# Credit Course Descriptions

#### **Course Category Index**

Courses at TCC are organized into institutional divisions or categories, each including a related group of subjects. Subject areas and course descriptions in this section of the catalog are listed in alphabetical order for the convenience of readers. Students wishing to learn more about certain courses are urged to talk about those courses with the chair of the division or department through which those courses are offered.

Accounting, p. 168 Anthropology, p. 169 Art, p. 170 Astronomy, p. 173 Biology, p. 173 Botany, p. 175 Business, p. 175 Chemistry, p. 179 Chinese, p. 180 Communication Studies, p. 181 Community Health Professional, p. 181 Community Health Paramedicine, p. 183 Community Health Resp. Care, p. 184 Computer Science, p. 184 Computer User, p. 184 Diagnostic Medical Sonography, p. 186 Early Childhood Education, p. 188 Economics, p. 190 Education, p. 190 Emerg. Med. & Health Services, p. 191

Engineering, p. 192 English: Composition, p. 194 English: Literature, p. 195 Environmental Science, p. 196 Experiential Learning, p. 197 Fresh Start, p. 197 Geography, p. 197 Geology, p. 198 German, p. 198 Health Information Management, p. 199 Health Information Technology, p. 200 History, p. 203 Human Development, p. 204 Humanities, p. 205 Human Services, p. 206 Information Technology, p. 208 Japanese, p. 210 Library Science, p. 211 Logistics, p. 211

Mathematics, p. 211

Music, p. 214 Nursing, p. 216 Nutrition, p. 220 Oceanography, p. 221 Paralegal, p. 221 Philosophy, p. 224 Physical Education, p. 224 Physics, p. 226 Political Science, p. 227 Psychology, p. 228 Radiologic Science, p. 229 Respiratory Therapy, p. 231 Science, p. 234 Social Science, p. 234 Sociology, p. 234 Spanish, p. 235 Supervision & Management, p. 236 Writing Center, p. 237

On the following pages are descriptions of the course offerings of Tacoma Community College. The specific courses to be offered each quarter will be announced in the online class schedules, which are posted quarterly at the college website.

Courses numbered 1-99 are pre-college-level courses designed to develop skills needed for college work and career training courses. They cannot be applied towards certificate or degree requirements.

Courses numbered 100-299 are college-level courses. They meet the requirements of the Associate of Arts and Associate of Science degrees as well as the Associate in Applied Sciences, and Associate in General Studies degrees conferred by TCC. These courses are normally accepted for transfer by four-year colleges and universities in Washington state when they are part of an Associate of Arts or Associate of Science degree. Students who transfer without one of the approved transfer degrees should not take for granted the transferability of all 100-level or 200-level classes since some of them are vocational courses and apply toward the Applied Sciences degree only.

Courses numbered 299 are reserved for special projects. Such projects are undertaken by individual students upon arrangement with an instructor and the chair of the division in which the course is offered. Credit granted for courses numbered 299 varies with the individual project.

Normally, one credit is given for one 50-minute period of class per week per quarter for lecture classes. Laboratory sections generally require two hours of class per week per quarter for each credit. Credits earned for successfully completing each course are shown in parentheses following the course titles in this section of the catalog.

For current course offerings, check the online class schedule or consult the appropriate division administrator. Class availability is dependent on adequate enrollment.

#### **Common Course Numbering**

The Washington Community and Technical College system has adopted common course numbers, prefixes and titles for courses that are equivalent at many two-year colleges. These changes went into effect summer quarter 2008.

The courses and their descriptions have not changed, just the course number and, in some cases, the prefix and/or title. The changes apply to both common courses and non-common courses.

Common courses are identified by an "&" character at the end of the prefix, for example ENGL& or ANTH&. Presence or absence of an "&" character on a course does not influence transferability of the course to other academic institutions.

#### **Developmental Courses**

There have been some programwide course changes with broad significance that we alert you to here. The developmental courses have been re-organized for clarity. See English and Math sections for detailed description of courses and prerequisites.

# Accounting

#### ACCT 101 Practical Accounting I (5)

Introduces students to basic accounting concepts and procedures, emphasizing sole proprietors. Topics include analysis of business transactions and completion of the accounting cycle, including preparation of financial statements. Students will be introduced to computers.

Prerequisite: MATH 085 with a minimum grade of C or placement at MATH 090 or higher. Recommended: READ 095 and concurrent or prior enrollment in CU 103 or CU 105.

#### ACCT 145 Payroll and Business Taxes (5)

Reviews state and federal laws and regulations on payroll computations, deductions and other business taxes.

