aerobic equipment. Pre and post fitness assessments conducted. [PE,SE][PNP]	FITNESS - INTERMEDIATE 1 Credit/Unit	FITNESS PE 216 22 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. [PE,SE][PNP]	CENTER-INTERMEDIATE 1 Credit/Unit	

WEIGHT	TRAINING-POWER	LIFTING	II	BASKETBALL	CONDITIONING-INTERMEDIATE
PE 217			2 Credits/Units	PE 242	2 Credits/Units
44 hours of lab				44 hours of lab	
Prerequisite: PE 117.				Prerequisite: PE 142.	
Continued application of skill and conditioning level. Application of workout design and training theory will also be covered and applied.				Further emphasis on fitness through running, related skills, and weight training activities. [PE,SE][PNP]	
Assessment of personal fitness parameters. [PE,SE][PNP]				BOWLING-INTERMEDIATE	
CARDIO		KICKBOXING-INT		PE 243	1 Credit/Unit
PE 220		1 Credit/Unit		22 hours of lab	
22 hours of lab				Prerequisite: PE 143.	
Prerequisite: PE 120.				Advanced instruction in all phases of bowling including league play and competition. [PE,SE][PNP]	
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. [PE,SE][PNP]				FENCING-FOIL, SABRE/EPEE	
YOGA-INTERMEDIATE				PE 246	1 Credit/Unit
PE 221			1 Credit/Unit	22 hours of lab	
22 hours of lab				Movements of all three weapons of fencing. Emphasizes defense, offense, rules, officiating and competition. [PE,SE][PNP]	
Prerequisite: PE 121.				FENCING-FOIL	INTERMEDIATE
A continuation of Hatha yoga technique. Students will practice more advanced postures and a deeper exploration of body-mind centering. [PE,SE][PNP]				PE 247	1 Credit/Unit
HEALTHY		HEART-INTERMEDIATE		22 hours of lab	
PE 223		1 Credit/Unit		Prerequisite: PE 147.	
22 hours of lab				Skill refinement and advanced technique for experienced foil fencers. [PE,SE][PNP]	
Prerequisite: PE 123.				GOLF-INTERMEDIATE	
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]				PE 248	1 Credit/Unit
PILATES-INTERMEDIATE				22 hours of lab	
PE 224			1 Credit/Unit	More advanced instruction on golf swing, short game, and golf strategies. [PE,SE][PNP]	
22 hours of lab				SOCCER-INTERMEDIATE	
Prerequisite: PE 124.				PE 250	1 Credit/Unit
Continuation of Pilates method of conditioning needed to increase core strength and stabilization, improve coordination, balance, postural awareness, and increase muscular flexibility and stamina. [PE,SE][PNP]				22 hours of lab	
ROCK		CLIMBING-INTERMEDIATE		Prerequisite: PE 150.	
PE 225		1 Credit/Unit		Focus on learning and applying more advanced individual skills utilizing small and large groups to demonstrate more advanced team tactics. [PE,SE][PNP]	
22 hours of lab				SOCCER-INTERCOLLEGIATE	ADVANCED
Prerequisite: Completion of PE 125 or consent of Instructional Unit.				PE 251	2 Credits/Units
Learn advanced rock climbing methods. Bouldering technique and Lead Climbing skills will be taught, taking the student beyond the skills learned in PE 125. [PE,SE][PNP]				44 hours of lab	
BOOT		CAMP-INTERMEDIATE		Learn and apply offensive and defensive skills and tactics through intercollegiate play. [PE,SE][PNP]	
PE 229		2 Credits/Units		SOFTBALL-INTERMEDIATE	
44 hours of lab				PE 253	1 Credit/Unit
Prerequisite: PE 129.				22 hours of lab	
Continuation of physical fitness for military purposes; emphasis on basic conditioning, discipline, and leadership. This course is open to all students. [PE,SE][PNP]				Prerequisite: PE 153.	
BASKETBALL-INTERMEDIATE				Continuation of skills, team play, offensive and defensive strategy, and team organization. [PE,SE][PNP]	
PE 240			1 Credit/Unit	TENNIS-INTERMEDIATE	
22 hours of lab				PE 255	1 Credit/Unit
Prerequisite: PE 140.				22 hours of lab	
Continuation of skills, practice, and competitive play. [PE,SE][PNP]				Prerequisite: PE 155.	
				Refinement of tennis skills, advanced game strategies and strokes. Observe and assist 100 level students. [PE,SE][PNP]	
				VOLLEYBALL-INTERMEDIATE	
				PE 258	1 Credit/Unit
				22 hours of lab	
				Prerequisite: PE 158.	
				Further development of individual skills, team offenses and defenses learned in the beginning level PE 158. [PE,SE][PNP]	

VOLLEYBALL-POWER

PE 260 1 Credit/Unit
 22 hours of lab
Prerequisite: PE 158 and PE 258 or competitive experience.
 Higher level of volleyball for the advanced player utilizing advanced skills and drills. Emphasis will be placed on advanced offensive and defensive strategies. [PE,SE][PNP]

BILLIARDS-INTERMEDIATE

PE 262 1 Credit/Unit
 22 hours of lab
Prerequisite: PE 162.
 Continuation of PE 162. Further development of more complex shots and strategies (English, duck, bunk, diamond). Provide assistance to the 100 level students with their basic stance and technique. [PE,SE][PNP]

ULTIMATE

PE 263 1 Credit/Unit
 22 hours of lab
Prerequisite: PE 163.
 Continuation of individual skill development, rules, game play, and strategies for the intermediate level ultimate Frisbee player. [PE,SE][PNP]

AQUA

PE 271 1 Credit/Unit
 22 hours of lab
Prerequisite: PE 171.
 Continuation of water exercise conditioning through stretching, flexibility, abdominal and back strength. [PE,SE][PNP]

SWIMMING-STROKE

PE 275 1 Credit/Unit
 22 hours of lab
Prerequisite: PE 175.
 Review Red Cross swimming strokes, water survival and safety skills. For the swimmer who is comfortable in deep water and can swim 25 yards. [PE,SE][PNP]

SWIM

PE 279 1 Credit/Unit
 22 hours of lab
Prerequisite: PE 179.
 Continued practice of swimming fitness through lap swimming. Students will participate in a workout designed to address their particular fitness and skill level. [PE,SE,GE][PNP]

SELECTED

PE 280 5 Credits/Units
 55 hours of lecture
 The course focuses on 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 for different topics. Individual topics are listed in the term class schedules. [PE, SE]

HIKING-INTERMEDIATE

PE 282 1 Credit/Unit
 22 hours of lab
 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. [PE,SE,GE][PNP]

ROWING-INTERMEDIATE

PE 283 1 Credit/Unit
 22 hours of lab
Prerequisite: A grade of 'S' in PE 183.
 Further development of rowing technique, tactics and fitness development. [PE,SE][PNP]

SPECIAL

PE 290 5 Credits/Units
Prerequisite: Consent of Instructional Unit.
 Opportunity to plan, organize and complete special projects approved by the department. [GE]

INTRODUCTION	TO	SPORTS	OFFICIATING
PE 295			2 Credits/Units

22 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.

PHYSICAL EDUCATION DANCE (PEDNC)

BALLET-BEGINNING

PEDNC130 1 Credit/Unit
22 hours of lab
Beginning ballet technique including barre and centre work. [PE, SE]

BALLROOM DANCE: MIXED
PEDNC131 3 Credits/Units
66 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.

BALLROOM DANCE: SMOOTH
PEDNC132 1 Credit/Unit
22 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. [PE,SE]

BALLROOM DANCE: LATIN
PEDNC133 1 Credit/Unit
22 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. [PE,SE]

CONTEMPORARY DANCE
PEDNC134 1 Credit/Unit
22 hours of lab
Fundamentals and techniques of modern dance and rhythmic self-expression. [PE,SE]

SWING DANCE-BEGINNING
PEDNC135 1 Credit/Unit
22 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. [PE,SE]

MODERN JAZZ
PEDNC136 1 Credit/Unit
22 hours of lab
Beginning Modern Jazz technique. Students will study fundamental moves and learn a routine. [PE,SE]

HIP-HOP DANCE
PEDNC137 1 Credit/Unit
22 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. [PE,SE]

TAP DANCE
PEDNC138 1 Credit/Unit
22 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. [PE,SE]

ZUMBA
PEDNC140 1 Credit/Unit
22 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. [PE,SE]

HULA
PEDNC141 1 Credit/Unit
22 hours of lab
Focus on Hawaiian traditional dance forms. [PE,SE]

AFRICAN DANCE
PEDNC142 1 Credit/Unit
22 hours of lab
Introduction to African dance, which focuses on drumming, rhythm, and music predominantly of West Africa. [PE,SE]

BOLLYWOOD
PEDNC143 1 Credit/Unit
22 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. [PE,SE]

IRISH DANCE
PEDNC144 1 Credit/Unit
22 hours of lab
Introduction to Irish dance, focusing on soft shoe and Ceili (group) dances. Dances include reel, jig, and hornpipe. [PE,SE]

BELLY DANCE
PEDNC145 1 Credit/Unit
22 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. [PE,SE]

BALLET-INTERMEDIATE
PEDNC230 1 Credit/Unit
22 hours of lab
Prerequisite: PEDNC 130.
Stronger techniques with more advanced steps and combinations including toe. [PE,SE]

BALLROOM DANCE-INTERMEDIATE: MIXED
PEDNC231 3 Credits/Units
66 hours of lab
Prerequisite: PEDNC 131.
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. [PE,SE]

BALLROOM DANCE-INTERMEDIATE: SMOOTH
PEDNC232 1 Credit/Unit
22 hours of lab
Prerequisite: PEDNC 131 or PEDNC 132.
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. [PE,SE]

BALLROOM PEDNC233 22 hours of lab Prerequisite: PEDNC 131 or PEDNC 132. 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. [PE,SE]	DANCE-INTERMEDIATE:	LATIN 1 Credit/Unit	AFRICAN PEDNC242 22 hours of lab Prerequisite: PEDNC 142. Continuation of African dance, which focuses on drumming, rhythm, and music predominantly of West Africa. [PE,SE]	DANCE	INTERMEDIATE 1 Credit/Unit
CONTEMPORARY PEDNC234 22 hours of lab Prerequisite: PEDNC 134. Intermediate techniques with opportunities for individual and group composition. [PE,SE]	DANCE-INTERMEDIATE	1 Credit/Unit	BOLLYWOOD PEDNC243 22 hours of lab Prerequisite: PEDNC 143. 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. [PE,SE]		INTERMEDIATE 1 Credit/Unit
SWING PEDNC235 22 hours of lab Prerequisite: PEDNC 135. 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. [PE,SE]	DANCE-INTERMEDIATE	1 Credit/Unit	IRISH PEDNC244 22 hours of lab Prerequisite: PEDNC 144. Intermediate Irish Dance course on more advanced soft shoe solo and Ceili (group) dances. Dances include the reel, jig, and hornpipe. [PE,SE]	DANCE-INTERMEDIATE	1 Credit/Unit
MODERN PEDNC236 22 hours of lab Prerequisite: PEDNC 136. Refinement of jazz technique and skill improvement. [PE,SE]	JAZZ-INTERMEDIATE	1 Credit/Unit	BELLY PEDNC245 22 hours of lab Prerequisite: PEDNC 145. Continuation of the skills learned in PEDNC 145, plus new variations and intermediate study of Middle Eastern Dance techniques. [PE,SE]	DANCE-INTERMEDIATE	1 Credit/Unit
HIP-HOP PEDNC237 22 hours of lab Prerequisite: PEDNC 137. Intermediate study of dance techniques, floor combinations, balance, and longer dance routines of hip hop dance. Develop more confidence and skill through practice. [PE,SE]	DANCE-INTERMEDIATE	1 Credit/Unit			
TAP PEDNC238 22 hours of lab Prerequisite: PEDNC 138. 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. [PE,SE]	DANCE-INTERMEDIATE	1 Credit/Unit			
ZUMBA PEDNC240 66 hours of lab Prerequisite: PEDNC 140. 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. [PE,SE]	INTERMEDIATE	3 Credits/Units			
HULA PEDNC241 22 hours of lab Prerequisite: PEDNC 141. Focus on Hawaiian traditional dance forms. [PE,SE]	INTERMEDIATE	1 Credit/Unit			

PHYSICAL EDUCATION EXCERCISE SCIENCE (PEEXS)

CARE AND PREVENTION OF ATHLETIC INJURIES PEEXS291

3 Credits/Units

22 hours of lecture / 22 hours of lab

Prerequisite: A grade of 'C' or better in FT 150, BIOL 164, or BIOL 251, or consent of Instructional Unit.

Injury prevention in sports through understanding of conditioning, bio-mechanics, taping, bandaging, nutrition, immediate post-injury care, and rehabilitation of sports injury. [SE] [PNP]

MENTAL PERFORMANCE IN SPORTS PEEXS293

3 Credits/Units

33 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.

[SE] [PNP]

SPORT IN SOCIETY PEEXS294

3 Credits/Units

33 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. [PE, SE] [PNP]

INTRODUCTION TO SPORTS OFFICIATING PEEXS295

2 Credits/Units

22 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.

PHYSICAL EDUCATION

MARTIAL ARTS (PEMAR)

T'AI **CHI**
PEMAR150 1 Credit/Unit

22 hours of lab

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. [PE, SE]

MARTIAL **ARTS:** **TAE** **KWON** **DO**
PEMAR151 1 Credit/Unit

22 hours of lab

Tae Kwon Do is a Korean martial art that predominately focuses on kicking. [PE, SE]

MARTIAL **ARTS:** **KUNG** **FU**
PEMAR152 1 Credit/Unit

22 hours of lab

Kung-Fu is a Chinese method of self-defense. Students will learn history, philosophy, basic strikes, blocks, and escapes from various attacks and grabs. [PE, SE]

MARTIAL **ARTS:BRAZILIAN** **JIU-JITSU**
PEMAR153 1 Credit/Unit

22 hours of lab

Brazilian Jiu-Jitsu is a Brazilian sport/self defense that uses grappling, wrestling, and locking techniques. A uniform is required. [PE, SE]

MARTIAL **ARTS:** **JUDO**
PEMAR154 1 Credit/Unit

22 hours of lab

Judo is a close-quarter combat martial art where students learn falling techniques, basic takedowns, escapes, and joint locks. [PE, SE]

SELF **DEFENSE**
PEMAR155 1 Credit/Unit

22 hours of lab

This course is designed to teach the student basic self-defense techniques as well as situational awareness through class participation and discussion. [PE, SE]

T'AI **CHI** **-** **INTERMEDIATE**
PEMAR250 1 Credit/Unit

22 hours of lab

Prerequisite: PEMAR 150.

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. [PE, SE]

MARTIAL **ARTS-INTERMEDIATE:TAE** **KWON** **DO**
PEMAR251 1 Credit/Unit

22 hours of lab

Prerequisite: PEMAR 151.

Tae Kwon Do is a Korean martial art that predominately focuses on kicking. [PE, SE]

MARTIAL **ARTS-INTERMEDIATE:KUNG** **FU**
PEMAR252 1 Credit/Unit

22 hours of lab

Prerequisite: PEMAR 152.

Kung-Fu is a Chinese method of self-defense. Students will learn history, philosophy, basic strikes, blocks, and escapes from various attacks and grabs. [PE, SE]

MARTIAL **ARTS-INTERMEDIATE:BRAZILIAN** **JIU-JITSU**
PEMAR253 1 Credit/Unit

22 hours of lab

Prerequisite: PEMAR 153.

Brazilian Jiu-Jitsu is a Brazilian sport/self defense that uses grappling, wrestling, and locking techniques. A uniform is required. [PE, SE]

MARTIAL **ARTS-INTERMEDIATE:JUDO**
PEMAR254 1 Credit/Unit

22 hours of lab

Prerequisite: PEMAR 154.

Judo is a close-quarter combat martial art where students learn falling techniques, basic takedowns, escapes, and joint locks. [PE, SE]

PHYSICAL SCIENCE (PHSC)

GENERAL

PHSC 101

44 hours of lecture / 22 hours of lab

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. [NS, SE]

PHYSICAL**SCIENCE**

5 Credits/Units

SELECTED

PHSC 280

55 hours of lecture

The course focuses on selected topics in Physical Sciences. Topics vary, and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit for different topics. Individual topics are listed in the quarterly class schedule. [GE]

TOPICS

5 Credits/Units

GENERAL

PHSC 102

44 hours of lecture / 22 hours of lab

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. No prerequisites are required. [NS, SE]

PHYSICAL**SCIENCE**

5 Credits/Units

INTRODUCTION

PHSC 104

44 hours of lecture / 33 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. Cannot receive credit for both PHSC 104 and ENGR 104. [NS, SE]

TO**DESIGN**

5 Credits/Units

OUR

PHSC 106

33 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 098, or eligibility for ENGL 101.

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. [NS, SE]

CHEMICAL**WORLD**

3 Credits/Units

SCIENCE**OF****SCI****FI**

PHSC 110

33 hours of lecture / 44 hours of lab

Prerequisite: Eligibility for MATH 096.

Introduction to the Scientific Method and the principles of Physics, and Chemistry through the investigation of Science Fiction. Learn to distinguish between science and pseudoscience. Through the investigation of science fiction TV shows and films we will establish and investigate both accepted scientific principles and examine and invalidate others. [NS, SE] [PNP]

5 Credits/Units

COOPERATIVE

PHSC 199

99 hours of clinical

Prerequisite: Consent of Instructional Unit.

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]

WORK**EXPERIENCE**

3 Credits/Units

PHYSICS (PHYS)

APPLIED

PHYS 090

44 hours of lecture / 22 hours of lab

Topics include force, motion, torque, energy, power, friction, electricity, magnetism, mechanical advantage, fluids, metric measurement, elasticity, heat, temperature, heat transfer, and heat engines. Open to all students seeking an Applied Science degree.

PHYSICS

PHYS 091

11 hours of lecture

Concurrent enrollment in PHYS & 124 is required.

Methods of problem-solving in physics. [PNP]

PHYSICS

PHYS 092

11 hours of lecture

Concurrent enrollment in PHYS& 125 required.

Methods of problem-solving in physics. [PNP]

PHYSICS

PHYS 093

11 hours of lecture

Concurrent enrollment in PHYS& 126 required.

Methods of problem-solving in physics. [PNP]

PHYSICS

PHYS 094

11 hours of lecture

Concurrent enrollment in PHYS& 221 required.

Methods of problem-solving in physics.

PHYSICS

PHYS 095

11 hours of lecture

Concurrent enrollment in PHYS& 222 required.

Methods of problem-solving in physics.

PHYSICS

PHYS 096

11 hours of lecture

Concurrent enrollment in PHYS& 223 required.

Methods of problem-solving in physics.

PHYSICS

PHYS&100

44 hours of lecture

Concurrent enrollment in PHYS 101 Lab course required.

Prerequisite: MATH 090 or equivalent.

Introduction to basic physics concepts for non-science majors, technical students, or students who desire a PHYS 121 or 221 preparatory course. [NS, SE]

PHYSICS

PHYS&101

33 hours of lab

Concurrent enrollment in PHYS 100 course required or consent of the instructor.

Laboratory study of basic physics concepts for non-science majors, technical students, or students who desire a PHYS 121 or 221 preparatory course. [NS, SE]

PHYSICS

5 Credits/Units

CALCULATIONS

1 Credit/Unit

CALCULATIONS

1 Credit/Unit

CALCULATIONS

1 Credit/Unit

CALCULATIONS

1 Credit/Unit

CALCULATIONS

1 Credit/Unit

CALCULATIONS

1 Credit/Unit

MAJORS

4 Credits/Units

MAJORS

1 Credit/Unit

GENERAL

PHYS&124

33 hours of lab

Concurrent enrollment in PHYS& 134.

Exploration of classical physics topics in mechanics through laboratory experience. [NS, SE]

GENERAL

PHYS&125

33 hours of lab

Concurrent enrollment in PHYS& 135.

Exploration of classical physics topics in fluids, thermodynamics, and sound through laboratory experience. [NS, SE]

GENERAL

PHYS&126

33 hours of lab

Concurrent enrollment in PHYS& 136.

Exploration of classical physics topics in electricity and magnetism, optics, and modern physics through laboratory experience. [NS, SE]

GENERAL

PHYS&134

44 hours of lecture

Concurrent enrollment in PHYS 091 and PHYS& 124 required.

Prerequisite: A grade of 'C' or better in College Trigonometry, and a grade of 'C' or better in or concurrent enrollment in College Algebra.

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. [NS, SE]

GENERAL

PHYS&135

44 hours of lecture

Concurrent enrollment in PHYS& 125 and PHYS 092.

Prerequisite: A grade of 'C' or better in PHYS 134.

Second of a three-term sequence beginning with PHYS 134. Fundamental physical principles of sound, fluids, heat, thermodynamics, electricity, and magnetism. [NS, SE]

GENERAL

PHYS&136

44 hours of lecture

Concurrent enrollment in PHYS& 126 and 093.

Prerequisite: A grade of 'C' or better in PHYS 135.

Third of a three-term sequence beginning with PHYS 134. Topics in electricity, magnetism, atomic and nuclear physics, and optics. [NS, SE]

COOPERATIVE

PHYS 199

99 hours of clinical

Prerequisite: Consent of Instructional Unit.

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]

ENGINEERING

PHYS&231

33 hours of lab

Concurrent enrollment in PHYS& 241.

Students will explore classical physics topics in mechanics through laboratory experience. [NS, SE]

PHYSICS

LAB

1 Credit/Unit

PHYSICS

LAB

1 Credit/Unit

PHYSICS

LAB

1 Credit/Unit

PHYSICS

4 Credits/Units

PHYSICS

4 Credits/Units

PHYSICS

4 Credits/Units

WORK

EXPERIENCE

3 Credits/Units

PHYSICS

LAB

1 Credit/Unit

ENGINEERING	PHYSICS	LAB	II
PHYS&232			1 Credit/Unit

33 hours of lab

Concurrent enrollment in PHYS& 242.

Students will explore classical physics topics in fluids, thermodynamics, and sound through laboratory experience. [NS, SE]

ENGINEERING	PHYSICS	LAB	III
PHYS&233			1 Credit/Unit

33 hours of lab

Concurrent enrollment in PHYS& 243.

Students will explore classical physics topics in electricity and magnetism, optics, and modern topics through laboratory experience. [NS, SE]

ENGINEERING	PHYSICS	I
PHYS&241		4 Credits/Units

44 hours of lecture

Concurrent enrollment in PHYS& 231 and PHYS 094.

Prerequisite: Completion of or concurrent enrollment in MATH 152 (or MATH 211).

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. [NS, SE]

ENGINEERING	PHYSICS	II
PHYS&242		4 Credits/Units

44 hours of lecture

Concurrent enrollment in PHYS& 232 and PHYS 095.

Prerequisite: A grade of 'C' or better in PHYS 241.

Physics topics in fluids, heat, thermodynamics, sound, electricity, and magnetism. Second term of a three-term sequence beginning with PHYS 241. [NS, SE]

ENGINEERING	PHYSICS	III
PHYS&243		4 Credits/Units

44 hours of lecture

Concurrent enrollment in PHYS& 233 and PHYS 096.

Prerequisite: A grade of 'C' or better in PHYS 242.

Topics in electricity, magnetism, atomic and nuclear physics, and optics. Third term of a three-term sequence beginning with PHYS 241. [NS, SE]

SPECIAL	PROJECTS
PHYS 290	5 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

POLITICAL SCIENCE (POLS)

AMERICAN NATIONAL GOVERNMENT AND POLITICS POLS 111 5 Credits/Units

55 hours of lecture

The institutions, structures, and processes that affect the course of politics and public policy at the national level of American government. [SE, SS]

STATE AND LOCAL GOVERNMENT POLS 131 5 Credits/Units

55 hours of lecture

The institutions, structures, and political processes at the state and local levels of government in our federal system. [SE, SS]

COOPERATIVE WORK EXPERIENCE POLS 199 3 Credits/Units

99 hours of clinical

Prerequisite: Consent of Instructional Unit.

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]

INTERNATIONAL RELATIONS POLS&203 5 Credits/Units

55 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. [SE, SS]

THE GEOPOLITICS OF THE MIDDLE EAST POLS 220 5 Credits/Units

55 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 the impact and influence of the rest of the world on the Middle East. Credit not allowed for both POLS 220 and GEOG 220. [SE]

THE GEOPOLITICS OF AFRICA POLS 221 5 Credits/Units

55 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 POLS 221 and GEOG 221. [SE]

THE GEOPOLITICS OF CHINA, JAPAN & EAST ASIA POLS 222 5 Credits/Units

55 hours of lecture

Geo-political survey of China, Japan and East 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. This course will also examine the importance and impact of China, Japan and East Asia on the rest of the world, as well as examine the impact and influence of the rest of the world on China, Japan and East Asia. Credit not allowed for both POLS 222 and GEOG 222. [SE]

THE GEOPOLITICS OF SOUTH AND CENTRAL ASIA POLS 223 5 Credits/Units

55 hours of lecture

Geo-political survey of South 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. This course will also examine the importance and impact of South and Central Asia on the rest of the world, as well as examine the impact and influence of the rest of the world on South and Central Asia. Credit not allowed for both POLS 223 and GEOG 223. [SE]

ENVIRONMENTAL POLITICS POLS 231 5 Credits/Units

55 hours of lecture

Prerequisite: POLS 111, 131 or POLS 203 (or POSC 111, 131 or 211), or consent of Instructional Unit.

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. [SE, SS]

SELECTED TOPICS POLS 280 5 Credits/Units

55 hours of lecture

This course focuses on 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 for different topics. [SE]

SPECIAL PROJECTS POLS 290 5 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

PROFESSIONAL BAKING (PBAK)

ARTISAN

PBAK 110

22 hours of lecture / 154 hours of lab

Concurrent enrollment in PBAK 111.

Prerequisite: Eligible for ENGL 098 and MATH 030 or MATH 092.

Begins with straight doughs and progresses through overnight fermentation, enrichment, pre-ferments, sourdoughs, rye breads, history of bread-making, professionalism in the workplace, safety and sanitation, equipment use and safety, baker's math, weights and measures and note-taking. Valid Washington State food handlers card.

BREADS

9 Credits/Units

EARLY

MORNING

PRODUCT

PBAK 111

22 hours of lecture / 66 hours of lab

Concurrent enrollment in PBAK 110.

Prerequisite: Eligible for ENGL 098 and MATH 030 or MATH 092.

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. Valid Washington State food handlers card.

VIENNOISERIE

PBAK 120

22 hours of lecture / 154 hours of lab

Concurrent enrollment in PBAK 121.

Prerequisite: Eligible for ENGL 098 and MATH 030 or MATH 092.

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 and note-taking. Valid Washington State food handlers card.

9 Credits/Units

COOKIES, BROWNIES, BARS AND QUICK BREADS

PBAK 121

22 hours of lecture / 66 hours of lab

Concurrent enrollment in PBAK 120.

Prerequisite: Eligible for ENGL 098 and MATH 030 or MATH 092.

Covers production of a variety of cookies by method such as bar, rolled, cut, scooped, refrigerator and decorated. Also covered are brownies, layered bars, cheesecake bars and quick breads. Also covers professionalism in the workplace, safety and sanitation, equipment use and safety, baker's math, weights and measures and note-taking. Valid Washington State food handlers card.

5 Credits/Units

BEGINNING

CAKE

DECORATING

PBAK 125

22 hours of lecture / 22 hours of lab

Prerequisite: Consent of Instructional Unit.

Covers the basics of cake decorating. Includes professionalism in the workplace, bakeshop safety and sanitation, equipment use and safety. Basic tools of cake decorating and their applications, cutting, filling, crumb frosting and final frosting a cake, borders, writings, basic flowers, and color scheme will be covered. Valid Washington State food handlers card.

3 Credits/Units

INTERMEDIATE

PBAK 126

22 hours of lecture / 22 hours of lab

Prerequisite: A grade of 'C' or better in PBAK 125.

Continuation of the basics of cake decorating. Covers professionalism in the workplace, bakeshop safety and sanitation, equipment use and safety. The basic tools of cake decorating and their applications, cutting, filling, crumb frosting and final frosting a cake, borders, writings, extended flower working, and color scheme will be covered. Fondant and fondant working tools will be introduced. Valid Washington State food handlers card.

CAKE

DECORATING

3 Credits/Units

ADVANCED

PBAK 127

22 hours of lecture / 22 hours of lab

Prerequisite: A grade of 'C' or better in PBAK 126.

Continuation of the Intermediate Cake Decorating course. Covers professionalism in the workplace, bakeshop safety and sanitation, equipment use and safety. The basic tools of cake decorating and their applications, cutting, filling, crumb frosting and final frosting a cake, borders, writings, basic flowers, and color scheme will be covered. Continued work with fondant and color working. Valid Washington State food handlers card.

CAKE

DECORATING

3 Credits/Units

CAKES,

DESSERTS

AND

TORTES

PBAK 130

22 hours of lecture / 154 hours of lab

Concurrent enrollment in PBAK 131.

Prerequisite: Eligible for ENGL 098 and MATH 030 or MATH 092.

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. Valid Washington State food handlers card.

9 Credits/Units

RETAIL

OPERATIONS

AND

BARISTA

PBAK 131

22 hours of lecture / 66 hours of lab

Concurrent enrollment in PBAK 130.

Prerequisite: Eligible for ENGL 098 and MATH 030 or MATH 092.

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. Valid Washington State food handlers card.

5 Credits/Units

APPLIED

PROFESSIONAL

DEVELOPMENT

PBAK 200

11 hours of lecture / 176 hours of lab

Prerequisite: Successful completion of PBAK 110, PBAK 111, PBAK 120, PBAK 121, PBAK 130 and PBAK 131.

Students will spend two weeks in each of four areas; Artisan bread, Viennoiserie, 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. Valid Washington State food handlers card.

9 Credits/Units

PRODUCTION

PBAK 210

22 hours of lecture / 154 hours of lab

Concurrent enrollment in PBAK 211.

Prerequisite: A grade of 'C' or better in PBAK 200 and eligibility for ENGL 098 and MATH 030 or MATH 092.

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, Viennoiserie, 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. Valid Washington State food handlers card.

CHOCOLATE

PBAK 211

22 hours of lecture / 66 hours of lab

Concurrent enrollment in PBAK 210.

Prerequisite: A grade of 'C' or better in PBAK 200 and eligibility for ENGL 098 and MATH 030 or MATH 092.

Students will learn the origin of chocolate as well as the various types, brands, flavor profiles and qualities of chocolate. Practical application will include tempering chocolate, fillings, shelling and bottoming chocolates. Also covered is professionalism in the workplace, safety and sanitation, equipment use and safety, baker's math, weights and measures and note-taking. Valid Washington State food handlers card.

PASTRY

PBAK 220

22 hours of lecture / 154 hours of lab

Concurrent enrollment in PBAK 221.

Prerequisite: A grade of 'C' or better in PBAK 200 and eligible for ENGL 098 and MATH 030 or MATH 092.

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. Valid Washington State food handlers card.

RETAIL/MERCHANDISING,

PBAK 221

22 hours of lecture / 66 hours of lab

Concurrent enrollment in PBAK 220.

Prerequisite: A grade of 'C' or better in PBAK 200 and eligible for ENGL 098 and MATH 030 or MATH 092.

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. Valid Washington State food handlers card.

BAKING

9 Credits/Units

LAB

5 Credits/Units

BAKING

9 Credits/Units

INVENTORY/PURCHASING

5 Credits/Units

CAPSTONE

PBAK 230

11 hours of lecture / 110 hours of lab

Concurrent enrollment in PBAK 231.

Prerequisite: A grade of 'C' or better in PBAK 200 and eligible for ENGL 098 and MATH 030 or MATH 092.

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. Valid Washington State food handlers card.

INDUSTRY

PBAK 231

132 hours of clinical

Concurrent enrollment in PBAK 230.

Prerequisite: A grade of 'C' or better in PBAK 200 and eligible for ENGL 098 and MATH 030 or MATH 092.

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. Valid Washington State food handlers card.

PROJECT

6 Credits/Units

INTERNSHIP

4 Credits/Units

PROFESSIONAL TECHNICAL COMPUTATIONAL SKILLS (PTCS)

PROFESSIONAL	TECHNICAL	COMPUTATIONAL	SKILLS
PTCS 110			5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in MATH 030 or MATH 092 or CAP 042 or recommending score on placement test.

Intended for students enrolled in career technical education programs. It includes topics from algebra, geometry, statistics, inductive reasoning, and trigonometry with an emphasis on applications and measurement. This course will satisfy the computational requirement for the Certificate of Proficiency, Associate of Applied Science and the Associate of Applied Technology.

55 hours of lecture

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]

PSYCHOLOGY (PSYC)

GENERAL

PSYC&100

55 hours of lecture

Prerequisite: Eligibility for enrollment in ENGL 101.

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. [SE,HR,SS][PNP]

PSYCHOSOCIAL ISSUES IN HEALTH CARE I
PSYC 122 1 Credit/Unit

11 hours of lecture

Concurrent enrollment in NURS 122, NURS 123, NURS 124, NURS 127, NURS 128, and PSYC 124.

Prerequisite: A grade of 'C' or better in PSYC 100, NURS 110, NURS 111, NURS 113, NURS 114, and ENGL 112.

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. [SS]

PSYCHOSOCIAL ISSUES IN HEALTH CARE II
PSYC 124 2 Credits/Units

22 hours of lecture

Concurrent enrollment in NURS 122, NURS 123, NURS 127, and NURS 128.

Prerequisite: A grade of 'C' or better in NURS 110, NURS 111, NURS 113, NURS 114, and NURS 115.

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. [SS]

COOPERATIVE WORK EXPERIENCE
PSYC 199 5 Credits/Units

165 hours of clinical

Prerequisite: Consent of Instructional Unit.

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment in, HDEV 195, 198, or 200 required. [GE]

LIFESPAN PSYCHOLOGY
PSYC&200 5 Credits/Units

55 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. [SE,HR,SS]

SOCIAL PSYCHOLOGY
PSYC 203 5 Credits/Units

55 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. [HR,SE,SS]

PSYCHOSOCIAL ISSUES IN HEALTH CARE III
PSYC 253 2 Credits/Units

22 hours of lecture

Concurrent enrollment in NURS 251 and NURS 252.

Prerequisite: A grade of 'C' or better in NURS 241 and NURS 242.

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. [SS]

PSYCHOLOGY: SELECTED TOPICS
PSYC 280 3 Credits/Units

33 hours of lecture

Prerequisite: PSYC 100 (or PSYC 101) or consent of Instructional Unit.

Selected topics in psychology as listed in the term class schedule. May be repeated for credit. [SE]

SPECIAL PROJECTS
PSYC 290 5 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

ORGANIZATIONAL BEHAVIOR
PSYC 315 5 Credits/Units

55 hours of lecture

Focuses on managing relationships in organizations. Students will gain practical experience in managing teams, resolving conflict, and building professional and effective relationships. Special emphasis will be placed on managing difficult behavioral human situations, whether among employees within the organization or with external stakeholders. [SS]

SOCIOLOGY (SOC)

INTRO TO SOCIOLOGY
SOC& 101 5 Credits/Units

55 hours of lecture

Prerequisite: Eligibility for enrollment in ENGL 101.

Introduces the sociological perspectives that explain human interaction, social institutions, and social change. Examines these social phenomena from a variety of sociological perspectives, including the functionalist, conflict, and symbolic-interactionist. [HR,SE,SS]

MARRIAGE AND FAMILY EXPERIENCES IN THE U.S.
SOC 121 5 Credits/Units

55 hours of lecture

Marriage and family experiences will be examined along with other social institutions that affect the marriage and family relationships in a changing U.S. culture. [HR,SE,SS]

RACE AND ETHNICITY IN THE U.S.
SOC 131 5 Credits/Units

55 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. [HR,SE,SS]

INTRODUCTION TO ISLAM
SOC 141 3 Credits/Units

33 hours of lecture

Introduction to the world of Islam and Muslim populations. Topics include Islam as a way of life in a socio-cultural context and the ways this religion affects the individual, family, and social life in various Islamic societies. Focus on analyzing Islam both in theory and in practice. [SE]

WORLD RELIGIONS
SOC 161 5 Credits/Units

55 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. [HA,SE,SS,GE]

COOPERATIVE WORK EXPERIENCE
SOC 199 5 Credits/Units

165 hours of clinical

Prerequisite: Consent of Instructional Unit.

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. Completion of, or concurrent enrollment HDEV 195, 198 or 200 required. [GE]

SOCIAL PROBLEMS: THE PURSUIT OF SOCIAL JUSTICE
SOC& 201 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in SOC& 101 or PSYC 100 (or SOC 101 or PSYC 101).

Study of the magnitude and consequences of social problems in the US from a sociological; power, privilege and inequity; and cross cultural perspective. Examinations that promote social justice and equity. Topics include: poverty, crime and the US justice system, the environment, racial and economic inequalities, gender identity, substance abuse and terrorism. [HR,SE,SS][PNP]

DEATH AND DYING
SOC 220 3 Credits/Units

33 hours of lecture

A comprehensive survey of death, dying, bereavement, and other losses and their societal impacts upon people. Various cultural attitudes, traditions and changing values surrounding death and dying will be explored. [HR,SE,SS]

DOMESTIC VIOLENCE
SOC 230 5 Credits/Units

55 hours of lecture

Prerequisite: SOC& 101 or PSYC 100 (or SOC 101 or PSYC 101) or WS 101.

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. [SE]

CRIMINOLOGY AND DELINQUENCY
SOC 240 5 Credits/Units

55 hours of lecture

Prerequisite: SOC& 101 or PSYC 100 (or SOC 101 or PSYC 101).

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. [SE]

SOCIOLOGY: SELECTED TOPICS
SOC 280 5 Credits/Units

55 hours of lecture

Varying topics in Sociology as listed in the term class schedule. May be repeated for credit. [SE]

SPECIAL PROJECTS
SOC 290 5 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

ORGANIZATIONAL BEHAVIOR
SOC 315 5 Credits/Units

55 hours of lecture

Focus on understanding social and group dynamics and managing relationships in organizations. Gain practical experience in managing teams, resolving conflict, and building effective relationships across cultural differences. Special emphasis will be placed on social equity in the workplace and managing difficult behavioral human situations, whether among employees within the organization or with external stakeholders [GE,SS]

SPANISH (SPAN)

SPANISH

SPAN&121

5 Credits/Units

55 hours of lecture

Emphasis on listening/speaking skills, with additional practice in reading/writing and exploring cultural themes. Topics covered: greetings; regular and irregular verbs in present tense; question formation and responses; vocabulary about family, friends, studies, hobbies and likes/dislikes. [HA,SE]

SPANISH

SPAN&122

5 Credits/Units

55 hours of lecture

For 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 and exploring cultural themes. Students who enroll in this class should be able to conjugate verbs in the present tense (using the correct subject pronouns) and speak about likes and dislikes, family, friends, activities, and routines. [HA, SE]

SPANISH

SPAN&123

5 Credits/Units

55 hours of lecture

For 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 skills, with additional practice in reading/writing and exploring cultural themes. Students who enroll in this class should be able to converse and write using verbs in the present and simple past tense. This class focuses on how to narrate in the past tense and introduces more complex grammar structures such as the subjunctive mood. Heritage speakers of Spanish welcome. [HA, SE]

CONVERSATIONAL

SPAN 141

3 Credits/Units

33 hours of lecture

Prerequisite: SPAN 122 or equivalent.

Intensive practice in Spanish conversation. Discussion in small groups of contemporary topics common to American and Hispanic societies. [HB, SE]

STUDY

SPAN 150

11 hours of lecture

Prerequisite: A grade of 'C' or better or concurrent enrollment in SPAN 122 or above; or consent of Instructional Unit.

Preparing students to travel with the Clark College study abroad program in Spanish-speaking country. Successful completion of this course required for students to participate in the travel abroad program. Application and acceptance into the study abroad program also required. [SE]

COOPERATIVE

SPAN 199

330 hours of clinical

Prerequisite: Consent of Instructional Unit.

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]

SPANISH

SPAN&221

55 hours of lecture

Focus on discussion of literature and culture from the Spanish-speaking world. Intensive grammar review and composition practice. Heritage speakers of Spanish welcome. [HA, SE]

SPANISH

SPAN&222

55 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 and composition practice. Heritage speakers of Spanish welcome. [HA, SE]

SPANISH

SPAN&223

55 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 and composition practice. Heritage speakers of Spanish welcome. [HA, SE]

SELECTED

SPAN 280

55 hours of lecture

Selected topics in Spanish. Topics vary and course theme and content change to reflect new topics. This course may be repeated for credit. [SE]

SPECIAL

SPAN 290

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

IV

5 Credits/Units

V

5 Credits/Units

VI

5 Credits/Units

TOPICS

5 Credits/Units

PROJECTS

5 Credits/Units

SURVEYING & GEOMATICS (SURV)

INTRODUCTION TO GPS

SURV 100

11 hours of lecture / 22 hours of lab

Prerequisite: A grade of 'C' or better in MATH 093, 095, or 096 or qualifying score on placement test.

Introduction to global positioning tools. Fundamental concepts and use of modern handheld GPS. Includes field work and use of basic GPS software. [GE]

FUNDAMENTALS OF SURVEY

SURV 102

11 hours of lecture / 22 hours of lab

Introduction to concepts of map reading, coordinate systems, the Public Land Survey System, basic legal descriptions of real property, plotting field data and creating a plat, and the minimum requirements for preparing plats in the State of Washington. No field work required. [GE]

COMPUTATION AND PLATTING

SURV 104

55 hours of lecture

Prerequisite: A grade of 'C' or better in College Trigonometry.

Basic coordinate geometry, curves and solutions, conversions, statistics and error analysis, traverse calculations, inverting, coordinate positions, and area calculations. [GE]

FIELD SURVEY I

SURV 121

33 hours of lecture / 44 hours of lab

Concurrent enrollment in Lab.

Prerequisite: A grade of 'C' or better in MATH 095 or MATH 096 or equivalent placement score.

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

SURV 122

33 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in SURV 121.

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

SURV 123

11 hours of lecture

Prerequisite: Completion of, or concurrent enrollment in, SURV 121.

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

SURV 125

22 hours of lecture / 22 hours of lab

Prerequisite: Eligibility for MATH 096.

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

SURV 163

33 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better in SURV 122.

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]

CO-OP WORK EXPERIENCE

SURV 199

165 hours of clinical

Prerequisite: A grade of 'C' or better in SURV 121.

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]

BOUNDARY SURVEYS

SURV 202

44 hours of lecture

Prerequisite: Completion of or concurrent enrollment in SURV 121.

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 originals 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

SURV 203

33 hours of lecture

Prerequisite: A grade of 'C' or better in SURV 121.

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

SURV 223

33 hours of lecture

Prerequisite: A grade of 'C' or better in SURV 121.

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 A & PLATTING

SURV 225

33 hours of lecture

Prerequisite: A grade of 'C' or better in SURV 102 and 122.

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]

ARC	GIS	I
SURV 250		3 Credits/Units

22 hours of lecture / 22 hours of lab

Prerequisite: A grade of 'C' or better in SURV 125.

Introduction to ArcGIS. GIS concepts, methodologies, and techniques.

[GE]

MAP	PROJECTIONS
SURV 252	2 Credits/Units

22 hours of lecture

Prerequisite: Completion of or concurrent enrollment in SURV 121.

Overview of map projections with emphasis on conformal projections used in the geomatics profession. U.S. State Plane Coordinate system, implementation, and computations. [GE]

INTRODUCTION	TO	GPS
SURV 253		2 Credits/Units

11 hours of lecture / 22 hours of lab

Prerequisite: A grade of 'C' or better in SURV 252.

Introduction to global positioning tools. Fundamental concepts and use of modern handheld GPS. Includes field work and use of basic GPS software. [GE]

SURVEY	SOFTWARE	APPLICATIONS
SURV 264		4 Credits/Units

33 hours of lecture / 22 hours of lab

Prerequisite: A grade of 'C' or better in SURV 121.

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	6 Credits/Units

44 hours of lecture

Course focuses on 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 for different topics. [SE]

SPECIAL	PROJECTS
SURV 290	5 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize, and complete special projects approved by the department. [GE]

TUTORING (TUTR)

TUTORING
TUTR 185 3 Credits/Units
66 hours of lab
Introduction to methods and techniques in tutoring. Tutoring training assignments in various disciplines. [GE]

TUTORING-WRITING
TUTR 186 3 Credits/Units
66 hours of lab
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]

WELDING (WELD)

INTRODUCTION TO WELDING

WELD 102

44 hours of lecture / 44 hours of lab

Prerequisite: A grade of 'C' or better, or concurrent enrollment in HLTH 120, and eligibility for MATH 030 or MATH 092.

An introduction to the welding industry and the various career paths available within the industry. Practical application in general shop safety and department-required training on metal working equipment. [GE]

WELDING BLUEPRINT READING

WELD 110

55 hours of lecture

Interpretation of welding blueprints, welding symbols, tolerances and structural shapes. [GE]

WELDED SCULPTURE LAB I

WELD 120

66 hours of lab

Concurrent enrollment in ART 295 required.

Development of a rudimentary expressive design language using welded metal as a medium. Exploration of beginning welding and metal-working skills. [GE]

WELDING SCULPTURE LAB II

WELD 121

66 hours of lab

Concurrent enrollment in ART 296 required.

Three dimensional design problems are explored while creating a welded metal sculpture. Gas metal arc welding and plasma arc cutting are introduced. Use of hydraulic power equipment and metal cut-off equipment is covered. [GE]

WELDED SCULPTURE LAB III

WELD 122

66 hours of lab

Concurrent enrollment in ART 297 required.

A fabricated welded metal sculpture is created while learning advanced metal working skills. The gas tungsten arc welding process and resistance welding are covered. [GE]

GAS METAL ARC WELDING

WELD 140

33 hours of lecture / 66 hours of lab

Concurrent enrollment in WELD 141 or consent of Instructional Unit.

Prerequisite: A grade of 'C' or better in WELD 102 or consent of Instructional Unit.

Instructional theory and application of Gas Metal Arc Welding processes on ferrous metals. [GE]

GAS METAL ARC WELDING FABRICATION

WELD 141

33 hours of lecture / 66 hours of lab

Concurrent enrollment in WELD 140 or consent of Instructional Unit.

Prerequisite: A grade of 'C' or better in WELD 102 or consent of Instructional Unit.

Application of concepts of gas metal arc welding processes on ferrous metals with a focus on fabrication techniques, proper use of hand tools and equipment found in industry. [GE]

FLUX CORE ARC WELDING

WELD 142

33 hours of lecture / 66 hours of lab

Concurrent enrollment in WELD 143 or consent of Instructional Unit.

Prerequisite: A grade of 'C' or better in WELD 102, 140 and 141 or consent of Instructional Unit.