Prerequisite: BUS 110 with a minimum grade of C or Math 147; and ACCT& 201 with a minimum grade of C or instructor permission.

# ACCT 165 Accounting with Sage (5)

Introduction to automated accounting methods using Sage. Sage is used to examine the complete accounting cycle. The course focuses on technical skills behind the screens and soft skills needed in an accounting department.

Prerequisite: CU 103 or CU 105; and either ACCT& 201 or instructor permission.

## ACCT 175 Accounting with QuickBooks (5)

Introduction to automated accounting methods using QuickBooks. QuickBooks is used to examine the complete accounting cycle. Includes analysis, demonstration, exporting, importing and hands-on experience using the general ledger, accounts payable, accounts receivable and payroll modules. *Prerequisite: ACCT& 201 with a minimum grade of C or instructor permission. Recommended Preparation: ACCT 165.* 

#### ACCT& 201 Principles of Accounting I (5)

(Formerly ACCNT 210) Emphasis is on the development and interpretation of financial statements: the balance sheet, income statement and the statement of equity. *Prerequisite: ACCT 101 or MATH 095 with a minimum grade of C or equivalent; or assessment above MATH 095 or MATH 094 with a minimum grade of C.* 

## ACCT& 202 Principles of Accounting II (5)

(Formerly ACCNT 220) ACCT& 202 is a continuation of ACCT& 201. Introduces accounting for long-term debt and investments. Examines the measuring and reporting of Stockholders' Equity and consolidated statements. Re-emphasizes the preparation of the Statement of Cash Flows. Introduction to methods used to interpret financial statements.

Prerequisite: ACCT& 201 with a minimum grade of C.

#### ACCT& 203 Principles of Accounting III (5)

(Formerly ACCNT 230) Introduction to cost concepts such as cost-volume-profit analysis and the budgeting process. Examines methods to determine product costs of a manufacturing business and the methods employed to control costs, such as the use of the standard cost system. *Prerequisite: ACCT& 201 with a minimum* 

grade of C.

#### ACCT 250 Federal Income Tax (5)

Federal income tax for the layman, accounting student, working accountant/bookkeeper and small business owner, with special emphasis on tax issues affecting individuals. *Prerequisite: ACCT 101 or ACCT& 201 with a minimum grade of C- or instructor permission.* 

## ACCT 290 Work Internship (5)

During one quarter of the sophomore year, students can receive college credits for handson accounting work experience and training in a private or public sector organization. *Prerequisite: Program Chair permission.* 

#### ACCT 299 Independent Study & Special Projects (1)

Study on an individual basis. Prerequisite: Program Chair permission.

# Anthropology

# ANTH& 100 Survey of Anthropology (5)

(Formerly ANTHR-100) A survey of the subfields of physical anthropology, archaeology, anthropological linguistics and sociocultural anthropology through the examination of selected problems in human biological and cultural evolution. An introduction to the discipline of anthropology that asks what it means to be human. (multicultural content) *Prerequisite: ENGL/095 with a minimum grade of C or equivalent.* 

## ANTH& 204 Archaeology (5)

(Formerly ANTHR-205) Introduction to the study of the prehistory of humankind as revealed by material remains. Covers excavation techniques, analyzing and dating artifacts, and a survey of world prehistory from the beginning of culture to the appearance of writing.

Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.

## ANTH& 205 Biological Anthropology (5)

(Formerly ANTHR-201) Study of the origins and adaptations of the human species. An examination of the fossil record and living populations of monkeys, apes and humans. *Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.* 

# ANTH& 206 Cultural Anthropology (5)

(Formerly ANTHR-202) An analysis of the social and cultural variation of humankind. Comparison of how various western and nonwestern peoples live. (multicultural content) *Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.* 

## ANTH& 207 Linguistic Anthropology (5)

(Formerly ANTHR-203) Introduction to linguistic methods and theories used within anthropology. Topics include the structure of language, anatomy and evolution of language, the relationship between language and culture, the study of language variation and of language change. The linguistic database in the course is both historical and cross-cultural. (multicultural content)

Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.