Instructional theory and application of arc cutting processes/oxyfuel cutting and flux core arc welding processes on ferrous metals. [GE]

FLUX CORE ARC WELDING FABRICATION

WELD 143

33 hours of lecture / 66 hours of lab

Concurrent enrollment in WELD 142 or consent of Instructional Unit.

Prerequisite: A grade of 'C' or better in WELD 102, 140 and 141, or consent of Instructional Unit.

Application of concepts of flux core 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 WELDING

WELD 144

33 hours of lecture / 66 hours of lab

Concurrent enrollment in WELD 145 or consent of Instructional Unit.

Prerequisite: A grade of 'C' or better in WELD 102, 142 and 143, or consent on Instructional Unit.

Instructional theory and application of arc cutting processes/oxyfuel cutting and shielded metal arc welding processes on ferrous metals. [GE]

SHIELDED METAL ARC WELDING FABRICATION

WELD 145

33 hours of lecture / 66 hours of lab

Concurrent enrollment in WELD 144 or consent of Instructional Unit.

Prerequisite: A grade of 'C' or better in WELD 102, 142 and 143, or consent of Instructional Unit.

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

WELD 156

44 hours of lab

Prerequisite: Successful completion with a 'C' or better of WELD 102 and consent of Instructional Unit.

Students will review the requirements to earn program required AWS welding certifications. [GE] [PNP]

COOPERATIVE WORK EXPERIENCE

WELD 199

165 hours of clinical

Prerequisite: Consent of Instructional Unit.

Supervised work experience in an approved job. Completion of specific learning objectives and employer evaluation. [GE]

GAS TUNGSTEN ARC WELDING

WELD 240

33 hours of lecture / 66 hours of lab

Concurrent enrollment in WELD 241 or consent of Instructional Unit.

Prerequisite: A grade of 'C' or better in WELD 102, 144 and 145, or consent of Instructional Unit.

Instructional theory and application of arc cutting process/oxyfuel cutting and gas tungsten arc welding processes on ferrous metals. [GE]

GAS	METAL	ARC	FABRICATION
WELD 241			6 Credits/Units

33 hours of lecture / 66 hours of lab

Concurrent enrollment in WELD 240 or consent of Instructional Unit.

Prerequisite: A grade of 'C' or better in WELD 102, 144 and 145, or consent of Instructional Unit.

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

33 hours of lecture / 66 hours of lab

Concurrent enrollment in WELD 243 or consent of Instructional Unit.

Prerequisite: A grade of 'C' or better in WELD 102, 142, 240 and 241, or consent of Instructional Unit.

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

33 hours of lecture / 66 hours of lab

Concurrent enrollment in WELD 242 or consent of Instructional Unit.

Prerequisite: A grade of 'C' or better in WELD 102, 143, 240 and 241 or consent of Instructional Unit.

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

33 hours of lecture / 66 hours of lab

Concurrent enrollment in WELD 245 or consent of Instructional Unit.

Prerequisite: A grade of 'C' or better in WELD 102, 240, 242 and 243 or consent of Instructional Unit.

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

33 hours of lecture / 66 hours of lab

Concurrent enrollment in WELD 244 or consent of Instructional Unit.

Prerequisite: A grade of 'C' or better in WELD 102, 241, 242 and 243, or consent of Instructional Unit.

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]

SELECTED	TOPICS
WELD 280	
6 Credits/Units	

66 hours of lecture

Selected topics in Welding as listed in the term class schedule.

Repeatable for credit. [GE]

SPECIAL	PROJECTS
WELD 290	
5 Credits/Units	

Prerequisite: Consent of Instructional Unit required.

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]

WOMEN'S STUDIES (WS)

INTRODUCTION TO WOMEN'S STUDIES
WS 101 5 Credits/Units

55 hours of lecture

Prerequisite: A grade of 'C' or better in ENGL 098 taken at 5 credits or recommended score on the writing placement test for ENGL 101.

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. [HA,HR,SE,SS]

WOMEN AROUND THE WORLD
WS 201 3 Credits/Units

33 hours of lecture

Study of current issues affecting women. International feminism, reproductive rights, women in leadership, and affirmative action from a cross-cultural perspective. Fulfills either humanities or social science distribution requirements for the associate degree. [HA, SE, SS]

WOMEN'S CULTURE
WS 210 3 Credits/Units

33 hours of lecture

A study of women's art and women in the arts, with emphasis on the roles and images of women in fine and folk art, music, film and mythology.

Examines the historical events and sociological factors influencing those roles and images. Fulfills either humanities or social science distribution requirements for the A.A. transfer degree. [HA, SE, SS]

RACE, CLASS, GENDER AND SEXUALITY
WS 220 5 Credits/Units

55 hours of lecture

Prerequisite: WS 101.

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. [SE, SS] [PNP]

RACISM & WHITE PRIVILEGE IN THE U.S.
WS 225 3 Credits/Units

33 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. [SE, SS] [PNP]

SELECTED TOPICS
WS 280 3 Credits/Units

33 hours of lecture

This course focuses on selected topics in women's studies. Topics vary and course theme and content change to reflect new topics. This course may be repeated for credit. [SE]

SPECIAL PROJECTS
WS 290 5 Credits/Units

Prerequisite: Consent of Instructional Unit.

Opportunity to plan, organize and complete special projects approved by the department. [GE]

ENROLLMENT, AID AND COLLEGE LIFE

- Academic Standards Policy (p. 276)
- Advising (p. 278)
- Career Services (p. 279)
- College Life (p. 280)
- Credential Evaluations Office (p. 286)
- Enrollment Services (p. 289)
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- Special Instructional Programs and Locations (p. 305)
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ACADEMIC STANDARDS POLICY

www.clark.edu/clark-and-community/about/policies-procedures/academic_standards/index.php (http://www.clark.edu/about/governance/policies-procedures/academic_standards/)

The College develops and enforces academic standards for all credit students. The purpose of academic standards is to quickly identify and alert students with low academic achievement and to provide those students assistance for improving their academic performance, such as advising them to utilize student support services. In some cases, students who fail to make satisfactory progress will not be allowed to enroll.

Visit Clark's Academic Standards Policy website (https://catalog.clark.edu/enrollment-aid-college-life/academic-standards-policy/www.clark.edu/clark-and-community/about/policies-procedures/academic_standards/) for up-to-date information on the policy, procedures, and a flowchart.

Academic Standards Procedure 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 (1) 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 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 averages (GPA) of 2.0 or higher upon return from Four-Term Academic Dismissal, they will be placed on One-Term Academic Dismissal.

Academic Standards for Professional/Technical Programs

Students in certain professional/technical programs must receive grades of 'C' or better in program core courses to advance in the program class sequences. Students should refer to the department descriptions under their associated pages located on the index of the Academic Plans (<https://catalog.clark.edu/academic-plans/>) portion of the catalog for further information.

ADVISING

360-992-2345

www.clark.edu/advising (<http://www.clark.edu/enroll/advising-services/>)

The mission statement for Clark College advising is:

By providing accurate, timely, and consistent information, Advising personnel, in collaboration with faculty, will guide, support, and help students develop lifelong learning skills; assist students as they plan and achieve their educational and career goals; and work with students to establish a lasting relationship with Clark College. As a result of working with advising personnel, students will:

- Develop an understanding of their own educational pathway so that remaining classes and timeliness of completion are clear and accurate.
- Develop an educational plan that addresses academic, career, and life goals.
- Develop an awareness of their own personal responsibility within the advising process.
- Develop skills to successfully navigate and use campus services and tools.

To ensure the communication of accurate program information to all Clark students, advising is required for all new degree and certificate students to Clark and at certain checkpoints during the degree or certificate progress. The advising system at Clark College is an educational process that assists students as they pursue educational, career, and life goals. It is expected that students will build relationships with advisors during their time at Clark College and, over the course of their degree or certificate, will attain the objectives listed above.

CAREER SERVICES

360-992-2902

<http://www.clark.edu/enroll/careers/index.php> (<http://www.clark.edu/enroll/careers/>)

Online job database system: www.clark.edu/cc/penguinjobs (<https://clark-csm.symplicity.com/>)

Career Services provides the resources and strategies for choosing a college major; developing career plans; finding jobs, internships, and volunteer opportunities; and making successful career transitions. Resources include a computer lab, an extensive library of books and videos, and one-on-one appointments with career and employment specialists. Services are free and open to students, former students, and the general public.

Career Center resources:

- Assistance in assessing personal skills and interests to explore career options or select a course of study.
- Detailed descriptions of more than 1,000 occupations and industries.
- Information about employment outlooks, labor trends, wages, and job preparation.
- Databases of universities, technical training programs, and scholarships in Washington, Oregon, and the United States.
- Strong Interest Inventory and Myers-Briggs Type Indicator assessments, including a career report and 90-minute small group interpretation of results.

Employment services and work experience opportunities for students:

- An online job database system, Penguin Jobs, on the Career Services website: www.clark.edu/cc/penguinjobs (<https://www.collegecentral.com/>).
- Institutional hire job referrals for on- and off-campus student employment opportunities.
- Local and statewide full- and part-time job listings.

Job search and employment preparation services:

- Assistance with resume writing, cover letters, and interviewing skills.
- Job- and career-related workshops and resources.

Financial literacy:

- One-on-one appointments for free financial coaching.
- Financial Wellness tools: <http://www.clark.edu/enroll/careers/financial-wellness/index.php> (<http://www.clark.edu/enroll/careers/financial-wellness/>)
- Money-themed student success workshops.

Employer services:

- Free on-campus recruiting table.
- Free advertisement of job and internship vacancies.
- Multiple career events each year, including targeted job fairs and employer guest speakers discussing various career fields.
- Opportunities to serve on college advisory boards.

- Equal opportunity guidelines are followed and applicants are referred on a non-discriminatory basis for all possible co-op, internship, volunteer, or job placements.

Cooperative Education/Internship Work Experiences

360-992-2154

Clark College recognizes the value to students of actual experience in a work environment and has developed a nationally recognized program which allows credits to be earned for that experience under controlled conditions.

The purpose of Cooperative Education Work Experience (co-op) is to provide on-the-job experience that complements students' academic career goals and that furnishes an opportunity for career exploration. Co-op involves the faculty, student, and employer in determining learning objectives and evaluating the student's progress in achieving those objectives. Students may use internship experiences to test their interest in a field or their fit in the work environment of a particular industry.

COLLEGE LIFE

Archer Gallery

360-992-2246

<http://www.clark.edu/campus-life/arts-events/archer/index.php> (<http://www.clark.edu/campus-life/arts-events/archer/>)

Archer Gallery has been exhibiting fine art in Southwest Washington since 1978, consistently presenting an impressive list of artists and exhibits. Focusing on Northwest and Washington artists, the gallery also exhibits works by national artists. Featuring both established and emerging talents, the cultural, social, and ethnic diversity of the region is expressed in the exhibition schedule.

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

<http://www.clarkpenguins.com/index.aspx> (<http://www.clarkpenguins.com/>)

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

360-992-2149 Fax: 360-992-2862

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 shipments or reservations (https://www.clarkbookstore.com/site_csi_full.asp#Online%20Textbook%20Reservation) from the store website. The store stocks required textbooks and supplies as requested by classroom instructors and

vigorously supports students' interest by maintaining the lowest possible price for textbooks of any college in the region. Additionally, the store facilitates numerous solutions to help Clark students stretch their educational budgets including a comparison shopping tool (https://www.clarkbookstore.com/site_text_path.asp), textbook and calculator rentals (https://www.clarkbookstore.com/site_rentals.asp), peer-to-peer textbook exchange (https://www.clarkbookstore.com/swap_main.asp), and more.

The bookstore supports the interests of the broader community by selling specialty and educational items, logo items, apparel, gifts, cards, food and beverages, various reference and test preparation items, and more. Personal services available in store include faxing, notary public, special orders, Clark College Theatre and event tickets (https://www.clarkbookstore.com/site_theatre.asp), USPS stamps, C-Tran bus passes (http://www.clark.edu/campus-life/student_ID.php), payment for parking and student IDs (http://www.clark.edu/campus-life/student_ID.php) and more.

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

360-992-2336

The majority of college bulletin boards are used for college or departmental information only. All bulletin boards are identified with the assigned posting monitor. The posting monitor is responsible for postings. Complete bulletin board guidelines and a listing of campus bulletin boards and their classification may be obtained from the Facilities Services Office located in the Facilities Services building (FST).

Signs or posters may not be placed on wood, glass, painted, plastered, or metal surfaces. Only thumbtacks may be used on bulletin boards. Staples are not permitted. 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. Child care and early education services with family support options are available to Clark College students, faculty, staff, and the local community. Child care services are available for children twelve (12) months and walking through five (5) years of age. During the summer, services are available for children up to ten (10) years of age. Contact the program for more information or to arrange a tour. Services are available from 7:30 a.m. through 6:00 p.m. Monday – Friday.

Event Scheduling

360-992-2713

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 Scheduling office.

Student Life

360-992-2441

<http://www.clark.edu/campus-life/student-life/index.php> (<http://www.clark.edu/campus-life/student-life/>)

Facebook: Clark College Student Life

Instagram & Twitter: 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);
- 50-plus events and activities each year including Welcome Week, Involvement Fair, and Spring Thing – see our online events calendar for more information;
- Clubs, programs, committees, and other student involvement opportunities;
- Free coffee, Monday-Friday mornings;
- Quick-stop computer lab;
- Student-use kitchen, including refrigerator, microwave, toaster and hot water;
- Relaxing game room where you can enjoy TV, a massage chair, board games, and more;
- FREE student planner;
- Free one-time legal consultation services;
- Discounted C-Tran bus passes;
- 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

<http://www.clark.edu/campus-life/student-life/clubs/index.php> (<http://www.clark.edu/campus-life/student-life/clubs/>)

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 more than 50 clubs and programs 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)

http://www.clark.edu/campus-life/student-life/ascc/ascc_student_government.php

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)

<http://www.clark.edu/campus-life/student-life/ascc/activities-programming-board.php>

With the motto, “We run the fun!” this five-member group is charged with the creation of a comprehensive events calendar to include awareness, cultural, educational, family, and social events for Clark students. Hosting 40+ events each year, including the annual Spring Thing 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 Independent

<http://www.clarkcollegeindependent.com/> (<https://clarkcollegeindependent.com/>)

Working at The Independent offers students hands-on journalism experience. Working with one or more aspects of the newspaper (writing, editing, photography, layout, advertising, and business management) provides an introduction to the journalism profession as well as a means of earning credit. Some staff positions are paid. The Independent serves as a major communication link between students, student government, faculty, staff, and administration.

Phoenix

<http://www.clark.edu/academics/programs/english/phoenix.php>

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.

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
- Bauer Hall, Rm. 101 and Rm. 102

- Cannell Library, Rm. 100, Rm. 102, and Rm. 203
- Scarpelli Hall, Rm. 135 and Rm. 023
- Clark College at WSUV, Rm. 129
- Clark College at Columbia Tech Center, Rm. 212 and Rm. 219
- Pathways Center, TBG, Rm. 226

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, the 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

chc@clark.edu

<http://www.clark.edu/campus-life/student-support/counseling/index.php>
(<http://www.clark.edu/campus-life/student-support/>)

Located in the Health Sciences Building, the Counseling and Health Center supports student success by providing a range of professional counseling and medical services that are both affordable and conveniently available on campus. Counselors provide free, short-term, goal-focused counseling. They support students in self-development, goal-setting, and problem-solving to enhance student success. A Nurse 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.

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, five (5) 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, tooth whitening,

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

www.clark.edu/DSS (<http://www.clark.edu/DSS/>)

Clark College and the Disability Support Services (DSS) Office staff assist those with disabilities in pursuing their educational goals. The DSS staff is committed to assuring Clark College's 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.

Clark College recognizes that traditional methods, programs, and services may need to be altered to assure full accessibility to qualified persons with disabilities. The DSS Office is the primary focus of efforts by Clark College to assure nondiscrimination on the basis of disability. Through the DSS Office, qualified persons with disabilities can address their concerns regarding attitudinal or procedural barriers encountered, as well as any need for accommodation to assure equal access. The DSS Office will provide information, approve accommodations, and partner with faculty on the provision of accommodations. DSS serves as a resource to the campus community in striving to make Clark College both an accessible and hospitable place for persons with disabilities to enjoy full and equal participation.

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/) (<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 (http://www.clark.edu/campus-life/student-support/computing_resources/rave_emergency_notification_system.php). Emergency Building Coordinators are posted in every building to assist with emergency protocols.

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

http://www.clark.edu/campus-life/student-life/fitness_center/index.php
(http://www.clark.edu/campus-life/student-life/fitness_center/)

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:

- Current full- and part-time Clark students;
- Clark employees, their spouses and children sixteen (16) years old and older;

- 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

<http://www.clark.edu/campus-life/student-life/dining/index.php> (<http://www.clark.edu/campus-life/student-life/dining/>)

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.
- Salad Bar, Soup, and Gran & Go and Beverages 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 referral bulletin board, located in central Gaiser Hall, it does not assume the responsibility for screening rentals.

Note: International Programs does work with international applicants to secure housing for them and to place them in one of the following options:

- An apartment building shared with domestic and international students from the International Air Academy (two- or four-bed apartments);
- An apartment with single or double rooms close to campus; or
- A host family arrangement.

Please contact International Programs for details.

Legal Consultation

360-992-2404

Student Legal Services is a contracted program funded by ASCC that provides free, one-time legal consultation to students. A local general-practice attorney provides multilingual legal counsel on family, criminal, and contract issues for students, as needed.

Thirty-minute consultation appointments are offered once a week through fall, winter and spring terms, and can be arranged through the Student Life office, located in PUB 160. Please call 360-992-2404 to schedule an appointment.

Library

360-992-2151

<http://library.clark.edu/>

Clark College Libraries provide resources to support the educational mission of Clark College. Located on the main campus, Cannell Library provides students, faculty, and staff with books, movies, and CDs. Cannell Library also has group study rooms and computer labs. Students attending classes at Columbia Tech Center can visit the Information Commons located on the second floor of the building in Room 219. Students are encouraged to ask librarians at either location for assistance using the wide range of in-print and online resources. Library faculty offer a variety of instruction sessions, research assistance, and workshops.

Through Summit, a partnership that combines the holdings of academic libraries in Washington, Oregon, and Idaho, students also have access to books, DVDs, videotapes, government documents, and more. Direct online borrowing and an efficient courier service allow students to obtain books quickly and easily.

From the Libraries' website (library.clark.edu (<http://library.clark.edu>)), Clark College students, faculty, and staff have 24/7 online access to thousands of resources, including electronic books, full-text journals, and 78 electronic databases. Consult the Library website or call 360-992-2151 for hours of service and other library information.

MESA Program

360-992-2225

<http://www.clark.edu/academics/programs/dept/mesa/> (<http://www.clark.edu/academics/programs/dept/mesa/>)

Mathematics, Engineering, science Achievement (MESA) offers academic and professional support services to qualifying students who intend to transfer to four (4) year universities in pursuit of science, technology, engineering and mathematics (STEM) majors. Our overriding aim is to diversify the STEM workforce by addressing the challenges underserved students face in their educational and career development.

Resources available for students include: online orientation, career advising, transfer assistance, professional development & academic excellence workshops, and a study center (SBG 206/208).

You may be eligible for the MESA program if you meet any of the following:

- Are a historically underrepresented student of color in STEM
- Are of the first generation in your family to attend college
- Are eligible for financial aid as determined by the FAFSA or WAFA, work study, or are at least at or below the federal poverty level

Office of Diversity and Equity

360-992-2292

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

<http://www.clark.edu/about/governance/public-disclosure-and-records/adminProcedures/500/530/index.php> (<http://www.clark.edu/about/governance/public-disclosure-and-records/adminProcedures/500/530/>)

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.

To encourage and enable transit ridership, the college funds and supports the BackPASS program. Through the BackPASS program, all registered

Clark College students can purchase a BackPASS endorsement for their student identification cards. The BackPASS will afford the student unlimited access to C-Tran service in Clark County. Students may receive only one subsidized BackPASS per term. To facilitate use of the BackPASS, bus schedules, maps, and other transit information can be found in several locations. C-Tran regularly participates in student orientations and hosts information booths on the main campus.

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 BackPASS program can be obtained from the Security/Safety Department in Gaiser Hall.

Security/Safety Department

360-992-2133

<http://www.clark.edu/campus-life/student-support/security/index.php> (<http://www.clark.edu/campus-life/student-support/security/>)

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 25 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; aid to stranded motorists including jump starts and lockout service; 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/report.php>

Student Ambassadors and the Campus Visit Program

360-992-2078

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 discounts can be found at the Security/Information Office in Gaiser Hall.

Student ID Cards

Annual Clark College student photo ID cards can be purchased 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 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

<http://www.clark.edu/campus-life/student-support/tutoring/index.php>
(<http://www.clark.edu/campus-life/student-support/tutoring/>)

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

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

<http://www.clark.edu/campus-life/student-support/tutoring/etutoring.php>

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 e-Chat (synchronous) or e-Questions (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 Resource Center

360-992-2073

vetresources@clark.edu

<http://www.clark.edu/campus-life/student-support/vrc/index.php> (<http://www.clark.edu/campus-life/student-support/vrc/>)

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 OFFICE

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 <http://www.clark.edu/enroll/advising-services/credential-evaluation/index.php> (<http://www.clark.edu/enroll/advising-services/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 6-8 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 individual's 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 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 www.clark.edu/enroll/credential-evaluation/clep.php (<http://www.clark.edu/enroll/advising-services/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 granted by listing the equivalent course number, title, and credits. Not all institutions accept CLEP credits. 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 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: 1-800-257-9558
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 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 Affairs Department 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:

- Within ten (10) business days of transcript receipt, 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 Degree Audit 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 re-evaluated 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 the use of VA education benefits.
- 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.

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 2019 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 available in the Advising Department and is given 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 from regionally accredited institutions of higher education. Recognized accrediting bodies are as follows:

- Middle States Association of Colleges and Schools (MSA);
- New England Association of Schools and Colleges, Inc./Commission on Institutions of Higher Education (NEASC-CIHE);
- North Central Association of Colleges and Schools (NCA-HLC);
- Northwest Commission on Colleges and Universities (NWCCU);
- Southern Association of Colleges and Schools/Commission on Colleges (SACS-CC);
- Western Association of Schools and Colleges/Accrediting Commission for Community and Junior Colleges (WASC-ACCJC);
- Western Association of Schools and Colleges/Accrediting Commission for Senior Colleges and Universities (WASC-ACSCU).

Domestic Institution Transfer Policy

Students who have attended other regionally 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 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 from international institutions of education may submit their academic records for credit consideration. The amount of

credit 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 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 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

Our Welcome Center is your first step whether you are a new, transfer, or returning student. We provide information on how to become a student at Clark College. Our services include assistance with admissions procedures, residency information, campus tours, student orientation, and referral to other services and programs.

All students intending to enroll at Clark College are required to submit an application for admission and pay a non-refundable application fee. Application for admission is available on the Clark College website at www.clark.edu/quickstep (<http://www.clark.edu/enroll/admissions/apply.php>).

Clark College admits anyone who is eighteen (18) years of age or a graduate of an accredited high school or the equivalent. Students who are (16) years of age or older may enroll in summer term. Applicants who are under the age of eighteen (18) and without a high school diploma or equivalent may be considered for admission. Refer to the Exception to Admission (Underage Policy) section for further details. Admission to the college does not guarantee admission to a specific area of study. Some programs require additional applications and are limited or competitive-entry programs. See additional information under Health Occupations Programs.

Residency classifications for the purpose of tuition rates are determined by the length of time a student has been permanently living in the state of Washington. Please refer to the Residency Classifications section for detailed information.

New Student Admission

Students with no previous college experience must complete an admissions application and pay a non-refundable application fee. New students are also required to meet with an advisor before they may register for classes. Prior to meeting with an advisor, please have your placement documentation submitted or with you at the time of your appointment. For more information please visit website at www.clark.edu/enroll/advising-services/index.php (<http://www.clark.edu/enroll/advising-services/>)

Transfer Student Admission

Students transferring from other colleges are required to submit an admissions application and pay a non-refundable application fee. Transfer students are required to meet with an advisor before they may register for classes.

If a student intends to use previously earned credits 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.

Transfer credits are usually accepted by Clark College if such credits were earned at an institution accredited by a regional association recognized by the Council on Post-secondary Accreditation. Students should refer to

Section B of this catalog for information about non-traditional credits and the process for transcript evaluation.

Returning Student Admission

Students who are returning to Clark College after an absence of four (4) or more terms must provide an updated application for admission prior to registration. Returning students are required to meet with an advisor before they may register for classes.

If a student has attended another college since their last enrollment at Clark College and wants to apply those credits 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 has its own set of admission policies and procedures. Please refer to www.clark.edu/runningstart (http://www.clark.edu/enroll/admissions/running_start/) for more 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)

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 ultimate right to determine admission to the college and/or to enroll in certain classes.

Residency Classifications

www.clark.edu/enroll/admissions/admission_forms.php (http://www.clark.edu/enroll/admissions/admission_forms.php)

To qualify for any of the residency classifications listed below, students must be U.S. citizens, resident aliens, refugees, or non-immigrant aliens 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 Oregon 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.
- **Qualifying Oregon Border Counties:** Columbia, Gilliam, Hood River, Multnomah, Clatsop, Clackamas, Morrow, Sherman, Umatilla, Union, Wallowa, Wasco, or Washington.

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.

* 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.

- **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 July 1, 2003, Washington state law (HB1079) 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 qualify, students must complete an affidavit declaring they have:

- Resided in Washington state for the three (3) years immediately prior to receiving a high school diploma, and completed their full senior year at a Washington high school, OR completed the equivalent of a high school diploma and resided in Washington state for the three (3) years immediately before receiving the equivalent of the diploma, AND
- Continuously resided in the state since earning the high school diploma or its equivalent, AND
- Certify that they will file an application to become a permanent resident of the United States as soon as they are eligible to apply.

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

Contact the Veterans Affairs Office at 360-992-2112 for information regarding eligibility criteria for the Veterans Tuition Waiver. You must provide the original or certified copy of form DD214.

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 waiver are listed below, under the departments that serve them.

- Enrollment Services
 - Clark College employee
 - Classified state employee or Washington Public Higher Education employee
 - Senior Citizen Gold Card
 - 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
 - Dislocated forest products workers or their unemployed spouses
 - Wrongfully convicted individual, their children and stepchildren
 - Running Start
- High School Completion Office
 - High school completion
- Veterans Affairs Office
 - 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 and pay the non-refundable admission application fee. 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://](http://www.clark.edu/assessment)

www.clark.edu/enroll/admissions/assessment/) for more information on available placement and retesting options.

Distance Learning Proctoring

The Assessment Center provides proctoring services for students taking distance learning or correspondence courses. There is a fee for this service. Contact the Assessment Center at 360-992-2588 to discuss available proctoring options or visit <http://www.clark.edu/enroll/admissions/assessment/proctoring.php> to download a proctor request form.

High School 21+

360-992-2741

Begun in 2015, High School 21+ is a program that helps students 21 years or older earn their high school diplomas in a more timely and convenient way than was previously available. The High School 21+ 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 21+ program will need to apply for admission and pay the non-refundable application fee, submit their official high school transcripts, take the CASAS test, and meet with the High School Completion Advisor prior to beginning their classes. While adults aged 19 and older are welcome to enroll in the program, diplomas will be issued only to adults aged 21 and over.

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 www.GED.com (<https://catalog.clark.edu/enrollment-aid-college-life/>

enrollment-services/www.GED.com). The GED test must still be taken in person at an official GED testing center. Examinees under the age of 19 must provide a high school release form to the Assessment Center, located in Gaiser Hall, room 128, to enable the online scheduling feature.

GED preparation classes are available through Clark College. Contact 360-992-2588 for further information.

ELEARNING

eLearning@clark.edu (learning@clark.edu)
<http://www.clark.edu/academics/eLearning/index.php>

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.

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, hybrid, and weekend hybrid. To learn more about eLearning class formats, please go to What is eLearning page (<http://www.clark.edu/academics/eLearning/whatis.php>). General class descriptions are as follows:

- Online – A course that uses web-based tools and where 100% of the instruction and interaction between instructor and student is done online.
- 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 programs, please contact the Advising department.

Students registering for web-enhanced, hybrid, or online courses can get help preparing by visiting the following pages:

- Is eLearning Right for Me? (http://www.clark.edu/academics/eLearning/self_assess.php)
- eLearning Programs (<http://www.clark.edu/academics/eLearning/programs/>)
- Canvas Orientations (http://www.clark.edu/academics/eLearning/student_orientation.php)

The Smarter Measure test is recommended for help with assessing technology skills and learning styles. Here is a link: Welcome to Clark SmarterMeasure! (http://www.clark.edu/Library/Tech/smartermeasure_info.php)

What Types of Programs are Offered?

Through the eLearning class formats, students have several options to complete a degree through Clark College eLearning:

1. Associate in Arts General Transfer degree (AADTA): In a combination of formats including online, hybrid, and weekend hybrid.
2. Business Administration DTA/MRP. In a combination of formats including online, hybrid, and weekend hybrid.

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 (LMS) the first day of the term for class instruction.

Please visit the eLearning Getting Started page (<http://www.clark.edu/academics/eLearning/begin.php>) for information about starting an eLearning class.

Technical Requirements and Support

To see if you have appropriate technology for eLearning courses go to the Technical Requirements page (http://www.clark.edu/academics/eLearning/tech_reqs.php).

Technical support is available through the 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.

For further information about TechHub, please visit their website (http://www.clark.edu/campus-life/student-support/computing_resources/techhub/).

FINANCIAL AID

360-992-2153

<http://www.clark.edu/enroll/paying-for-college/financial-aid/index.php>
(<http://www.clark.edu/enroll/paying-for-college/financial-aid/>)

The Financial Aid Office helps improve college affordability for students by expanding access to and information about financial resources.

Financial Aid Eligibility

In general, students must meet the following criteria to qualify for financial aid:

- Demonstrate financial need as determined by the Department of Education through completing the FAFSA
- Be a U.S. citizen or an eligible noncitizen.
- Have a valid Social Security number (with the exception of students from the Republic of the Marshall Islands, Federated States of Micronesia, or the Republic of Palau).
- Male applicants between the ages of 18 and 25 must be registered with Selective.
- Be admitted to Clark College as a *regular student* in an eligible degree or certificate program.
- Not be in default on a federal loan or owe an overpayment on a federal grant.
- For state aid, not owe a repayment of a state grant or loan.
- Have a high school diploma or GED.
- Students without a high school diploma or GED may qualify through Ability to Benefit.
- Meet satisfactory academic progress.
- Agree to use federal student aid only for educational purposes.

Types of Financial Aid Available

Financial aid includes grants, tuition waivers, work study, and student loans. Funds are awarded according to the Clark College Financial Aid Packaging Policy. The financial aid programs available to students at Clark College include:

- **Federal Pell Grant:** Awarded based on financial need. Students may receive the Pell Grant for a maximum of four (4) full-time (12 credits or more) terms per academic year. The grant is prorated for less than full-time enrollment. Eligibility is limited to a lifetime maximum of 18 full-time terms.
- **Federal Supplemental Educational Opportunity Grant:** Awarded based on financial need. The grant is available to students enrolled in six (6) credits or more per term.
- **Washington State Need Grant:** Awarded to eligible Washington State residents up to the cost of tuition. The grant is prorated for less than full-time enrollment. Students may also receive funding to cover a small portion of child care expenses. Information is available online at www.wsac.wa.gov (<http://www.wsac.wa.gov/>).
- **College Bound Scholarship:** Awarded in combination with other state financial aid to cover the average cost of tuition, fees, and a partial book allowance. The scholarship is available to students who sign up in the seventh or eighth grade and meet specific eligibility requirements. Information is available online at www.wsac.wa.gov (<http://www.wsac.wa.gov/>).

- **Clark College Grants and Waivers:** Clark College reserves a percentage of tuition revenue and offers these funds to Washington State resident students in the form of institutional grants and tuition waivers. Clark College offers the following institutional grants and waivers:

- **Clark College Grants and Need-Based Tuition Waiver:** May only be awarded to reduce the cost of tuition, and cannot be applied toward fees or disbursed directly to the student. Student athletes receiving an Athletic Tuition Waiver are not eligible to receive this additional waiver.
- **Clark College Non-Need Based Tuition Waiver:** May only be awarded to reduce the cost of tuition, and cannot be applied toward fees or disbursed directly to the student.

- **Federal and State Work Study:** Awarded to Washington State residents based on financial need. Funds are earned through employment on and off campus. Students must be enrolled in six (6) or more credits per term.
- **Federal Direct Loans:** Federal Direct loans are borrowed funds that students must repay with interest. A federal student loan allows students to borrow money to help pay for college through loan programs supported by the federal government. They have low interest rates and offer flexible repayment terms, benefits, and options. All students must first complete the Free Application for Federal Student Aid (FAFSA). Students who are eligible for a loan, will have an offer included in their award letter.
 - There are two types of federal student loans: subsidized and unsubsidized. Students who are eligible for a subsidized loan are not charged interest while they remain in school. Interest starts accruing on subsidized loans after a student leaves school. With an unsubsidized loan, interest starts accruing at the time loan funds are disbursed. Students can choose to make interest payments while in school or delay interest payments until after they leave school.

Loan Disbursement Holds:

- Students who are first time borrowers are limited on the maximum period of time they can receive subsidized loans. Eligibility is limited to 150% of the length of the student's program of study. Additional information about subsidized loan limitations is available at <http://www.clark.edu/enroll/paying-for-college/loans/index.php> (<http://www.clark.edu/enroll/paying-for-college/loans/>)
- New students borrowing a loan for the first time receive their first loan disbursement on the 31st day of the term. If the disbursement date falls on a weekend or holiday, the disbursement will be available on the following business day.
- All students borrowing a loan for a single quarter will receive their disbursements in two installments. The first disbursement will be on the 1st day of the term and the second at the mid-point of the term. If the disbursement dates fall on a weekend or holiday, the disbursement will be available on the following business day.

Application Process

The annual application process begins by completing the Free Application for Federal Student Aid (FAFSA) online at www.fafsa.gov (<https://fafsa.ed.gov/>). The FAFSA is available starting October 1. Completing the FAFSA is the first step of the application process. Additional documents may be requested by the Financial Aid Office. If additional information is needed, students will be contacted by student email. A student's financial aid file is considered complete and ready for processing when all requested documents are received by the Financial

Aid Office. For priority processing, students planning to attend summer and/or fall term 2019 should complete their financial aid file by May 2, 2019. Priority processing dates for winter 2020 is November 15, 2019 and spring 2020 is March 5, 2020.

Washington Application for State Financial Aid (WASFA)

Eligibility for Washington State financial aid has been expanded to include students who are ineligible for federal financial aid due to immigration status. DREAMers should complete the WASFA online at www.readysetgrad.org/WASFA (<http://www.readysetgrad.org/WASFA/>). Students who qualify may be eligible for state grant aid and work study.

Financial Aid Awards and Refunds

The Clark College Financial Aid Office processes the student's financial aid file and determines eligibility for grants, work study, and loans. Students are notified of their eligibility with an award letter sent to their student email account. All grants and tuition waivers included on the award letter are based on full-time (12 credits or more) enrollment. Grants and tuition waivers are prorated down prior to the start of the term for less than full-time enrollment. Loans and work study included on the award letter are offers and require additional application steps.

All financial aid awards are automatically applied toward tuition and fees. If the financial aid award is not sufficient to pay tuition and fees in full, the student is responsible for the remaining balance. If the financial aid award exceeds the cost of tuition and fees, the student will receive a refund. With the exception of summer term, financial aid refunds are generally issued one (1) to two (2) business days before the start of the term. To avoid delays in financial aid refunds, students should finalize their academic schedule at least one week before the start of the term.

BankMobile Refund Selection Kit

Through a partnership with BankMobile, Refund Selection Kits are issued to all Clark College students who apply for financial aid. The kits are mailed by BankMobile to students after they complete their financial aid file. Students should visit their refund website (<https://www.refundselection.com/refundselection/#/welcome/continue>) after receiving their kit to choose how they wish to receive their refund each term. Students can choose to have their refunds deposited into an existing bank account, directly deposited into a BankMobile Vibe account offered by BankMobile, or mailed as a paper check. Additional information about the BankMobile Refund Selection Kit is available online at www.clark.edu/cc/finaid (<http://www.clark.edu/enroll/paying-for-college/>).

Census Date

Enrollment level is the range of credits that a student is registered for and correlates with the level of funding.

A student's enrollment level for the term is established at the time the funds are sent to Customers Bank for disbursement. On the census date, fifth day of the term, the student's enrollment level is confirmed and compared to the original enrollment level. No funding adjustments can be made after the census date.

Increasing Enrollment Level (Adding Credits)

If a student adds classes during the first week of the term the Financial Aid Office will recalculate the student's financial aid awards. If there are

additional funds to disburse, they will be released through the student's Customer's Bank option.

Decreasing Enrollment Level (Dropping Credits)

If a student drops to a lower enrollment level after their refund disbursement is released to Customers Bank, the student will be billed based on their change in enrollment. Money owed is identified as a Pell Grant overpayment.

Census Date Adjustments

The Financial Aid Census Date may be adjusted due to College closures resulting from inclement weather or other unforeseeable circumstances that cause the campus to be closed during the first five business days of the term. In the event of unexpected closures, Financial Aid, Enrollment Services, and Accounting Services will coordinate efforts to extend refund periods, and payment deadlines as needed.

Late Start or Module Classes

A student may enroll in class(es) that begin after the official term start date, or end before the official term end date. Financial aid will include module classes in the enrollment level at the time funds are sent to Customers Bank. If a student does not commence attendance or drops a module class prior to the class start date, they will be billed based on their change in enrollment. Money owed is identified as a Pell Grant overpayment.

Pell Grant Overpayments

Students who owe a Pell Grant overpayment will have 45 days to repay their debt in full or make payment arrangements with Clark College Accounting Services. If a student has not repaid the debt in full, or made payment arrangements, the debt will be referred to ED Debt Resolution Services (<https://myedebt.ed.gov/>) if a student has not repaid the debt in full or made payment arrangements. Students whose debt has been referred are no longer eligible for financial aid, including grants, loans, and work study. The full Clark College Census Date policy is available at our website (http://www.clark.edu/enroll/paying-for-college/documents/Census_Date_Disbursement_Policy.pdf).

Financial Aid Satisfactory Academic Progress

Students must meet Financial Aid Satisfactory Academic Progress (SAP) Policy requirements to remain eligible for federal, state, and institutional financial aid. SAP is reviewed both annually and at the end of each payment period. All terms of attendance, including those in which financial aid was not received, are used in determining SAP status.

There are three standards of Satisfactory Academic Progress Policy that are evaluated at the end of each term:

1. **Grade Point Average (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 have and maintain a minimum 2.0 cumulative GPA at the end of their sixth term and beyond to avoid an automatic suspension.
2. **Maximum Timeframe** is measured to ensure students are taking required courses to complete their certificate or degree. Financial aid will be suspended and program progression must be reviewed at 125%. Students 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.

3. **Pace of Progression Students** must complete all financial aid eligible credits funded each term within their enrollment level* and 67% of their attempted cumulative credits. Pace of progress that is 66.6% or higher will be rounded to 67%. All program credits, including transfer and remedial credits, will be taken into consideration whether or not aid was received. Grades F (Failed), I (Incomplete), U (Unsatisfactory), W (Withdrawal), Y (In Progress), N (audit), and R (repeat) will count as attempted credits.

Credits/Units registered at the time of disbursement	You will remain in good standing if you successfully complete
Full Time (12-18 credits/units)	12 credits/units per term
3/4 Time (9-11 credits/units)	9 credits/units per term
1/2 Time (6-8 credits/units)	6 credits/units per term
Less Than 1/2 Time (1-5 credits/units)	All attempted credits/units per term

Financial Aid Warning Status

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
- Not all attempted credits are completed (as noted on the chart)

Credits/Units registered at the time of disbursement	Warning will occur if you complete	Suspension will occur if you complete
Full Time (12-19 credits/units)	Between 6-11 credits/units	5 credits/units or less
3/4 Time (9-11 credits/units)	Between 6-8 credits/units	5 credits/units or less
1/2 Time (6-8 credits/units)	Not Applicable	5 credits/units or less
Less Than 1/2 Time (1-5 credits/units)	Not Applicable	Less than all attempted credits/units

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 on financial aid suspension are not eligible for future financial aid including grants, work study, and loans. Immediate financial aid suspension will occur when a student:

- Is on Financial Aid Warning/Probation and
 - Does not complete the number of credits in their enrollment level and/or
 - Does not meet 67% progression and/or
 - Cumulative GPA falls below 2.0 at the end the term
- Has a cumulative GPA below a 2.0 at the end of the 6th term of attendance and beyond
- Has attempted 125% of the credits required for the program
- Has failed to meet requirements of their Academic Plan contract
- Not all attempted credits are completed (as noted on the chart below)

Credits/Units registered at the time of disbursement	Suspension will occur if you complete
Full Time (12-19 credits/units)	5 credits/units or less
3/4 Time (9-11 credits/units)	5 credits/units or less
1/2 Time (6-8 credits/units)	5 credits/units or less
Less Than 1/2 Time (1-5 credits/units)	Less than all attempted credits/units

Regain Eligibility for Financial Aid

When students lose financial aid due to lack of academic progress, there are two (2) options available to regain eligibility. The options are:

1. Filing a **Satisfactory Academic Progress Appeal** or
2. Submitting a **Request for Reinstatement**

Satisfactory Academic Progress Appeal

Failure to maintain good academic standing may be the result of circumstances beyond the student's control. In cases of student's illness, injury, a death in the family or unusual circumstance, students may appeal to regain financial aid eligibility. **Students are limited to two (2) appeals at Clark College** (Maximum Timeframe appeals are excluded from this limit).

The appeal must include:

1. Satisfactory Academic Progress Appeal Form (http://www.clark.edu/enroll/paying-for-college/documents/SAP_Appeal.pdf)
2. Typed and signed statement explaining the circumstances AND what has changed AND the steps taken to ensure academic success in the future
3. Supporting documentation confirming the extenuating circumstances presented in the statement
4. A current degree worksheet completed and signed by the student and program advisor

Appeals are reviewed by the Financial Aid Advisory Committee and students are notified of their decision through student email. The Committee's decision is final. If the appeal is approved, the Committee has the authority to restrict students to specific academic conditions. The student may be required to follow an Academic Plan until satisfactory academic progress is achieved.

If approved, aid is reactivated based on available funding at the time the appeal is approved and may not reflect the original award. An approved appeal does not negate any repayment owed to the financial aid programs or Clark College.

Request for Reinstatement

If a student chooses not to appeal or has exhausted the two (2) appeal limit they may submit a Request for Reinstatement (<http://www.clark.edu/enroll/paying-for-college/documents/Reinstatement.pdf>) when they have satisfied the following conditions:

1. Enrolled in and completed a minimum of 5 program required credits (CAP courses are ineligible) with a cumulative GPA of 2.0 or higher, and
2. Pace of progression is 67% or higher

All credits attempted in reinstatement term must be completed. Receiving grades of F (Failed), I (Incomplete), U (Unsatisfactory), W (Withdrawal), Y (In Progress), N (audit), and R (repeat) will hinder

eligibility for financial aid reinstatement and may increase the number of credits required to reinstate.

If the reinstatement is approved, aid is reactivated based on available funding at the time the reinstatement is approved and may not reflect the original award. Students may be restricted to specific academic conditions and must remain in good academic standing to receive continued funding. An approved reinstatement does not negate any repayment owed to the financial aid programs or Clark College.

Financial Aid Probation

If the Financial Aid Advisory Committee approves a student's appeal, financial aid will be reactivated on a probationary status. Financial aid suspension will occur if the student does not meet all satisfactory academic progress requirements at the end of the next term of attendance (see warning section for details).

Other Requirements and Limitations

I. Maximum Timeframe

Eligibility for federal aid expires once a student attempts 150% of the published credits required for a program. Maximum credit warning notifications will be issued when a student reached 110% of the credits required for a degree or 100% for a certificate. Once a student has attempted 125% of program credits, financial aid will be suspended until an internal review of program progression has been completed. All credits, regardless of whether they were taken while on financial aid, or credits removed with an approved set-aside petition are used in calculating 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. Transfer credits accepted for use towards the current certificate or degree are included. Remedial coursework needed to reach program required classes is counted towards maximum timeframe. Funding of remedial courses is limited to 45 attempted credits. Repeated credits (R grades) are counted as attempted towards maximum timeframe. Once a class has been attempted and credit has been earned, financial aid can only pay for a second attempt.

II. Program Changes

If a student was approved in a previous appeal with specific academic conditions, those conditions must be met **before** changing their program. If the student wants to change their program prior to completing the appeal's academic conditions, a student must submit a Request for Financial Aid Extension to the Financial Aid Office. If the program change is approved, new conditions will be applied.

Financial Aid Funds Repayment Policy

Students who officially or unofficially withdraw from all classes, or complete zero credits at the end of the term, may owe a repayment of financial aid funds received. The Financial Aid Office is required to determine the percentage of funds earned by the student and is based on the withdrawal date.

Official Withdrawal: The date the student withdrew, according to Clark College Enrollment Services (<http://www.clark.edu/enroll/registration/manage-enrollment/registration-information.php>) withdrawal procedures.

Unofficial Withdrawal: If the student did not officially withdraw, the date of withdrawal is determined as outlined below. The Financial Aid Office will use the latest date.

- The last date of participation in an academically related activity or the midpoint of the term. The last date of participation is reported by the instructor to Enrollment Services.
- The midpoint of the term in which funds were received.

Repayment of Title IV Funds

Title IV funds include Pell Grant, Supplemental Educational Opportunity Grant (SEOG), Subsidized Loans, and Unsubsidized Loans. Title IV funds are subject to the Department of Education Return of Title IV policy requirements. The amount of Title IV funds a student earns, is equal to the percentage of the term completed.

For example, students who complete 40% of the term are considered to have earned 40% of Title IV funds received, the other 60% is considered unearned aid.

Once 60% or more of the term has been completed, 100% of Title IV funds have been earned, and the student will not owe a repayment.

The formula for calculating the amount of Title IV funds that must be returned is determined as follows:

1. Determine the percentage of Title IV funds earned based on the date of official or unofficial withdrawal.
2. Multiply the percentage of unearned Title IV funds by the amount of Title IV funds received.

Once the repayment amount has been calculated, the Financial Aid Office will determine the College's and student's responsibility in repayment of funds.

Clark College's responsibility in repayment is either the percentage of unearned Title IV funds multiplied by tuition and fee charges or the total repayment amount. The calculation which determines the lowest amount, will be utilized. The amount of unearned Title IV funds which the College is responsible for will be returned 45 days from the date the College determined the student withdrew. The funds will be returned in the following order:

1. Unsubsidized Direct Loans
2. Subsidized Direct Loans
3. Direct PLUS Loans
4. Pell Grants
5. Supplemental Education Opportunity Grants
6. Other Federal, State, Private, or Institutional financial assistance

Any refunds (http://www.clark.edu/enroll/registration/refund_policies.php) issued as a result of the withdrawal will be applied by the College to the student's repayment amount. Students will be billed by Clark College Accounting Services for the remaining balance of the return.

The student's responsibility in repayment is determined by subtracting the College's repayment from the total repayment amount. Any amount of unearned Pell Grant or SEOG funds that a student must return is considered an overpayment. The student repayment amount is half of the grant funds received.

Students who owe an overpayment will have 45 days to pay their debt in full or make arrangements to pay their debt. If, within 45 days, the student fails to pay in full or make arrangements to pay, the debt will be referred to Department of Education Debt Resolution Services (www.myeddebt.ed.gov (<http://www.myeddebt.ed.gov>)). Students who

fail to comply with the terms of their agreement to repay will immediately become ineligible for Title IV funds.

Repayment of State Financial Aid

State financial aid funds include Washington State Need Grant and College Bound Scholarship. State financial aid funds are subject to the Washington State Student Achievement Council (WSAC) Repayment policy. This policy goes into effect only if a student withdraws or completes zero credits at the end of the term.

Under this policy, students earn the percentage of State funds received that is equal to the percentage of the term completed. Students who complete 50% or more of the term prior to withdrawing are considered to have earned 100% of Title IV funds received, and will not owe a repayment.

The date of withdrawal and repayment amount are determined according to the same methodology outlined above. Refunds issued as a result of the withdrawal will be applied to reduce the student repayment amount. Students who owe a repayment of State financial aid will receive a bill from Clark College Accounting Services, and will not be eligible to receive additional State financial aid until the repayment has been paid in full. Any unpaid repayments will be referred to the WSAC for collection by June 30, 2018.

Other Educational Resources Available Scholarships

360-992-2582

<http://www.clark.edu/enroll/paying-for-college/scholarships/index.php>
(<http://www.clark.edu/enroll/paying-for-college/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.

Individual scholarships may have their own eligibility criteria where a student must maintain a certain grade point average (GPA) or enrollment level to qualify for funds awarded. Students should refer to their scholarship award letter for the conditions of their award. The scholarship application is separate from the application for financial aid.

The majority of scholarship applications are available January through April, and funds are awarded for the following academic year.

Workforce Education Services

360-992-2729

Clark College Workforce Education Services administers a variety of programs designed to support students who are pursuing vocational or technical non-transfer degree programs and certificate programs. Resources available include:

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-demand jobs. Eligible students must be Washington State residents, meet income guidelines, and be enrolled in an approved program. Financial assistance with tuition, books, and mandatory fees may be available for those who qualify.

Worker Retraining

360-992-2274

The Worker Retraining program serves students who have experienced unemployment, who are displaced homemakers, or have been discharged from the military, and are pursuing professional/technical programs that provide them with the ability to re-enter the workforce. Eligible students must live in Washington State and be enrolled in an approved program. Financial assistance with tuition, books, and mandatory fees may be available for those who qualify.

WorkFirst Financial Aid and Work Study

360-992-2915

The WorkFirst program serves students who are receiving Temporary Assistance for Needy Families (TANF) and are pursuing professional/technical programs. Eligible students must live in Washington State and be enrolled in an approved program. Financial assistance with tuition, books, and mandatory fees may be available for those who qualify.

On-campus WorkFirst Work Study job opportunities may also be available for those who qualify.

Basic Food Employment and Training (BFET)

360-992-2038

The BFET program serves students who are receiving federal basic food benefits and are pursuing professional/technical programs. Eligible students must live in Washington State and be enrolled in an approved program. Students may be eligible to receive subsidized child care assistance through Working Connections/Department of Social and Health Services (DSHS). Financial assistance with tuition, books, and mandatory fees may be available for those who qualify.

Sponsored Programs

360-992-2307

The Sponsored Programs office serves as a liaison between students and various governmental and community agencies that have authorized funding to pay for tuition, books, and supplies. An administrative processing fee applies to agencies who fund these student expenses.

Veteran Education Resources

360-992-2711 or 360-992-2112

Certifying officials located in the Veterans Resource Center (VRC) serve as a liaison between Clark College and the U.S. Department of Veterans Affairs. Clark College is approved for VA Education Benefits under Chapters 30, 31, 32, 33, 35, 1606, 1607, and Military Tuition Assistance (TA).

Eligible veterans and dependents must request certification each term for approved degree and certificate programs. Only courses required within the program will be funded. Audited courses are not eligible. Students are required to make satisfactory academic progress and should contact the Veterans Affairs Office prior to making any schedule changes. Visit our website for a complete checklist of requirements <http://www.clark.edu/campus-life/student-support/vrc/forms.php>

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 Officials 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.

The Code of Federal Regulations (38 CFR 21.4201) states 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 percent of the students enrolled in the course are having all or part of their tuition, fees, or other charges paid to or for them by an Education Institution or VA. The VA will only pay the monthly stipend/BAH for the period students are enrolled in and attending class(es).

Clark College joins with the Department of Defense (DOD) Voluntary Education Partnership Memorandum of Understanding (MOU) and conforms to Executive Order 13607 of April 27, 2012, establishing Principles of Excellence for Educational Institutions Serving Service Members, Veteran Spouses, and other family members. Credit for military experience may be granted toward general elective and specific vocational program coursework. Veterans 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 recommendations are based on the American Council of Education (ACE) guidelines for military training. Military experience is a non-traditional credit program. Students should refer to the Non-Traditional Credit Policy section of this catalog and contact the Veterans Affairs Office for additional information.

Clark College attempts to limit student enrollment to 85% veteran enrollment per 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 funding. Chapter 35 and 31 students may enroll even if the 85% has been realized.

The College's School Certifying Officials can be reached utilizing the contact information below:

Mike Gibson
(P) 360-992-2711
(E) mgibson@clark.edu

Cary Bare
(P) 360-992-2736
(E) cbare@clark.edu

REGISTRATION

360-992-2183

For more detailed information regarding registration for new, continuing or transfer students please see the registration website at <http://www.clark.edu/enroll/registration/index.php> (<http://www.clark.edu/enroll/registration/>).

Continuing student registration access dates/times are based on cumulative credits earned.

Priority registration access is given to eligible veterans under HB 1109. 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 can 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.

Online Registration Services

The following services are available online for current Clark College students:

- Enrollment verification
- Change of address
- Registration access date/time
- Online Registration
- Student global PIN change
- Student schedule
- Unofficial transcript
- Waitlist inquiry
- Degree audit (online degree audit)

Students may conveniently enroll online each term by taking advantage of online registration. Students will need a SID (student identification number) and global PIN. Printing student class schedule and changing student address, phone, or e-mail are other convenient options available online at <http://www.clark.edu/current/index.php> (<http://www.clark.edu/current/>).

Registration Policies

Credit Maximum

Students may register online or in person for 0-20 credits. Students who wish to add excess credits (i.e., 21 or more) must make an appointment and obtain written permission from an advisor to register over the credit maximum.

Late Registration Policy

Beginning the third (3rd) day of the term, instructor permission is required to enroll into any regular starting class. Beginning the tenth (10th) day of the term (eighth day in summer), students are also required to submit a late registration petition with the instructor's signature to enroll. The

Late Registration Petition form is available at the Registration Office. Exception: Late starting classes, section changes, and level changes.

Students who register after the tenth (10th) day of the term (eighth day in summer) will be charged a \$50 per-class Late Registration Fee. A student whose enrollment change falls under the following circumstances will not be charged:

- Students who need to make a level change. Example: Moving from MATH 096 to MATH 092.
- Students who need to make a section change. Example: Moving from an online course to a face-to-face course.
- Students who wish to enroll in classes that are set up as continuous enrollment as opposed to sequential.
- Students who are enrolling in late-starting classes that start after the tenth (10th) day of the term.
- Students enrolled in Transition Studies courses.
- Students utilizing the Clark College employee tuition waiver.
- Students who enroll in zero (0) credit courses.
- Students who feel their situation warrants an exception to this fee may request to have this fee waived by completing an Exception to the Late Registration Fee request form. The final decision on any exceptions will be made at the discretion of the Registrar.

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 registered 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 and withdraw has occurred.

Dropping a Class and Withdrawal from the College

Students who find it necessary to withdraw from classes must do so formally. The withdrawal process can be completed online at www.clark.edu/current (<http://www.clark.edu/current/>) or in person using a Change of Registration form at the Enrollment Services Office. The dates 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 eighth (8th) week 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. Withdrawals will not be accepted after the last day of the eighth (8th) week of the term.
- For courses with unusual start and end dates, withdrawals will not be accepted after 80% of the class meetings have occurred.
- 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

Any student may enroll in a course on an audit basis with instructor's written consent and upon payment of the regular tuition and fees. Audit students will be exempt from examinations and will not receive college credit; however, the instructor may require reasonable attendance and class participation. 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).

Student Attendance Status

Clark College considers students enrolled in twelve (12) or more credits 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

Attendance Status	Credit/Unit Hours Per Term
Full-time student	12 credit hours
Three-quarter-time student	9-11 credit hours
Half-time student	6-8 credit hours
Less than half-time student	1-5 credit hours

GI Bill Attendance Status for Fall, Winter and Spring Terms

Attendance Status	Credit/Unit Hours Per Term
Full-time student	12 credit hours
Three-quarter-time student	9-11 credit hours
Half-time student	6-8 credit hours

GI Bill Attendance Status for Summer Term

Attendance Status	Credit/Unit Hours Per Term
Full-time student	8 credit hours
Three-quarter-time student	6-7 credit hours
Half-time student	4-5 credit hours
Less than half-time	3 credits or less

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 or more is considered full-time training for Post 9/11 GI Bill for Fall, Winter, and Spring terms. (7 or more credits is required for BAH payment)
- 8 credits or more is considered full-time training for Post 9/11 GI Bill during Summer term only. (5 or more credits 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 Affairs Office for 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. Offices that should be informed include Admissions, Financial Aid, and Registration. Student Update forms are available at the Enrollment Services Office and online at https://www.clark.edu/current_students/.

Tuition and Fees

The first tuition due date is three weeks before the quarter begins. Due dates are on a weekly cycle:

- Students can verify the amount of tuition and the due date by viewing their schedule at https://www.clark.edu/current_students/.
- Students who register 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 register after the 10th day of the quarter (8th day of summer quarter) 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 denied the request for official transcripts.
- 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 ¹

Students are charged per credit 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 ¹

Students are charged per credit 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 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, or issuance of academic transcripts, and other college services, will be withheld for failure to meet financial obligations.

Refund Policy

A student who officially withdraws 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/registration/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

Grade Legend

Clark College uses the grading symbols listed below. The grades A, B, C, and D may include pluses (+) and minuses (-).

Letter Grade	Grade Point
A	4.0
A-	3.7
B+	3.3
B	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D+	1.3
D	1.0
D-	0.7
F	0.0
I	Incomplete
N	Audit
S	Satisfactory (credit only, no grade points)
U	Unsatisfactory (no credit, no grade points)
W	Official withdrawal
Y	In process/re-register

Transfer of Grades

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 equitable treatment.

Grade Information

Students enrolled in credit classes may obtain grade information approximately eight (8) days after the end of each term. Students may access grades at a college student information kiosk or through the Clark College website: www.clark.edu (<http://www.clark.edu/>).

Grade Point Average (GPA)

Grade points are calculated by multiplying the number of credit 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 attempted in courses that received a letter grade.

Credit/Unit Hrs Attempted	Grade	Grade Points Earned
5	B+ = 3.3	16.5
3	C = 2.0	6.0
8 Total Credits/Units		22.5 Total Grade Points

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 attempted in the courses that received a letter grade.

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. Faculty must submit the Memorandum of Incomplete Work to Enrollment Services by the grading deadline.

When assigning an incomplete grade, the instructor must provide a date for which the work must be completed, and the grade that will be entered on the student's transcript if the work is not finished on time. The incomplete grade remains on the student's transcript until the specified date, or until the student completes the required work and the instructor submits an amended grade to the Enrollment Services office.

An 'I' grade is given at the instructor's discretion and requires a contract to finish remaining course work. The student and instructor must fill out a contract form that identifies specific requirements to be completed. One copy of the contract is retained by the instructor and one given to the student. Unless otherwise specified, 'I' grade will revert to 'F' if not completed within ninety (90) days.

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/>)

In Process/Re-register

Students enrolled in variable credit or continuous enrollment courses may be given a "Y" grade if their effort is not sufficient to grant one (1) credit. Students must re-register and pay tuition to continue the course. A "Y" grade may also be used for courses which last more than one (1) term.

Pass/No Pass

Students may request to enroll in certain courses on a Pass/No Pass (PNP) basis. Students must contact the Enrollment Services Office for information about courses approved for this option. No more than sixty (60) credits 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.
- Credit 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 grade awarded will be used in computing the Clark College GPA.
- Each grade received will remain on the students transcript; the Registrar will place an "R" next to the other grade(s) received for that course.
- 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, Y or S.
- The Clark College repeat policy may or may not be recognized by other institutions, 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 "set aside" 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 set aside to fulfill credit requirements for graduation. Students should understand that the record to be set aside includes all courses taken before the date selected by the student, and those courses may not be used to satisfy future course prerequisites.

Students may set aside a previous record if:

- They have earned fifteen (15) credits at Clark College beyond the term to be set aside.
- They have a 2.50 GPA at Clark College for these credits.
- 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.

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 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 the Enrollment Services Office and their instructor. If a recording error has been made, it will be corrected. Grade changes are made at the discretion of the instructor. A "Change of Grade Form" must be signed and submitted to the 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 name, student address, student e-mail, date of birth, major field of study, terms of attendance, degrees and awards received, participation in activities and sports, and weight and height of members of athletic teams. 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 Student Identification number (SID). Students are required to use their assigned SID 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 is signed by the Registrar, has the college seal attached and is provided in a sealed envelope. To obtain an official transcript, students should go online to www.studentclearinghouse.org (<http://www.studentclearinghouse.org/>) to place an order. Transcripts will be mailed to any college, university or other agency upon receipt of the request within seven (7) business days. There is also a rush transcript option available. There is a fee for all official transcripts. For current fee information please go to our website or call 360-992-2287. Transcripts will not be faxed.

Students may obtain an unofficial transcript through the Clark College website, www.clark.edu (<http://www.clark.edu>); at student information kiosks; 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 of graded course work and a GPA of 3.75 or higher. The credits from courses in which a student receives an "I," "S," or "Y" will not count toward the twelve (12) credit minimum. Students who qualify for the list will receive a congratulatory letter from the Vice President of Instruction and a notation will be made on the student's transcript.

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 HS21 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 campus, but some are held at community sites.

Transitional Studies Tutoring Center

360-992-2750

The Transitional Studies Tutoring Center, at TBG 228, 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.

Economic & Community Development

360-992-2939

Clark College Economic & Community Development is the region's premier provider of continuing education, offering customized training for local employers and community education programs for individual residents of Southwest Washington. This department is dedicated to building community through education, mature learning, and professional development, as well as forging partnerships in support of regional economic development.

Customized Learning and Development

360-992-2466

Customized Learning and Development delivers high-quality workforce training, leadership development, and technical and business analysis tools to manufacturing, healthcare, business, nonprofit, and government organizations. An expert team assesses business needs, analyzes human and technical resources available, and builds a customized plan to deliver the training and leadership needed to meet organizations' current objectives and future needs. Customized Learning and Development provides organizations with highly relevant training that directly affects the economy, employment opportunities, and workforce development in Southwest Washington.

Professional Development

360-992-2939

Professional Development offers regularly scheduled classes, workshops, and certification programs for individuals to develop knowledge, skills, and increase their productivity and value to employers. A wide range of topics, such as accounting, health care, programming, web design, graphic arts, Microsoft Office, and small business are available to everyone wanting to take that next step. One-day "fast track" learning sessions and flexible online classes are also available.

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 world language, recreation and wellness, healthy living, and home and gardening. The cooking school in the kitchen classroom at Columbia Tech Center campus offers demonstration and hands-on courses that educate about nutrition and world culture while building student skills. All Community Education courses reflect a commitment to building community and sustainability.

Mature Learning

360-992-2939

Mature Learning is an educational and cultural enrichment program for adults. The program provides an opportunity to learn in a relaxed atmosphere with no tests, grades, or homework. A wide variety of courses is offered including art, writing, computers, science, history, creative writing, health, humanities, and more. Most classes meet two hours a week, either on the main Clark College campus, at Columbia Tech Center, downtown Vancouver, or at other locations in the community. Mature Learning also provides travel and excursions to places of cultural, scientific, and natural interest.

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 <http://www.clark.edu/enroll/admissions/orientation/index.php> (<http://www.clark.edu/enroll/admissions/orientation/>).

STUDENT SUCCESS PROGRAMS

360-992-2830

studentsuccess@clark.edu

http://www.clark.edu/campus-life/student-support/student_success/index.php (http://www.clark.edu/campus-life/student-support/student_success/)

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 peer mentors 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
- Targeted outreach and support related to Penguin Alert for Student Success (PASS) and Academic Standards Policy (ASP)
- Assistance to struggling students with locating appropriate academic resources and making informed enrollment decisions
- Peer mentoring to help students navigate and access appropriate support resources and strategies that meet their unique needs
- Reinstatement advising and support for students returning to the college
- Goal setting, course selections, and degree/certificate program planning
- Training and support for students, staff, and faculty on the Academic Standards Policy (ASP)

Penguin Alert for Student Success (PASS)

http://www.clark.edu/campus-life/student-support/student_success/aew/index.php (http://www.clark.edu/campus-life/student-support/student_success/aew/)

PASS is a resource that enables instructors to communicate with their students early in the term about any behaviors that are interfering with their success in class. The warning is intended to provide students with sufficient time to:

1. identify and correct problematic behaviors that are hindering success in class,
2. access appropriate campus resources, and
3. if necessary, withdraw from classes if circumstances prohibit successful completion of coursework.

Students who receive an Penguin Alert for Student Success are encouraged to contact their instructors, trained PASS staff and peer

mentors, and financial sources for strategies to improve course grades and guidance on course withdrawals.

DEGREE & CERTIFICATE REQUIREMENTS

- General Information (p. 309)
- Transfer Degree Distribution List (p. 311)
- Transfer Degree Overview (p. 315)
- Career and Technical Degrees and Certificates Distribution List (p. 321)
- Bachelor of Applied Sciences (p. 325)
- Procedure for Requesting AP Credits (p. 327)
- Non-Traditional Credit (p. 328)
- Credit Hours and Credit Load (p. 329)

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; and 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 and a minimum Grade Point Average (GPA) of 2.0; each associate degree requires a minimum of ninety (90) credits 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 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 and require a minimum GPA of 2.0. Individual departments offer Certificates of Completion with varying credit requirements.

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 in residence at our institution. Clark College does allow students to transfer credits toward meeting degree or certificate program requirements. There is no restriction on the number of transfer credits allowed; however, students must meet the minimum in-residence credit at Clark College for their specific program.

Refer to the following information for specific requirements and restrictions for each type of program:

Bachelor Degree

A minimum of thirty (30) credits, 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, 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, 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, pre-college or college level, must be completed at Clark College at any time to meet Academic Residency.

Non-traditional credit and credit earned through academic credit for prior learning may not be included within the minimum number of credits required.

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); recognizes all credit 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 program 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.

Code	General Education Requirement
CA	Written Communication Skills (AAS and CP only)
CP	Computational Skills
CT	Written Communication Skills (AAT only)
GE	General Elective
HA	Humanities Academic (A list)
HB	Humanities Performance (B list)
HE	Health
HPE	Health & Physical Education
HR	Human Relations
NS	Natural Sciences
OC	Oral Communications
PE	Physical Education Activity
PPI	Power, Privilege and Inequity
Q	Quantitative/Symbolic Reasoning
SE	Specified Elective
SS	Social Sciences
WC	Written Communication Skills (Transfer only)

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.

TRANSFER DEGREE DISTRIBUTION LIST

Transfer Degree Distribution List

Communication [C, WC, OC]

10 credits

Please refer to specific degree for details regarding specified communication requirements.

Quantitative Skills/Symbolic Reasoning [Q]

5 credits

Please refer to specific degree for details regarding specified quantitative skills requirements. If none are listed, please select from the following list

Code	Title	Credits/ Units
MATH 102	COLLEGE TRIG WITH SUPPLEMENTAL INSTRUCTION	5
MATH 103	COLLEGE TRIGONOMETRY	5
MATH 104	FINITE MATH WITH SUPPLEMENTAL INSTRUCTION	5
MATH 105	FINITE MATHEMATICS	5
MATH 110	COLLEGE ALGEBRA WITH SUPPLEMENTAL INSTRUCTION	5
MATH 111	COLLEGE ALGEBRA	5
MATH 122	MATH FOR ELEMENTARY TEACHERS	5
MATH 123	MATH FOR ELEMENTARY TEACHERS	5
MATH 124	MATH FOR ELEMENTARY TEACHERS	5
MATH 140	CALCULUS FOR LIFE SCIENCES	6
MATH 147	STATISTICS II	3
MATH 199	COOPERATIVE WORK EXPERIENCE	5
MATH 215	LINEAR ALGEBRA	5
MATH 221	DIFFERENTIAL EQUATIONS	5
MATH&107	MATH IN SOCIETY	5
MATH&146	INTRODUCTION TO STATISTICS	5
MATH&148	BUSINESS CALCULUS	5
MATH&151	CALCULUS I	5
MATH&152	CALCULUS II	5
MATH&153	CALCULUS III	5
MATH&254	CALCULUS IV	5
PHIL&117	TRADITIONAL LOGIC	5
PHIL&120	SYMBOLIC LOGIC	5

Health & Physical Education [PE/HPE]

3 credits

Option One

Code	Title	Credits/ Units
Complete two (2) credits/units of Health from the list below AND one (1) credit/unit of any college-level PE activity course		
HLTH 100	FOOD AND YOUR HEALTH	2

HLTH 101	HEALTH FOR ADULT LIVING
HLTH 103	ENVIRONMENTAL HEALTH
HLTH 104	WEIGHT AND YOUR HEALTH
HLTH 108	HAPPINESS AND YOUR HEALTH
HLTH 206	HUMAN SEXUALITY
HLTH 207	WOMEN'S HEALTH
HLTH 208	MEN'S HEALTH
HLTH 210	MULTICULTURAL HEALTH
HLTH 212	CANNABIS AND YOUR HEALTH
PE activity	1
Total Credits/Units	3

Option Two

Code	Title	Credits/ Units
HPE 258	FITNESS-WELLNESS	3
or HPE 266	MIND BODY HEALTH	
Total Credits/Units		3

Humanities [HA, HB]

15 credits

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

Department	HA	HB
American Sign Language	ASL& 121, ASL& 122, ASL& 123, ASL& 221, ASL& 222, ASL& 223	
	ASL 125	
Art	ART 118, ART 131, ART 151, ART 172, ART 220, ART 221, ART 222, ART 223, ART 225, ART 250, ART 272	ART 101, ART 103, ART 104, ART 105, ART 110, ART 117, ART 123, ART 124, ART 125, 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
Communication Studies	CMST&102, CMST&210, CMST&220, CMST&230	
	CMST 216	
Drama	DRMA&101	DRMA 140, DRMA 141, DRMA 150, DRMA 152, DRMA 250
	DRMA 154	

English	ENGL&226, ENGL&227, ENGL 121, ENGL 125, ENGL&228, ENGL&244, ENGL 126, ENGL 127, ENGL&245, ENGL&246, ENGL 128, ENGL 275, ENGL&254, ENGL&255, ENGL 276, ENGL 277 ENGL&256
	ENGL 133, ENGL 143, ENGL 145, ENGL 150, ENGL 156, ENGL 173, ENGL 175, ENGL 176, ENGL 240, ENGL 243, ENGL 261, ENGL 267, ENGL 272
Japanese	JAPN&121, JAPN&122, JAPN&123, JAPN&221, JAPN&222, JAPN&223
Journalism	JOUR 101, JOUR 111
Music	MUSC&104, MUSC&141, MUSC&142, MUSC&143, MUSC&231, MUSC&232, MUSC&233 MUSC 100, MUSC 116, MUSC 117, MUSC 118, MUSC 125, MUSC 127, MUSC 135 MUSC&121, MUSC&122, MUSC&123, MUSC&221, MUSC&222, MUSC&223 MUSC 101, MUSC 106, 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 193, 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 All MUSCA courses
Philosophy	PHIL&101, PHIL&120 PHIL 215, PHIL 216, PHIL 217, PHIL 240, PHIL 251, PHIL 280
Spanish	SPAN&121, SPAN&122, SPAN 141 SPAN&123, SPAN&221, SPAN&222, SPAN&223

Women's Studies	WS 101, WS 201, WS 210
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Social Sciences [SS]

15 credits

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

Department	Courses
Addiction Counseling	ACED 101
Anthropology	ANTH&204, ANTH&206, ANTH&215
Communication Studies	CMST&230
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&126, HIST&127, HIST&128, HIST&146, HIST&147, HIST&148, HIST&215, HIST&219 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 203
Sociology	SOC& 101, SOC& 201 SOC 121, SOC 131, SOC 161, SOC 220, SOC 315
Women's Studies	WS 101, WS 201, WS 210, WS 220, WS 225

Natural Sciences [NS]

15 credits

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

Department	Lab Course	Non-Lab Course
Anthropology	ANTH&215	ANTH&245
Astronomy	ASTR&101	

Biology	BIOL&100, BIOL&160, BIOL&221, BIOL&222, BIOL&223, BIOL&241, BIOL&242, BIOL&251, BIOL&252, BIOL&253, BIOL&260 BIOL 101, BIOL 105, BIOL 106, BIOL 150, BIOL 165, BIOL 208, BIOL 224	BIOL 139, BIOL 140, BIOL 141, BIOL 142, BIOL 143, BIOL 145, BIOL 164, BIOL 167, BIOL 180
Chemistry	CHEM&110, CHEM&121, CHEM&131, CHEM&151, CHEM&152, CHEM&153, CHEM&251, CHEM&252, CHEM&253	CHEM&141, CHEM&142, CHEM&143, CHEM&241, CHEM&242, CHEM&243
Engineering	ENGR&104	
Environmental Science	ENVS&101 ENVS 109, ENVS 201, ENVS 218, ENVS 208	ENVS 202
Geography	GEOG 205	
Geology	GEOL&101, GEOL&103 GEOL 102, GEOL 218	
Meteorology	METR 101, METR 201	
Nutrition		NUTR&101
Oceanography	OCEA&101	
Physical Science	PHSC 101, PHSC 102, PHSC 104, PHSC 110	PHSC 106
Physics	PHYS&100, PHYS&124, PHYS&125, PHYS&126, PHYS&231, PHYS&232, PHYS&233	PHYS&134, PHYS&135, PHYS&136, PHYS&241, PHYS&242, PHYS&243

Elective Requirements

Complete a total of twenty-seven (27) credits from courses numbered 100 and above. The two areas of electives are listed below.

Specified Electives

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).

Specified Electives [SE] – Approved courses that apply: [C, HA, HB, HE, HPE, NS, OC, PPI, Q, SE, SS, WC] – 12 credits.

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

Department	Courses
Accounting	ACCT&201, ACCT&202, ACCT&203 only
Addiction Counseling	ACED 101 only
American Sign Language	
Anthropology	
Art	

Astronomy	
Biology	
Business	BUS& 101, BUS& 201; BUS 203, BUS 204, BUS 211 only
Chemistry	
Communication Studies	Excluding CMST 280
Computer Science & Engineering	
Computer Technology	CTEC 121, CTEC 122 only
Drama	
Early Childhood Education	ECED&105, ECED&120; and EDUC&115 only
Economics	
Education	EDUC&201 only
Engineering	
English	
Environmental Science	
Forensic Science	
Geography	
Geology	
Health	Excluding HLTH 120, HLTH 123
Health & Physical Education	Excluding HPE 220, HPE 280, HPE 290
History	
Human Services Substance Abuse	HSSA&101
Japanese	
Journalism	JOUR 101, JOUR 111 only
Mathematics	
Meteorology	
Music	
Nutrition	
Philosophy	
Physical Education ¹	
Physical Science	
Physics	
Political Science	
Psychology	
Sociology	
Spanish	
Women's Studies	

¹ A maximum of two (2) credits in PE activity can apply toward this area.

General Electives

Any additional courses of 100 level or higher may apply. Physical Education activity credits are limited to a maximum of three (3) credits regardless of distribution area in the DTA degree.

Coursework in FLPC cannot apply to the AA degree program.

No more than 15 credits can be taken from the General Elective area.

Application of Credit

Credits earned through Advanced Placement (AP), International Baccalaureate (IB), Tech Prep/Direct Credit, CLEP, cooperative work

experience, military experience, special projects, and course challenge must fall within the following guidelines when awarded:

1. Credits may be awarded only if the learning experiences fall within the outcomes of the regular curriculum of the college.
2. Academic transcripts will indicate other credits awarded.
3. Credits cannot duplicate credits already awarded.
4. Students should read the degree requirements section of this catalog for information about applying other credit options toward a degree.

The following lists the number of credits that can be applied through other credit options in each degree or certificate program at Clark College:

Bachelor of Applied Science (BAS), Associate in Arts (AA), Associate in Fine Arts (AFA), and Associate in Science – Transfer (AST) degrees:

- A maximum of forty-five (45) credits earned through Academic Credit for Prior Learning will apply.
- A maximum of 25% of the degree or certificate may have credits from prior experiential learning and military experience.
- Students can apply 15 credits in CLEP, Tech Prep/Direct Credit, cooperative work experience, and Special Projects toward a BAS, AA, AFA, and AST degree.
- CLEP, cooperative work experience, and Tech Prep/Direct credits will only apply toward general electives. AP, IB, course challenge, and potentially military experience credits would be allowed in distribution areas.

Articulation Programs

Certain degree programs are offered at Clark College that have been set up in cooperation with four-year institutions. Program tracks that have been approved by Clark's Instructional Planning Team are eligible for Clark's Associate in Arts – Option B degree, even if they do not meet the core requirements. Intensive research, planning, and cooperation on the part of multiple institutions have gone into the development of these programs.

Associate in Applied Science – Transfer Degree (AAS-T)

The Associate in Applied Science – Transfer degree (AAS-T) is designed to build upon the technical courses required for job preparation but also includes a college-level General Education component, common in structure for all such degrees. In general, technical degree programs are not designed for transfer to other colleges or universities. However, several four-year colleges and universities have specific bachelor's degree programs that accept AAS-T degrees. Clark College currently has one AAS-T degree in Early Childhood Education (see the Early Childhood Education program description in this catalog for specific program requirements).

Students seeking to transfer into degree programs other than those specifically designed for the AAS-T are urged to consider the DTA or AS-T in preparation for transfer. Majors outside the specifically designed degrees listed above likely will accept very few of the credits in the AAS-T degree (English composition, college-level math, and other general education courses should transfer).

“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 toward general education requirement(s) at any other public and most private higher education institutions in the state.¹

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:

- Communications (5 credits) – ENGL&101, ENGL&102
- Quantitative and Symbolic Reasoning (5 credits) – MATH&107, MATH&148 or MATH&151
- Humanities (10 credits in two different subject areas or disciplines²) – PHIL&101, MUSC&104, DRMA&101, or ENGL 240
For colleges that use History as a Humanities: HIST&146, HIST&147, HIST&148
- Social Science (10 credits in two different subject areas or disciplines) – PSYC&100, SOC& 101, POLS 231, POLS 111
For colleges that use History as a Social Science: HIST&146, HIST&147, HIST&148 HIST&126, HIST&127, HIST&128
- Natural Sciences (10 credits in two different subject areas or disciplines) – BIOL&100, BIOL&160 with lab, ASTR&101, ASTR&101 with lab, CHEM 106, CHEM&110 with lab, CHEM&121 with lab ENV&101, ENV&101 PHYS&100 with lab, GEOL&101 with lab.
- Additional 5 credits in a different discipline can be taken from any category listed above.

Note: Although these courses are listed under categories, the actual course may satisfy a different general education category at a receiving institution.

¹ 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 that will meet general education requirements.

² Disciplines are sometimes called “subjects” or “subject matter areas” and designated by a prefix (i.e., PHIL for Philosophy and POLS for Political Science).

TRANSFER DEGREE OVERVIEW

Associate in Arts (AA)

Associate in Arts – Major Related Program (MRP)

Associate in Fine Arts (AFA)

Associate in Science - Track 1 (AST1)

Associate in Science - Track 2 (AST2)

Associate in Applied Science - Transfer Degree (AAS-T)

'Washington 45' - List of One Year Transfer Courses

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.
- Maintain a minimum cumulative college-level grade point average (GPA) of 2.00 or higher.
- Thirty (30) credits minimum must be completed at Clark College to meet Academic Residency.

General Transfer Degree Credit Restrictions

- Cooperative Work Experience: No more than fifteen (15) credits may be applied to an associate degree.
- Course Challenge: Students may use credits earned from successful course challenges toward their degree or certificate, but the credits 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 from Academic Credit for Prior Learning can be applied to a degree.
- Pass/Fail Grading Option: Sixty (60) credits 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. If Tech Prep/Direct Credit courses apply to a professional technical degree or certificate there is no limit to the number of credits that can be applied.
- Special Projects: No more than fifteen (15) credits in Special Projects will be allowed to apply towards degree or certificate requirements unless specifically outlined by a program.

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 Requirements

Communication Skills [C, OC, WC]

10 credits

To fulfill the Communications Skills requirement for the AA-DTA transfer degree, students must complete ENGL& 101 for five (5) credits and another five (5) credit English composition course or take another three (3) credit English composition course and take a qualifying five (5) credit Oral Communication (OC) studies course.

Quantitative Skills/Symbolic Reasoning Skills [Q]

5 credits

To fulfill the quantitative skills requirement for the AA general transfer degree, students must complete five (5) credits of college level mathematics (Q) or symbolic reasoning (Q) coursework.

Health & Physical Education [HE, HPE, PE]

3 credits

To fulfill the Health and Physical Education requirements for the AA general transfer degree, students must complete two (two) qualifying credits for Health [HE] and one (1) credit of any college-level Physical Education [PE] activity course, or HPE 258 or HPE 266.

Humanities [HA, HB]

15 credits

To fulfill the Humanities requirement for the AA general transfer degree students must complete 15 credits of humanities coursework from at least two (2) subject areas. Students may include no more than ten (10) credits from any one subject area. A maximum of five (5) credits of the 'B' list coursework may be applied. A maximum of five (5) credits of 100-level world language can be applied.

Social Sciences [SS]

15 credits

To fulfill the Social Science requirements for the AA general transfer degree students must complete fifteen (15) credits of social science

coursework from at least three (3) subject areas. Students may include no more than ten (10) credits from any one subject area.

Natural Sciences [NS]

15 credits

To fulfill the natural Sciences requirement for the AA general transfer degree students must complete fifteen (15) credits of natural science coursework from at least two subject areas. Students may include no more than ten (10) credits from one subject area. Students must include at least one (1) lab science.

Specified Elective Requirements [SE]

12 credits

To fulfill the Specified Elective requirements for the AA general transfer degree students must complete twelve (12) credits of Specified Electives. A maximum of two (2) credits in Physical Education (PE) activity can apply.

General Electives [GE]

15 credits

Additional credits may be taken at college level to reach the minimum ninety (90) credit total for the AA general transfer degree. Note: Coursework in CAP, ESL, or FLPC cannot apply to the AA transfer degree.

Oral Communication [OC]

Clark students must complete either CMST&210, CMST&220, or CMST&230 to fulfill the Oral Communication requirement. Students may apply this course within the Humanities, Social Sciences (CMST&230 only), or Communication Skills distribution area or count the course as a Specified or General Elective.

College Preparation (COLL)

Clark students must complete College 101 (COLL 101). Students may apply this course in General Electives for the AA general transfer degree.

AA-DTA General Education Credit Restrictions

- Physical Education Activity: Three (3) credits maximum in PE activity can apply toward the degree.
- A course can apply toward the 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 and College 101 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 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/MRP¹ in:

- Biology
- Business
- Math Education
- Pre-Nursing
- Nursing

¹ For specific program requirements please see the programs section of the catalog.

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;
- 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 [HPE], College 101 [COLL] 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

To fulfill the communication skills requirement for the AFA degree students must complete ENGL&101 for five (5) credits. Students who complete ENGL&101 or its equivalent at less than five (5) credits 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

To fulfill the quantitative skills requirement for the AFA degree, students must complete five (5) credits of college level mathematics.

Health & Physical Education [HE, HPE, PE]

3 credits

To fulfill the Health and Physical Education requirement for the AFA degree, students must complete two (2) qualifying credits of Health and one (1) credit of any college-level Physical Education [PE] activity course, or HPE 258 or HPE 266.

Humanities [HA]

5 credits

To fulfill the Humanities requirement for the AFA degree students must complete five (5) credits of coursework from the Humanities [HA] Associate of Arts distribution list. Courses must be List A courses. The course completed cannot be part of the AFA major requirements.

Social Sciences [SS]

5 credits

To fulfill the Social Science requirement for the AFA degree students must complete five (5) credits 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

To fulfill the Natural Science requirement for the AFA degree students must complete five (5) credits 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.

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
- Earth Science

- Environmental/Resources Sciences
- Geology

AST1 General Education Requirements Communication Skills [WC]

5 credits

To fulfill the communication skills requirement for the AST1 degree students must complete ENGL&101 for five (5) credits. Students who complete ENGL&101 or its equivalent at less than five (5) credits may complete the communications requirement by completing any of the courses (or their appropriate transfer equivalents) in Written Communication [WC] or Oral Communications [OC] as defined within the Associate of Arts distribution requirements.

Quantitative Skills/Symbolic Reasoning Skills

10 credits

To fulfill the Quantitative Skills requirement for the AST1 degree students must complete MATH&151 and MATH&152, or Math courses that have MATH&152 as a prerequisite.

Health & Physical Education [HE, HPE, PE]

3 credits

To fulfill the Health and Physical Education requirement for the AST1 degree, students must complete two (2) qualifying credits of Health [HE] and one (1) credit of any college-level Physical Education [PE] activity course, or HPE 258 or HPE 266.

Humanities & Social Sciences [HA,HB, SS]

15 credits

To fulfill the Quantitative Skills requirement for the AST1 degree students must complete five (5) credits of coursework from Humanities [HA,HB], five (5) credits of coursework from Social Sciences [SS], and an additional five (5) credits of coursework from either area for a minimum of fifteen (15) credits. Humanities and Social Sciences courses must be selected from the Associate of Arts distribution list. A maximum of five (5) credits of the "B" list coursework may be applied.

Pre-Major Sequence

45 to 50 credits

All students planning to earn the AST1 degree are required to complete the following course sequences. The sequences taken are dependent on the major of the student. Sequences should be started and finished at the same institution to ensure proper transfer. Students MUST consult with intended transfer school to select sequences.

Chemistry Sequence

15 credits

To fulfill the chemistry sequence requirement students may take either:

Code	Title	Credits/ Units
Option One		
CHEM&141 & CHEM&151	GENERAL CHEMISTRY I and GENERAL CHEMISTRY LABORATORY I	5

CHEM&142 & CHEM&152	GENERAL CHEMISTRY II and GENERAL CHEMISTRY LABORATORY II	5
CHEM&143 & CHEM&153	GENERAL CHEMISTRY III and GENERAL CHEMISTRY LABORATORY III	6
Option Two		
CHEM&241 & CHEM&251	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY LABORATORY I	5
CHEM&242 & CHEM&252	ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY LABORATORY II	5
CHEM&243 & CHEM&253	ORGANIC CHEMISTRY III and ORGANIC CHEMISTRY LABORATORY III	6

Biology or Physics Sequence

5 credits

To fulfill the biology or physics sequence requirement students may take either:

Code	Title	Credits/ Units
Option One		
BIOL&222	MAJORS CELL/MOLECULAR	5
BIOL&221	MAJORS ECOLOGY/EVOLUTION	5
BIOL&223	MAJORS ORGANISMAL PHYS	5
Option Two ¹		
PHYS&124 & PHYS&134 & PHYS 091	GENERAL PHYSICS LAB I and GENERAL PHYSICS I and PHYSICS CALCULATIONS	6
PHYS&125 & PHYS&135 & PHYS 092	GENERAL PHYSICS LAB II and GENERAL PHYSICS II and PHYSICS CALCULATIONS	6
PHYS&126 & PHYS&136 & PHYS 093	GENERAL PHYSICS LAB III and GENERAL PHYSICS III and PHYSICS CALCULATIONS	6

¹ Please note that PHYS 091, PHYS 092, and PHYS 093 do not count toward the credit total for transfer degrees (AST1, AST2, DTAMRP or AADTA) degrees.

Additional Mathematics Courses

5 credits

To fulfill the additional mathematics requirement students may take either:

Code	Title	Credits/ Units
MATH&146 or MATH&153	INTRODUCTION TO STATISTICS CALCULUS III	5

Students should consult with intended transfer school to select correct path.

Science Electives

10 to 15 credits

Complete an additional ten (10) to fifteen (15) credits (preferably in a two or three-term sequence) in physics, geology, organic chemistry, biology or

mathematics consisting of courses normally taken for science majors to better prepare for major.

Electives

Students should complete sufficient additional college-level credits so that total credits earned is at least 90 term credits. These remaining courses may include prerequisites for major courses, additional major coursework, or specific general education or other university requirements, as approved by the advisor.

Associate in Science – Track 2 (AST2)

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

AST2 - Concentration Options

- Atmospheric Science
- Computer Science
- Engineering
- Physics

AST2 – MRP

- Bioengineering and Chemical Engineering
- Computer and Electrical Engineering
- Mechanical/Civil/Aeronautical/Industrial/Materials Science Engineering

General Education Requirements

Communication Skills [WC]

5 credits

To fulfill the communication skills requirement for the AST1 degree students must complete ENGL&101 for five (5) credits. Students who complete ENGL&101 or its equivalent at less than five (5) credits may complete the communications requirement by completing any of the courses (or their appropriate transfer equivalents) in Written Communication [WC] or Oral Communications [OC] as defined within the Associate of Arts distribution requirements.

Quantitative Skills/Symbolic Reasoning Skills

10 credits

To fulfill the Quantitative Skills requirement for the AST2 degree students must complete MATH&151 and MATH&152, or Math courses that have MATH&152 as a prerequisite.

Health & Physical Education [HE, HPE, PE]

3 credits

To fulfill the Health and Physical Education requirement for the AST2 degree, students must complete two (2) qualifying credits of Health [HE] and one (1) credit of any college-level PE [PE] activity course, or HPE 258 or HPE 266.

Humanities & Social Sciences [HA,HB, SS]

15 credits

To fulfill the Quantitative Skills requirement for the AST2 degree students must complete five (5) credits of coursework from Humanities [HA,HB], five (5) credits of coursework from Social Sciences [SS], and an additional five (5) credits of coursework from either area for a minimum of fifteen

(15) credits. Humanities and Social Sciences courses must be selected from the Associate of Arts distribution list. A maximum of five (5) credits of "B" list coursework may be applied.

Pre-Major Sequence

25 credits

All students planning to earn the Associate in Science – Track 2 degree are required to complete the following course sequences. Please note that there are different sequences for Engineering and Non-engineering majors. The sequences taken are dependent on the major of the student. Sequences should be started and finished at the same institution to ensure proper transfer. Students MUST consult with faculty or advising staff to pick the correct sequences.

Physics Sequence

15 credits

Code	Title	Credits/ Units
Option One ¹		
PHYS&124 & PHYS&134 & PHYS 091	GENERAL PHYSICS LAB I and GENERAL PHYSICS I and PHYSICS CALCULATIONS	6
PHYS&125 & PHYS&135 & PHYS 092	GENERAL PHYSICS LAB II and GENERAL PHYSICS II and PHYSICS CALCULATIONS	6
PHYS&126 & PHYS&136 & PHYS 093	GENERAL PHYSICS LAB III and GENERAL PHYSICS III and PHYSICS CALCULATIONS	6
Option Two ¹		
PHYS&231 & PHYS&241 & PHYS 094	ENGINEERING PHYSICS LAB I and ENGINEERING PHYSICS I and PHYSICS CALCULATIONS	6
PHYS&232 & PHYS&242 & PHYS 095	ENGINEERING PHYSICS LAB II and ENGINEERING PHYSICS II and PHYSICS CALCULATIONS	6
PHYS&233 & PHYS&243 & PHYS 096	ENGINEERING PHYSICS LAB III and ENGINEERING PHYSICS III and PHYSICS CALCULATIONS ¹	6

¹ Please note that PHYS 091, PHYS 092, PHYS 093, PHYS 094, PHYS 095, AND PHYS 096 do not count toward the credit total for transfer degrees (AST1, AST2, DTAMRP or AADTA) degrees.

² Calculus based required for engineering majors.

Chemistry with Lab

5 credits

CHEM&141, CHEM&151 (required for engineering majors); other majors should select 5 credits of science based on specific faculty or program advising.

Additional Mathematics Coursework

5 credits

Code	Title	Credits/ Units
MATH&146 or MATH&153	INTRODUCTION TO STATISTICS CALCULUS III	5

Elective Requirements

35 credits

Students are again advised to consult with an advisor to ensure that the courses selected are the best fit for their major and transfer intent. Sequences should be started and finished at the same institution.

Engineering Majors should choose from the courses listed below, in consultation with an advisor, based on the requirements of the specific discipline at the baccalaureate institution the student selects to attend.:

Department	Courses
Chemistry	CHEM&142, CHEM&143, CHEM&152, CHEM&153, CHEM&241, CHEM&242, CHEM&243, CHEM&251, CHEM&252, CHEM&253
Computer Science & Engineering	CSE 101, CSE 120, CSE 121, CSE 215, CSE 222, CSE 223, CSE 224, CSE 290
Engineering	ENGR&104, ENGR&215, ENGR&204, ENGR&214, ENGR&224, ENGR&225 ENGR 101, ENGR 107, ENGR 109, ENGR 113, ENGR 115, ENGR 120, ENGR 121, ENGR 150, ENGR 221, ENGR 239, ENGR 240, ENGR 250, ENGR 252, ENGR 253, ENGR 270, ENGR 280
Math	MATH&254 MATH 215, MATH 221

Non-engineering Majors should choose from the courses listed below, in consultation with an advisor, based on the requirements of the specific discipline at the baccalaureate institution the student selects to attend:

Department	Courses
Biology	BIOL&100, BIOL&221, BIOL&222, BIOL&223, BIOL&251, BIOL&252, BIOL&253, BIOL&260 BIOL 101, BIOL 164, BIOL 165, BIOL 167, BIOL 168, BIOL 208, BIOL 224
Chemistry	CHEM&142, CHEM&143, CHEM&152, CHEM&153, CHEM&241, CHEM&242, CHEM&243, CHEM&251, CHEM&252, CHEM&253
Computer Science & Engineering	CSE 120, CSE 121, CSE 215, CSE 222, CSE 223, CSE 224, CSE 290

Engineering	ENGR&104, ENGR&215, ENGR&204, ENGR&214, ENGR&224, ENGR&225 ENGR 101, ENGR 107, ENGR 109 ENGR 113, ENGR 115, ENGR 120, ENGR 121, ENGR 150, ENGR 221, ENGR 239, ENGR 240, ENGR 250, ENGR 252, ENGR 253, ENGR 270, ENGR 280
Environmental Science	ENVS&101 ENVS 109, ENVS 218, ENVS 221
Math ¹	MATH&153, MATH&254 MATH 203, MATH 204, MATH 215, MATH 221
Physics	PHYS&231, PHYS&232, PHYS&233, PHYS&241, PHYS&242, PHYS&243

¹ The pre-calculus courses (MATH 102, MATH 103, MATH 110, and/or MATH 111) might also be used as electives if these courses had to be taken in preparation for the calculus sequence.

Year Transfer List” of general education courses (not all offered at Clark College):

- Communications (5 credits) – ENGL&101, ENGL&102
- Quantitative and Symbolic Reasoning (5 credits) – MATH&107, MATH&148 or MATH&151
- Humanities (10 credits in two different subject areas or disciplines) – PHIL&101, MUSC&104, DRMA&101, CMST&210 or ENGL 254
- For colleges that use History as a Humanities HIST&126, HIST&127, HIST&128, HIST&146, HIST&147, HIST&148
- Social Science (10 credits in two different subject areas or disciplines) – PSYC&100, SOC& 101, POLS&203, POLS 111
- For colleges that use History as a Social Science: HIST&126, HIST&127, HIST&128, HIST&146, HIST&147, HIST&148
- Natural Sciences (10 credits in two different subject areas or disciplines) – BIOL&100, BIOL&160 with lab ASTR&101 with lab, CHEM 106, CHEM&110 with lab, CHEM&121 with lab, CHEM&139, ENVS 109, ENVS&101, PHYS&100 with lab, GEOL&101 with lab.
- Additional 5 credits in a different discipline can be taken from any category listed above.

Associate in Applied Science – Transfer Degree (AAS-T)

The Associate in Applied Science – Transfer degree (AAS-T) is designed to build upon the technical courses required for job preparation but also includes a college-level General-Education component, common in structure for all such degrees. In general, technical degree programs are not designed for transfer to other colleges or universities. However, several four-year colleges and universities have specific bachelor’s degree programs that accept AAS-T degrees. Clark College currently has one AAS-T degree in Early Childhood Education (see the Early Childhood Education program description in this catalog for specific program requirements). Students seeking to transfer into degree programs other than those specifically designed for the AAS-T are urged to consider the DTA or AS-T in preparation for transfer. Majors outside the specifically designed degrees listed above likely will accept very few of the credits in the AAS-T degree (English composition, college-level math, and other general education courses should transfer).

“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 toward general education requirement(s) at any other public and most private higher education institutions in the state.¹ 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

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 in specified curriculum:

- Associate Degree: Ninety (90) credits 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 requirement. Most occupational programs require more than fifty-nine (59) credits 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 requirement. All Associate in Applied Technology degree programs require at least seventy-five (75) credits of major-related requirements.
- Certificate of Proficiency: Forty-five (45) credits minimum
- Certificate of Achievement: Twenty-one (21) credits 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 minimum must be completed at Clark College.
- Certificate of Proficiency: Fifteen (15) credits minimum must be completed at Clark College.
- Certificate of Achievement: Ten (10) credits 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 Restrictions

- Physical Education Activity: Three (3) credits maximum in PE activity can apply toward an associates degree.
- Academic Credit for Prior Learning: A maximum of sixty (60) credits from AP, IB, CI, course challenges, or industry certification credits 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 to be applied to a degree. Credits 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. If Tech Prep/Direct Credit courses apply to a professional technical degree or certificate, there is no limit to the number of credits that can be applied.
- Cooperative Work Experience: No more than fifteen (15) credits may be applied to an associate degree.
- Special Projects: No more than fifteen (15) credits in Special Projects will be allowed to meet degree or certificate requirements unless specifically outlined by the program.
- Military Experience: Credits 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 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.

General Education Requirements

Note: Some specific requirements of a program may also meet the General Education requirements.

Communication Skills [CA, CT]

Department	AAS - 6 credits/ units minimum (CA)	AAT - 5 credits/ units minimum (CT)	CP - 3 credits/ units minimum (CA)
Business	BUS 211	BUS 211	BUS 211
Business Technology	BTEC 107	BTEC 107	BTEC 106, BTEC 107
Communication Studies ¹	CMST&210 ¹ , CMST&220 ¹ , CMST&230 ¹		
English	ENGL 098, ENGL 108, ENGL 110 ENGL&101, ENGL&102, ENGL&235	ENGL&101, ENGL&235	ENGL 097, ENGL 098, ENGL 108, ENGL 110 ENGL&101, ENGL&235
Management	MGMT 107		MGMT 107
Professional Technical Writing	PTWR 135	PTWR 135	PTWR 135

¹ Communication Studies courses cannot be counted toward the first three (3) credits of Communication Skills [CA,CT].

Note: Pharmacy Technician students may meet the Communication Skills requirement by achieving the following:

Completion of ENGL 098 or equivalent with a grade of “C” or better (2.0) or placement into ENGL&101.

Health & Physical Education [HE, HPE, PE, PEDNC, PEMAR] - 3 credits

Select three credits/units from either Option One or Option Two:

Code	Title	Credits/ Units
Option One		
Select two credits/units from the following:		2
HLTH 100	FOOD AND YOUR HEALTH	
HLTH 101	HEALTH FOR ADULT LIVING	
HLTH 103	ENVIRONMENTAL HEALTH	
HLTH 104	WEIGHT AND YOUR HEALTH	
HLTH 108	HAPPINESS AND YOUR HEALTH	
HLTH 206	HUMAN SEXUALITY	
HLTH 207	WOMEN'S HEALTH	
HLTH 208	MEN'S HEALTH	
HLTH 210	MULTICULTURAL HEALTH	
HLTH 212	CANNABIS AND YOUR HEALTH	
Select one from the following:		1
College-level Physical Activity course		
Option Two		
Select one from the following:		3
HPE 220	OCCUPATIONAL WELLNESS	
HPE 258	FITNESS-WELLNESS	
HPE 266	MIND BODY HEALTH	

Computational Skills [CP]

Department	AAS - 3 credits/ units minimum	AAT - 5 credits/ units minimum	CP - 3 credits/ units minimum
Allied Health	AH 261	AH 261	AH 261
Business	BUS 102	BUS 102	BUS 102
Business Technology Medical Office	BMED 103, BMED 105	BMED 103, BMED 105	BMED 103
Chemistry			CHEM 095
Computer Science & Engineering	CSE 121, CSE 222, CSE 223, CSE 224		CSE 121, CSE 222, CSE 223, CSE 224
Computer Technology	CTEC 121	CTEC 121	CTEC 121

Mathematics	All MATH/ MATH& courses numbered 030 or higher EXCEPT MATH 199 or MATH 290	MATH 102, MATH 103, MATH 104, MATH 105, MATH 110, MATH 111 MATH&107, MATH&146	All MATH/ MATH& courses numbered 030 or higher EXCEPT MATH 199 or MATH 290
		Or any MATH/ MATH& course for which these courses are a prerequisite	

Professional Technical Computer Skills	PTCS 110	PTCS 110	PTCS 110
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A placement into or eligibility for MATH 090 or MATH 092 higher will satisfy this requirement for certain designated programs.

Human Relations [HR]

Department	AAS - 3 credits/ units minimum	AAT - 5 credits/ units minimum	CP - 3 credits/ units minimum
Addiction Counseling	ACED 101, ACED 201	ACED 101, ACED 201	ACED 101, ACED 201
Business Technology	BTEC 148	BTEC 148	BTEC 148
Business Medical	BMED 166, BMED 225, BMED 226	BMED 166, BMED 225, BMED 226	BMED 166, BMED 225, BMED 226
Business	BUS& 101	BUS& 101	BUS& 101
Communication	CMST&210, CMST&230	CMST&210, CMST&230	CMST&210, CMST&230
College	COLL 101	COLL 101	COLL 101
Computer Technology	CTEC 104, CTEC 165	CTEC 104, CTEC 165	CTEC 104, CTEC 165
Human Development	HDEV 103, HDEV 105, HDEV 123, HDEV 155, HDEV 175, HDEV 186, HDEV 195, HDEV 198, HDEV 200	HDEV 103, HDEV 105, HDEV 123, HDEV 155, HDEV 175, HDEV 186, HDEV 195, HDEV 198, HDEV 200	HDEV 103, HDEV 105, HDEV 123, HDEV 155, HDEV 175, HDEV 186, HDEV 195, HDEV 198, HDEV 200
Management	MGMT 101, MGMT 103, MGMT 106, MGMT 110, MGMT 112, MGMT 120, MGMT 122, MGMT 125, MGMT 128, MGMT 132	MGMT 101, MGMT 103, MGMT 106, MGMT 110, MGMT 112, MGMT 120, MGMT 122, MGMT 125, MGMT 128, MGMT 132	MGMT 101, MGMT 103, MGMT 106, MGMT 110, MGMT 112, MGMT 120, MGMT 122, MGMT 125, MGMT 128, MGMT 132
Psychology	PSYC&100, PSYC&200	PSYC&100, PSYC&200	PSYC&100, PSYC&200
	PSYC 203	PSYC 203	PSYC 203

Sociology	SOC& 101, SOC& 201	SOC& 101, SOC& 201	SOC& 101, SOC& 201
	SOC 121, SOC 131, SOC 220	SOC 121, SOC 131, SOC 220	SOC 121, SOC 131, SOC 220

Women's Studies WS 101 WS 101 WS 101

Humanities [HA, HB] - 3 credits for AAS only

Department	HA	HB
American Sign Language	ASL& 121, ASL& 122, ASL& 123, ASL& 221, ASL& 222, ASL& 223 ASL 125	
Art	ART 131, ART 151, ART 172, ART 220, ART 221, ART 222, ART 223, ART 225, ART 250, ART 272	ART 101, ART 103, ART 104, ART 105, ART 110, ART 117, ART 118, ART 123, ART 124, ART 125, 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
Communication Studies	CMST&102, CMST&210, CMST&220, CMST&230 CMST 216	
Drama	DRMA&101 DRMA 154	DRMA 140, DRMA 141, DRMA 150, DRMA 152, DRMA 250
English	ENGL&226, ENGL&227, ENGL&228, ENGL&244, ENGL&245, ENGL&246, ENGL&254, ENGL&255, ENGL&256 ENGL 133, ENGL 136, ENGL 143, ENGL 145, ENGL 150, ENGL 156, ENGL 173, ENGL 175, ENGL 176, ENGL 240, ENGL 243, ENGL 260, ENGL 261, ENGL 267, ENGL 272	ENGL 121, ENGL 125, ENGL 126, ENGL 127, ENGL 275, ENGL 276, ENGL 277
Japanese	JAPN&121, JAPN&122, JAPN&123, JAPN&221, JAPN&222, JAPN&223	
Journalism	JOUR 101, JOUR 111	

Music	MUSC&104, MUSC&141, MUSC&142, MUSC&143, MUSC&231, MUSC&232, MUSC&233	MUSC&121, MUSC&122, MUSC&123, MUSC&221, MUSC&222, MUSC&223 MUSC 101, MUSC 106, 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 193, 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 All MUSCA courses
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Philosophy PHIL&101, PHIL&120

PHIL 215, PHIL 216,
PHIL 217, PHIL 240,
PHIL 251, PHIL 280

Spanish SPAN&121, SPAN&122, SPAN 141
SPAN&123, SPAN&221,
SPAN&222, SPAN&223

Women's Studies WS 101, WS 201,
WS 210

Social Sciences [SS] - 3 credits for AAS only

Department	Courses
Addiction Counseling	ACED 101
Anthropology	ANTH&204, ANTH&206, ANTH&215
Communication Studies	CMST&230
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

History	HIST&126, HIST&127, HIST&128, HIST&146, HIST&147, HIST&148, HIST&215
	HIST 231, HIST 251, HIST 252
Political Science	POLS&203
	POLS 111, POLS 131, POLS 231
Psychology	PSYC&100, PSYC&200
	PSYC 203
Sociology	SOC& 101, SOC& 201
	SOC 121, SOC 131, SOC 220
Women's Studies	WS 101, WS 201, WS 210, WS 220, WS 225

Natural Sciences [NS] - 3 credits for AAS only

Department	Lab Course	Non-Lab Course
Anthropology	ANTH&215	ANTH&245
Astronomy	ASTR&101	
Biology	BIOL&100, BIOL&160, BIOL&221, BIOL&222, BIOL&223, BIOL&241, BIOL&242, BIOL&251, BIOL&252, BIOL&253, BIOL&260	BIOL 139, BIOL 140, BIOL 141, BIOL 142, BIOL 143, BIOL 145, BIOL 164, BIOL 167, BIOL 180
	BIOL 101, BIOL 105, BIOL 150, BIOL 165, BIOL 208, BIOL 224	
Chemistry	CHEM&110, CHEM&121, CHEM&131, CHEM&151, CHEM&152, CHEM&153, CHEM&251, CHEM&252, CHEM&253	CHEM&141, CHEM&142, CHEM&143, CHEM&241, CHEM&252, CHEM&243 CHEM 095
Engineering	ENGR&104	
Environmental Science	ENVS&101	
	ENVS 109, ENVS 218	
Geology	GEOL&101, GEOL&103	
	GEOL 102, GEOL 218	
Meteorology	METR 101	
Nutrition		NUTR&101
Physical Science	PHSC 101, PHSC 102, PHSC 104, PHSC 110	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, PHYS&243
		PHYS 090

objective requiring less than forty-five (45) credits, but more than twenty (20) credits. 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 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. 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.

Certificate of Achievement (CA)

The Certificate of Achievement is designed for students who wish to receive specialized occupational training for a specialized career

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
- Minimum of sixty (60) upper division (300 or 400 level) credits
- Maintain a minimum cumulative college-level grade point average (GPA) of 2.00 or higher
- Thirty (30) credits minimum must be completed at Clark College to meet Academic Residency.

General Degree Credit Restrictions

- Academic Credit for Prior Learning: No more than forty-five (45) credits 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 earned through Advanced Placement (AP), International Baccalaureate (IB), Cambridge International (CI), course challenges, or industry certifications.
- Course Challenge: Students may use credits earned from successful course challenges toward their degree or certificate, and the credits will apply towards academic residency requirements.
- Pass/Fail Grading Option: Sixty (60) credits 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. If Tech Prep/Direct Credit courses apply to a professional technical degree or certificate there is no limit to the number of credits that can be applied.
- Special Projects: No more than fifteen (15) credits 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 students 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

Communication Skills

(10 credits)

Must include at least two communication courses to include a minimum of one English composition course; e.g. ENGL&101. Remaining credits 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)

- Five (5) credits 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 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

Humanities

(10 credits)

A maximum of five (5) credits of List B (performance) Humanities coursework can be applied. A maximum of five (5) credits of 100-level world language can be applied.

Social Science

(10 credits)

Natural Sciences

(10 credits)

At least five (5) credits in physical, biological and/or earth sciences. Shall include at least one laboratory course.

Additional General Education Courses

(15 credits)

Remaining general education courses needed to achieve the required 60 credits 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 based on the upper division tuition schedule.

Refer to the specific degree requirements for further information.

PROCEDURE FOR REQUESTING AP CREDITS

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 will be awarded for an examination if the student has already earned credit in a duplicate course; a maximum of forty-five (45) credits 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 to be awarded. IB 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.

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 at: <http://www.clark.edu/enroll/advising-services/credential-evaluation/placement.php>

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 will be awarded for an examination if the student has already earned credit in a duplicate course; a maximum of forty-five (45) credits 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 to be awarded. AP 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.

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

For a current list of available courses and available credit, please visit the Credential Evaluations website at: <http://www.clark.edu/enroll/advising-services/credential-evaluation/placement.php>

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 will be awarded for an examination if the student has already earned credit in a duplicate course; a maximum of forty-five (45) credits 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 to be awarded. CI 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.

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, practical's, 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, 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:

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.

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 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 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 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 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.

COLLEGE INFORMATION

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- Accreditation (p. 333)
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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.

ACCREDITATION

Clark College is accredited by the Northwest Commission on Colleges and Universities¹ (8060 165th Avenue NE, Suite 100, Redmond, WA 98052), a regional institutional accrediting agency recognized by the Secretary of the U.S. Department of Education.

Several of the college's programs are also accredited by program-specific accrediting bodies:

- The associate degree Nursing program is accredited by the Accreditation Commission for Education in Nursing, Inc.¹ (formerly known as the National League for Nursing Accrediting Commission).
- The Dental Hygiene program is accredited by the American Dental Association, Commission on Dental Accreditation.¹
- The Medical Assistant certificate program is accredited by the Commission on Accreditation of Allied Health Education Programs.
- The Addiction Counselor program is accredited by the National Addiction Studies Accreditation Commission.
- The Automotive T-TEN program is accredited by the National Automotive Technicians Education Foundation and is a certified Toyota Technician Training Education Network (T-TEN) program.

¹ Agency recognized by the U.S. Department of Education as one of the accrediting agencies.

COLLEGE ASSESSMENT

Clark College is committed to guiding individuals to achieve their educational and professional goals. To carry out that commitment, the college continuously assesses student learning by gathering information about the effectiveness of its programs and services, and the achievements and perspectives of its alumni. This information is used to monitor the effectiveness of educational programs as well as student and academic services.

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.

STUDENT RIGHTS AND RESPONSIBILITIES

Clark College provides its community and students with education and services of the highest quality. Admission to Clark College carries with it the presumption that students will conduct themselves as responsible members of the college community. Clark College expects all students to conduct themselves in a manner consistent with its high standards of scholarship and conduct.

Student rights, responsibilities, and the Code of Student Conduct can be found at: http://www.clark.edu/clark-and-community/about/policies-procedures/student_code.php (http://www.clark.edu/about/governance/policies-procedures/student_code.php). A printed copy can be requested in the Office of the Vice President for Student Affairs, Gaiser Hall 204 (GHL 204). These standards of conduct for students promote Clark College's educational purposes and provide students a full understanding of their rights and responsibilities.

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. Clark College endeavors to facilitate student learning by providing the conditions that improve educational outcomes and eliminates systemic disparities among all groups.

Clark College is committed to freedom from discrimination for all members of the College community. The College expressly prohibits discrimination on the basis of race, color, national origin, age, perceived or actual physical or mental disability, pregnancy, genetic information, sex, sexual orientation, gender identity, marital status, creed, religion, honorably discharged veteran or military status, or use of a trained guide dog or service animal. In addition, the College is committed to freedom from all forms of harassment including sexual harassment, domestic violence and harassment in the workplace. All claims of discrimination and harassment will be investigated by the designee of the President.

Discrimination is prohibited by Title VI of the Civil Rights Act of 1964, Title VII of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, Sections 504 and 508 of the Rehabilitation Act of 1973, the Americans with Disabilities Act and ADA Amendments Act, the Age Discrimination Act of 1975, the Violence Against Women Reauthorization Act, and Washington State's Law Against Discrimination, Chapter 49.60 RCW and its implementing regulations. For more information regarding the discrimination and harassment policy, please refer to http://www.clark.edu/clark-and-community/about/policies-procedures/grievance_procedure.php (http://www.clark.edu/about/governance/policies-procedures/grievance_procedure.php)

Any person who believes she or he has been discriminated against or harassed by Clark College or its employee(s) or agent(s) on the basis of any status listed above, may request informal assistance and/or lodge a formal grievance. The College encourages the timely reporting of any incidents of discrimination or harassment. For complainants who wish to submit a complaint, a formal complaint form is available online at http://www.clark.edu/campus-life/student-support/student_complaint/index.php (http://www.clark.edu/campus-life/student-support/student_complaint/). Hard copies of the complaint form are available at the following locations on campus:

The Diversity Center

Gaiser Hall 214 (GHL 214)

The Office of the Vice President of Student Affairs

Gaiser Hall 204 (GHL 204)

The Office of Human Resources

Baird Administration Building 144 (BRD 144)

BEHAVIORAL INTERVENTION AND THREAT ASSESSMENT (BITA)

360-992-2401

Clark College strives to maintain a healthy and safe environment for all students, faculty and staff. Life can be challenging, and people may need support and referrals for assistance.

Clark College's BITA team is composed of administrators, faculty counselors, and a case manager that collaboratively work to maintain a safe college environment. BITA works directly with students, faculty and staff to identify and respond to student behaviors that cause others concern and/or fear that the student poses a danger to self, others or the college community.

To learn more about BITA or submit a referral of concern at <http://www.clark.edu/campus-life/student-support/bita/index.php> (<http://www.clark.edu/campus-life/student-support/bita/>).

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 have the right to request the amendment of the education records that they believe are inaccurate or misleading. Students must write the college official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the college decides not to amend the record as requested by the student, the college will notify the student of the decision and advise the student of the process by which the student may appeal the decision.
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.

The college may release student directory information without student consent which includes student name, student address, student e-mail, date of birth, major field of study, terms of attendance, degrees and awards received, participation in activities and sports, and weight and height of members of athletic teams. With regard to former students, such information also includes addresses for use by the Clark College Foundation.

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.

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.

Pursuant to the Solomon Amendment, Clark College is authorized to disclose the following directory information to the military for recruitment purposes: student's name, address, telephone listing, date of birth, academic major, and degrees received from Clark College.

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. S.W.
Washington, DC 20202-8520

In some instances, records may be withheld by the college. Academic transcripts are routinely withheld if a student has a financial obligation to 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.

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.

GRADUATION RATES

Below is the federal graduation rate survey (GRS) (3 year) information for student cohorts from 2008, 2009, 2010, and 2011 along with the GRS 200% (4 year) information for student cohorts from 2007, 2008, 2009, and 2010. 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.

- Combined (3 year) transfer out/completion/graduation rate, 4-year average: 43%
- GRS (3 year) completion or graduation rate, 4-year average: 26%
- GRS (3 year) transfer out rate, 4-year average: 18%
- GRS 200% (4 year) completion or graduation rate, 4-year average: 31%

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 Planning & Effectiveness, 360-992-2506.

View the most recent cohort graduation rates at the National Center for Education Statistics website: <https://nces.ed.gov/collegenavigator/>

EQUITY IN ATHLETICS

The Equity in Athletics Disclosure Act (EADA) is designed to make prospective students aware of a school's commitment to providing equitable athletic opportunities for its male and female students. Any co-educational institution of higher education that participates in a federal student aid program must prepare an EADA report each October. For a copy of the report, please contact the Athletic Department, O'Connell Sports Center, 360-992-2691, or visit the EADA website at <http://ope.ed.gov/athletics/>.

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/clark-and-community/about/policies-procedures/consumer_information/index.php (http://www.clark.edu/about/governance/policies-procedures/consumer_information/).

Information is available in paper format through the Office of the Dean of Student Enrollment and Completion located in Gaiser Hall.

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. Hours of Operation: 7am-10pm

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. Hours of Operation: 7am-5pm

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. Hours of Operation: 7am-9pm

Clark College at Boschma Farms

Clark College at Boschma Farms is expected to be a boon for the region and represent a long-term visionary chapter for the college. Design of the first building is expected to start in 2017 on the 70-acre campus located just east of I-5 in Ridgefield, Washington. Construction is scheduled to start in 2019.

Clark College Economic and Community Development

Clark College Economic & Community Development (ECD) is Southwest Washington's premier provider of workforce training and non-credit learning, serving more than 10,000 people annually. ECD offers classes at its main location in the Columbia Bank Building (<http://ecd.clark.edu/about/campus-locations.php>), the Columbia Tech Center, and Clark's main campus.

FACULTY AND ADMINISTRATION

- Board of Trustees (p. 345)
- Executive Cabinet (p. 346)
- Administration (p. 347)
- Faculty (p. 351)
- Foundation (p. 359)

BOARD OF TRUSTEES

Clark College Board of Trustees

Jane Jacobsen 2016-2019

B.A. in Communications, University of Arkansas

Certificate of Excellence, Switzerland Cultural Art Center - Zurich, Switzerland

Master's work in Business Administration, University of Vermont

Currently working with Gramor Development and the City of Vancouver on development of the Columbia Waterfront Park.

Community activities include:

- Founding Executive Director and member of Board of Directors of Confluence
- Board President, Friends of Fort Vancouver
- Member of the Advisory Council with Columbia Land Trust
- Former member of the Columbia River Gorge Commission
- Former member of the Washington State Historical Society

Jada Rupley 2015 – 2020

B.A. in Psychology/Education, Central Washington University

M.Ed. in School Administration, Seattle Pacific University

Superintendent Certificate, Washington State University

Certified Superintendent, School Principal, School Psychologist

As a Governor appointee, Ms. Rupley served as co-chair for the Early Learning Advisory Council building the early learning system. The Southwest Washington Child Care Consortium was a milestone for families with young children, providing over 2,000 quality child care slots in 28 centers in Clark County. In 2012-2014, she was chosen by then-Governor Kitzhaber to serve as Oregon's first Early Learning System Director, implementing legislation for early learning and child care investments for children from birth to 6 years.

Currently, Ms. Rupley is the Superintendent of Clackamas Education District. The ESD serves 10 districts and about 70,000 students in Clackamas County, Oregon.

Community activities include:

- H-RoC Board Member
- Clark College Foundation Board Liaison
- Clark County Skills Center
- Clark County Aging Task Force
- Clark County Planning Commission
- Clark County Aging Task Force
- Chair/Board Member Leadership Clark County

Paul Speer 2018-2023

Mr. Speer has extensive experience and skills in strategic planning, nonprofit fundraising and capacity building. A resident of Clark County for the past 37 years. Speer has long demonstrated a commitment to his community. For more than 25 years, Mr. Speer worked at Hewlett-Packard Company, where he retired as Vice President of Development Strategy in the Office of Strategy and Technology.

Currently, Mr. Speer is an executive advisor and coach, who also appears as a guest lecturer and panelist on topics including leadership, new business creation, business planning, venture philanthropy, sustainable energy, and encore careers.

Community activities include:

- The Historical Trust - Board Member
- Oregon Public Broadcasting - Board Member
- Social Venture Partners International - Past Board Member
- Leadership Clark County - Past Board Member
- iUrban Teen - Advisory Member
- Cascadia Tech Academy - Advisory Member
- Superintendent's Management Task Force for Vancouver Public Schools - Advisory Member
- University of Portland's Engineering Dean's Advisory Council - Past Council Chair
- University of Portland's Franz Center for Leadership, Entrepreneurship, and Innovation Board - Past Board Chair
- Pearson Field Education Center - Committee Chair

Rekah Strong 2012 – 2017

B.S. Criminal Justice, Portland State University

M.A. Social Work/Administration, Portland State University

Ph.D. Social Work Research, Portland State University in progress

Ms. Strong is currently the Executive Director for Educational Opportunities for Children & Families. She has more than 16 years of experience working in public agencies and developing strategies to improve organizational cultural humility.

Community activities include:

- Board member, We Reign Youth Foundation
- Board member, Partners in Diversity

EXECUTIVE CABINET

William Belden (2010)

Vice President of Student Affairs
B.A. Eastern Washington University
M.Ed. Western Washington University

Stefani Conversion (2018)

Vice President Human Resources and Compliance
B.A., M.A., Washington State University

Shanda L. Diehl (2008)

Associate Vice President of Planning and Effectiveness
B.A. Eastern Washington University
M.P.H. University of Washington

Lisa Gibert, CPA,CFRE (2003)

President/CEO, Clark College Foundation
B.S. University of Oregon
M.B.A. University of California, Irvine

Sachi Horback (2018)

Vice President of Instruction
A.A. Delaware County Community College
B.A. Millersville University
M.A. Immaculata College
PsyD Chesnut Hill College

Leigh A. Kent (2007)

Executive Assistant to the President
A.A., A.S. Holyoke Community College

Robert K. Knight (2004)

President
B.S. United States Military Academy
E.M.B.A. Golden Gate University

Valerie Moreno (2017)

Chief Information Officer
B.S. DeVry University

Robert D. Williamson (2009)

Vice President of Administrative Services
A.A. Ft. Steilacoom Community College
B.A., M.A. Western Washington University

Kevin Witte (2011)

Vice President of Economic and Community Development
B.S. University of Washington
M.B.A. University of Michigan

ADMINISTRATION

A

Jorge Argueta (2018)
Educational Planner
B.A., M.A. California State Polytechnic University Pomona

B

Andrew T. Barsotti (2014)
Director of Data Services
B.S. University of Wisconsin
M.S. Washington State University, Pullman

Chitpasong 'Chippi' Bello (2016)
Associate Dean of Financial Aid
B.S. Brigham Young University - Hawaii
M.S. Portland State University

Edie N. Blakley (2008)
Director of Career Services
A.A.S. Linn Benton Community College
B.S., Ed.M. Oregon State University

Adrienne Bocci (2018)
Admissions Recruiter
B.A. University of Oregon
M.S. Portland State University

Michael Brown (2019)
Dean of Libraries and Academic Success Services
B.A., M. Ed., Ph.D Texas Tech University

Margit Brumbaugh (2017)
Educational Planner
B.A. University of Washington
M.Ed. Concordia University

Armetta Burney (2012)
Director of Workforce Education Services
B.S. Southern University
M.B.A. Cardinal Stritch University

Cathleen 'Cath' Busha (2016)
Dean of Student Engagement
B.S. Millersville University
M.S.W. Arizona State University

Heather 'Colleen' Butcher (2016)
Information Technology Services Project Manager
B.A. Western University
M.B.A. York University
D.Th. George Fox University

C

Christy Campbell (2014)
Assistant Director of Business Services
B.S. Washington State University

Selena Castro (2012)
Dean of Student Enrollment
B.A., M.A., Ph.D. Washington State University

April Cannon (2017)
Educational Planner
B.S. Oregon State University
M.A. Eastern Michigan University

Tina Cruz (2015)
Corporate Education Client Support Specialist

D

Kevin Damore (2018)
Assistant Director of Marketing
B.S. Northern Arizona University

E

Guisela Eberle (2017)
Assistant Director of Human Resources
B.A. National Pedagogic University

F

Wende Fisher (2015)
Educational Planner - Professional/Technical
A.A.S. Clark College
B.A. Washington State University
M.Ed., M.S. Oregon State University

Angela Ford (2017)
Information Technology Services Project Manager
A.A. Fresno City College
B.A. San Francisco State University
M.B.A. Ellis College of New York Institute of Technology

Karen Foster (2018)
Instructional Operations Project Manager
B.A. Oakwood University
M.S.I.M.S. Roosevelt University

G

Joshua Giha (2015)
Application Developer
A.A. Florida Southwestern State College

Marcy Gilchrist (2017)
Educational Planner
B.A. Central Washington University

Kael Godwin (2007)
Decision Support Specialist: Data Science and Analytics
B.A., M.A. University of Nevada, Las Vegas

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

H

Trisha Haakonstad (2019)
Career Advisor

B.A. University of San Diego
M.S. Portland State University

Ellen Harju (2018)
Director of MESA Program
B.S. University of Washington
M.S., Ph.C., Ph.D. University of California, Los Angeles

Douglas Helmer (2016)
Education Program Director at larch Corrections
B.S., M.S. Warner Pacific College

Judith Hernandez Chapar (2017)
Director of the Teaching and Learning Center
B.A. Washington State University
M.S.W. Eastern Washington University
Ph.D. Oregon State University

Adam Hinkley (2017)
Educational Planner
B.A. University of Oregon
M.A. George Fox University
M.Ed. Kent State University

Nicole Hopkins (2015)
Transitional Studies Coach
A.A. Clark College
B.A. Washington State University

Genevieve Howard (2010)
Dean of Workforce, Professional, and Technical Education
B.A., M.A. California State University, Bakersfield

I J

Miles V. Jackson (1998)
Dean of Social Sciences and Fine Arts
B.S. Portland State University
M.S. University of Washington

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

K

Catherine Keane (2014)
Associate Director of Career Services
B.A. Saint Martin's College
M.P.A. Washington State University

Tanya Kerr (2017)
Control Officer

B.A. University of Washington

Monica L. Knowles (1998)
Bookstore Manager
A.A. Brooks College

L

Laura LeMasters (2016)
Assistant Athletic Director
B.A. Washington State University
M.A. California State University - Long Beach

M

John Maduta (2010)
Director of Advising
B.A. Western Washington University
M.S. Warner Pacific College

Useni Makano (2019)
Educational Planner
B.A. Portland State University

Korene E. Marquez (2013)
Associate Director of Student Tutoring Services
B.A. University of Oregon
M.A. Portland State University

Susan Maxwell (2001)
ctcLink Manager
B.A., M.S. University of Wisconsin-Milwaukee

Lance McIntire (2017)
Environmental Health and Safety Manager
B.S. Missouri State University
M.P.H. Des Moines University

Amy McIntosh (2017)
Educational Planner
B.S. Minnesota State University
M.S. Portland State University

Sherri Meadors (2016)
Payroll Manager
A.A. Clark College

N

Vanessa Neal (2018)
Employee Development Manager
B.A. University of New Mexico
M.S. University of Denver

O

Jennifer Obbard (2017)
Associate Dean of Health Science
B.S.N., M.S.N. Oregon Health Sciences University

Cindi M. Olson (1999)
Executive Assistant to the Vice President of Student Development

Ryan O'Meara (2018)
Grounds Manager

Shelley R. Ostermiller (2010)

Associate Director of Advising Services
A.A. Clark College
B.A. Washington State University, Vancouver
M.S. Warner Pacific College

Eriko Otsuka (2012)
Software Application Integrator and Developer
B.S., M.S. Washington State University, Vancouver

P

Timothy D. Petta (2013)
Director of Facilities Services
Avis Contractor's License School

Rosanne Ponzetti (2019)
ECD Program Manager
B.S. Oregon State University
M.A. University of New Mexico
M.A. St. Joseph's College

Q

R

Julie L. Robertson (2013)
Decision Support Specialist: Continuous Improvement and Analytics
B.S. Lewis & Clark College
M.S., M.S.W. Portland State University

Carmen Roman (2017)
Educational Planner
A.A. Clark College
B.S. Linfield College

S

Mirrandra Saari (2013)
Interim Director of Enrollment Services & Registrar
B.S. Central Washington University
M.Ed. Concordia University

Andrea Sanchez Turner (2018)
Executive Assistant to Human Resources

Sabra Sand (2014)
Director of Business Services
B.A. Washington State University

Renee Schiffhauer (2018)
Associate Director of Advising Services
B.S. Saint Vincent College
M.A. Indiana University of Pennsylvania

Ashley Schumacher (2014)
Advanced Registered Nurse Practitioner
B.S.N. Oregon Health Sciences University
M.S.N. University of California

Michael See (2017)
Director of Safety & Security
B.S. College of Professional Studies
M.S. Kaplan University

Natalie M. Shank (2014)
Interim Director of Student Care

B.A. Seattle Pacific University
M.S. Radford University
Ed.D. George Fox University

Jody Shulnak (2007)
International Student Recruitment & Outreach Manager
B.S. Northern Arizona University
M.S. Portland State University

Heidi Summers (2018)
Director of Transitional Studies
M.Ed. Virginia Tech

T

Julie F. Taylor (2005)
Administrative Secretary

Tasaday Turner (2015)
Associate Director of Advising - College Preparation and Transfer
A.A.S. Clark College
B.A. Washington State University
M.S. Portland State University

Laurel E. Tygart (2013)
Executive Assistant to the Vice President of Instruction
B.A. Western Oregon University

U

Sara Uhacz (2018)
Executive Assistant to the Vice President of Administrative Services

V

Katlyn Viers (2019)
Associate Director of Employee Equity, Outreach and Engagement
B.S. University of Oregon

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

W

Brenda Walstead (2015)
Dean of Business and Health Sciences
A.A. Clark College
B.S. Concordia University
M.S. Portland State University
Ed.D. Walden University

Jim Watkins (2003)
Construction Project Manager
B.A. New College

Vanessa Watkins (2015)

Associate Director of Entry Services
B.S. Oregon State University
M.S. Portland State University

Francois Wevers (2016)

Director of Economic Partnerships and Customized Learning
B.S. Pacific Lutheran University

Brenda Wierschin (2016)

Disability Support Services Accommodation Specialist
B.S. University of California
M.S.W. Portland State University

Jim Wilkins-Luton (2015)

Dean of Basic Education, English, Communication and Humanities
B.A. Whitworth University
M.A. Gonzaga University

Rashida Willard (2015)

Operations Manager, Administrative Services
A.A., B.A. Warner Pacific College
M.B.A. Concordia University

Melissa Williams (2015)

Director of Student Equity and Inclusion
A.A. Clark College
B.A. University of Washington
M.A. Washington State University

Peter G. Williams (2011)

Dean of Science, Technology, Engineering and Mathematics
B.A. University of Vermont
M.S. Washington State University
Ph.D. Oregon State University

Carley Willis (2018)

Educational Planner
B.S.W. George Fox University
M.S.E. Capella University

Patrick Willis (2014)

Career Advisor
B.A., M.Div. George Fox University

X
Y
Z

FACULTY

A

Lisa Aepfelbacher (2011)
Nursing B.S.N. Boston University
M.S. Case Western Reserve University

Jacqueline F. Allen-Bond (2000)
English as a Second Language
B.A. University of Victoria, Canada
M.A. School for International Training, Brattleboro

Glenna Afflerbaugh (2015)
Dental Hygiene
A.A.S. Clark College
B.S. Eastern Washington University
M.Ed. Concordia University

Roberto P. Anitori (2013)
Biology
B.S., Ph.D. University of New South Wales

Michael D. Arnold (1989)
Exercise Science, Physical Education
A.S. North Country Community College
B.S.E. Northwest Missouri State University
M.S. Northeast Missouri State University
Certified Strength and Conditioning Specialist

Patricia Atkinson (2015)
Economics
B.A. Marist
M.S. Portland State University

Julie A. Austad (2013)
Librarian
B.A. Linfield College
M.L.S. Emporia State University

B

Karl L. Bailey (2006)
Chemistry
B.S. California Polytechnic State University
Ph.D. University of California, Davis

Radmila Ballada (2008)
Technical Services and Systems Librarian
B.A. University of Vermont
M.A., M.L.S. Southern Connecticut State University

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 Colby Barsotti (1992)
Engineering

B.S., M.S. Washington State University

Rheannin Becke (2016)^{T-T}
Transitional Studies
M.S. Marquette University
M.A. University of Alaska Southeast

Carol L. Beima (1999)
Adult Basic Education
B.A. Wittenberg University
M.Ed. University of Washington

Linda Benak (2019)^{T-T}
Nursing
A.A.N. Community College of Denver
M.S.N. Gonzaga University

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

Mark E. Bolke (2000)
Biology
B.S., M.S. Portland State University

Christopher Boucher (2017)^{T-T}
Welding
WAC/RCW Certification
Amy Bratton (2017)^{T-T}
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

Laurie H. Brown (2002)
Nursing
A.S. Golden West College
A.S. Cypress College
B.S.N. California State University, Fullerton
M.P.A. Portland State University
M.S.N. Washington State University

C

Paul A. Casillas (1990)
Mathematics B.A. Augustana College, Illinois
M.A. University of Iowa
M.S. University of Oregon

Amy Castellano (2016)
Phlebotomy
B.S. University of Arizona
N.D. National College of Natural Medicine

Carlos J. Castro (2006)

Sociology

B.A., M.A., M.C.R.P., Ph.D. University of Oregon

Joseph Cavalli (2018)^{T-T}

History

B.A. Portland State University

M.A. University of Portland

Michael V. Ceriello (2007)

Political Science

B.A. University of California, Santa Barbara

M.A. Western Washington 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

Steven 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

Lisa E. Conway (2003)

Art

B.F.A. University of Michigan

M.F.A. Louisiana State University

Kathryn 'Kate' Cook (2014)^{T-T}

Mathematics

B.A. Principia College

M.S. California State University

Amanda Crochet (2011)

Chemistry

B.S. Tulane University

Ph.D. University of California, Berkeley

Catherine Crosby (2016)

Biology

B.S. Western Washington University

M.S., Ph.D. Washington State University

William T. Cushwa (1995)

Biology

B.S. Virginia Polytechnic Institute and State University

M.S., Ph.D. University of California, Davis

D**Jill C. Darley-Vanis** (2006)

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

Marylynne Diggs (1998)

English

B.A. University of Alabama

M.A., Ph.D. University of Oregon

Roxanne L. Dimyan (1997)

Librarian

B.A., M.L.S. University of Washington

Alison Dolder (2017)^{T-T}

Baking

A.A. Clark College

Elizabeth Donley (2011)

English

B.A. DePaul University

M.A., M.F.A. Chapman University

E**Allen 'Mark' Eddinger** (2018)^{T-T}

Mathematics

B.S. DeVry Institute of Technology

M.S. Western Washington University

Mark L. Elliott (1994)

Mathematics

B.S., M.S. Portland State University

Rebecca Engel (2017)^{T-T}

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)^{T-T}

Dental Hygiene

A.S., B.S., M.S.E. Indiana University

F

Melissa Favara (2018)^{T-T}

English
B.A. Western Michigan University
M.A. The Pennsylvania State University

Nadine L. Fattaleh-Diggs (2002)

Chemistry-General
B.A. Scripps College
M.S. Carnegie Mellon University

Caron Ford (2015)

Adult Basic Education
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)^{T-T}

Transitional Studies

Robert 'Earl' Frederick (2017)^{T-T}

Culinary
A.S. Johnson & Wales University
B.S. Warner Pacific College

Jacob Funk (2016)

Music
B.S. John Brown University
M.S. University of British Columbia
D.M.A. University of Missouri - Kansas City

G

Sara L. Gallow (1999)

English as a Second Language
B.A. Michigan State University
M.A. Ball State University

Randall S. Givens (1988)

Nursing
B.S. Walla Walla College
M.S. University of Portland
M.S.N. University of Portland

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

John P. Governale (1993)

Psychology
A.A. Skagit Valley College
B.A. Western Washington University
M.S. Portland State University

Aaron Guerra (2017)^{T-T}

Culinary
A.O.S. Le Cordon Bleu Culinary College

Zachary M. Grant (2006)

Librarian
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

Gothard C. Grey (2004)

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

H

Marilyn Hale (2010)

Business Technology
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

Tonia L. Haney (2010)

Automotive
B.S. Southern Illinois University

Douglas Harris (2018)^{T-T}

Music
B.A. University of Florida
M.M., D.A. University of Northern Colorado

Melanie Hendry (2019)^{T-T}

Baking

Rebecca Herman (2015)

Dental Hygiene
A.S. Clark College

B.S., M.Ed. Concordia University

Grant N. Hottle (2013)

Art
B.F.A. University of Oklahoma
M.F.A. University of Oregon

Christina Howard (2018)^{T-T}

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

Dwight W. Hughes (2003)

Network Technology
B.S. Northern Arizona University
M.A. University of Phoenix
Certifications in A+, Network+, MCP, CCAI, CCNA

Robert L. Hughes (1998)

Computer Technology
A.S. Clark College
B.A. The Evergreen State College

Carol C. Hsu (2010)

Engineering
B.S., M.S. The University of Texas, Austin

I

J

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Mathematics

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A.A.S., B.A.S. ITT Technical Institute
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S

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English
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M.A. University of Utah

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English
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A.A.S. Clark College
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Health & Physical Education
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N

O

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A.A., B.A. West Coast Christian College
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V
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Development & Special Events Assistant
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X
Y
Z

DIRECTORIES AND ACADEMIC CALENDAR

- Phone Directory (p. 362)
- Academic Calendar (p. 363)

PHONE DIRECTORY

Alphabetical Quick Dial Phone List: <http://www.clark.edu/directories/quick-dial/index.php> (<http://www.clark.edu/directories/quick-dial/>)

Employee Directory Phone List: <https://www.clark.edu/employee-directory/phone-list/>

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

2019 Summer Term

Event	Date (Day of the Week)
July 4th Holiday	July 4 (Th)
Classes Begin	July 8 (M)
End of 1st 4-week session	August 2 (F)
2nd 4-week session begins	August 5 (M)
Last day of 2nd 4-week session	August 30 (F)
Last day of 8-week session	August 30 (F)

2019 Fall Term

Event	Date (Day of the Week)
Labor Day Holiday	September 2 (M)
Classes Begin	September 23 (M)
Faculty Workday (no classes)	October 11 (F)
Veteran's Holiday	November 11 (M)
Faculty Workday (no classes)	November 27 (W)
Thanksgiving Holiday	November 28 (Th)
Native American Heritage Day	November 29 (F)
Last Day of Classes	December 6 (F)
Final Exams	December 9-12 (M-T-W-Th)
Faculty Workday	December 13 (F) and December 16 (M)
Christmas Holiday	December 25 (W)

2020 Winter Term

Event	Date (Day of the Week)
New Year's Day	January 1 (W)
Classes Begin	January 6 (M)
Martin Luther King Holiday	January 20 (M)
Presidents' Day Holiday	February 17 (M)
Last Day of Classes	March 13 (F)
Final Exams	March 16-19 (M-T-W-Th)
Faculty Workdays	March 20 (F) and March 23 (M)

2020 Spring Term

Event	Date (Day of the Week)
Classes Begin	April 6 (M)
Memorial Day Holiday	May 25 (M)
Last Day of Classes	June 12 (F)
Final Exams	June 15-18 (M-T-W-Th)
Graduation	June 18 (Th)
Faculty Workday	June 19 (F) and June 22 (M)

CORRECTIONS

- Catalog Corrections (p. 365)
- Course Corrections (p. 366)
- Degrees and Certificate Corrections (p. 367)

CATALOG CORRECTIONS

COURSE CORRECTIONS

Course Substitutions

BTEC 100 can be replaced with BTEC 101

CTEC 132 has replaced NTEC 132

DEGREES AND CERTIFICATE CORRECTIONS

Computer Support AAT

<https://catalog.clark.edu/academic-plans/computer-technology/computer-support-specialist-aat/>

- CTEC 132 has replaced NTEC 132

CATALOG ARCHIVES

- 2018-2019 Catalog (<https://catalog.clark.edu/archives/2018-2019/>)
 - 2018-2019 Corrections (<https://catalog.clark.edu/archives/degrees-certificate-corrections.pdf>)
- 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/>)
 - 2014 - 2015 Corrections (<http://www.clark.edu/academics/catalog/2014/2014corrections.pdf>)
- 2013 - 2014 Catalog (<http://www.clark.edu/academics/catalog/2013/>)
 - 2013 - 2014 Corrections (<http://www.clark.edu/academics/catalog/2013/2013corrections.pdf>)
- 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/>)
 - 2011 - 2012 Corrections (<http://www.clark.edu/academics/catalog/2011/2011corrections.pdf>)

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