#### ANTH& 210 Indians of North America (5)

(Formerly ANTHR-210) An examination of the diversity of cultures among the Indians of North America, this course is an ethnographic survey of Native American societies before European contact and includes discussion of contemporary issues. (multicultural content) *Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.* 

## ANTH 220 Ethnographies of American Cultures (5)

(Formerly ANTHR-207) This course focuses on the diversity of cultural perspectives within the United States. In-depth examinations of two or more cultures will include exploring the ways in which people from minority cultural perspectives cope with some of the central ideals and expectations of the dominant culture. (multicultural content) *Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment; and completion of one of the following: ANTH& 100 or ANTH& 206 or ANTH& 207 or ANTH& 210 or SOC& 101.* 

# ANTH& 237 Human Osteology (5)

(Formerly ANTHR-280) An introduction to the comparative study of human and other mammalian skeletons as used for identification in forensic and biological anthropology. The course explores various methods of identifying human skeletons (from others) including bone form, age, sex, and state at death. Other topics include dental analyses, bone formation, and preservation. *Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment. Recommended: ANTH& 205 or BIOL& 100 or BIOL& 175.* 

# ANTH& 245 Primatology (5)

(Formerly ANTHR-270) Examines the origins and evolutionary trends of primates, from modern relationships to growth, development, and behavioral adaptations. Course also covers primate ecology and conservation. Uses lectures, multimedia, and readings to compare and contrast the major groups of non-human primates and consider their relationships to humans. Course will provide perspective on the status of endangered species with whom we may share a future as well as a past. Field trips included.

Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment. Recommended: ANTH& 205 or BIOL& 100.

## ANTH 299 Independent Study (1-5)

A variable credit (1-5) course based on independent study contracted between an instructor and a student. The independent study will provide students an opportunity to pursue an anthropological area of interest in depth beyond what regular courses can provide. The emphasis may be field research, scholarly research, or a combination. *Prerequisite: ANTH& 100 with a minimum grade of B+, Instructor permission and a written contract between the instructor, student and instructional administrator, describing the nature and method of the independent study.* 

The following courses are designed for students who wish to explore one or more areas of art. They are beginning studio courses and have no prerequisites.

ART 102 Two-Dimensional Design

- ART 103 Three-Dimensional Design
- ART 105 Beginning Drawing
- ART 110 Beginning Graphic Design
- ART 131 Beginning Ceramics
- ART 140 Beginning Photography
- ART 147 Introduction to Digital Photography
- ART 150 Beginning Printmaking
- ART 156 Beginning Painting
- ART 172 Beginning Sculpture

A total of 22 ART credits may be used for distribution credit for the Associate of Arts degree.

- 5 ART Studio credits for Humanities
- 5 ART Appreciation credits for multicultural/humanities
- 12 ART lecture or studio credits for Distribution Electives

An additional 15 ART lecture or studio credits can be used for college-level electives.

Students who are interested in an art-related vocation should initially concentrate on basic design and drawing courses (ART 102, 103, 105). These form the foundation for the advanced art courses offered at TCC. Some of the courses listed in the catalog are offered on a limited basis once a year, every other year, etc. Contact the Art Department for help in planning your program. Students who plan to transfer should check the requirements of the college or university of their choice.

In painting, drawing and sculpture courses, the human form is a subject of study. The human model, sometimes in the nude, may be incorporated into these studies. Any student enrolled in one of these courses who may object, for whatever reason, to study of the nude model may arrange for optional studies with the instructor of that course.

The college reserves the right to temporarily retain for exhibit or photographing any student work submitted for credit.

#### ART& 100 Art Appreciation (5)

(Formerly ART-100) An introduction to understanding and appreciating the visual arts (fine arts, crafts, architecture, and new media) from a global perspective. Designed for non-art majors. A variety of learning approaches include lectures, slides, videos, guest artists, field trips, demonstrations, and hands-on participation. (multicultural content)

#### ART 102 Two-Dimensional Design (5)

The organization of visual elements (line, shape, texture, color) as applied in a variety of two-dimensional design media. Recommend prior to Graphic Design, Photography, and Painting classes. Performance/skills course.

#### ART 103 Three-Dimensional Design (5)

Using a series of progressive projects, involving wood, wire, and paper, students will learn the basic elements and principles of design and apply them to three-dimensional space. Organization of visual design elements will be applied to a variety of construction processes to create aesthetically pleasing sculptural designs. Performance/skills course.

#### ART 105 Beginning Drawing (5)

Foundation in drawing from observation. Emphasis on composition, perspective, and form through various drawing techniques and media. Performance/skills course.

#### ART 106 Advanced Drawing (5)

Further development of drawing skills with emphasis on composition, new media, and visual communication concepts. Performance/skills course. *Prerequisite: ART 105.* 

#### ART 110 Beginning Graphic Design (5)

An introduction to a visual structure concept using two-dimensional design. The beginning course will cover composition, color theory, typography and layout. Computer technology will be used to explore the use of these design elements as required for specific projects with traditional methods to communicate the practical design form. Performance/skills course.

#### ART 111 Intermediate Graphic Design (5)

An intermediate course furthering understanding of visual structure using concepts of two-dimensional design. This course will cover intermediate concepts in composition, color theory, typography and layout. Computer technology will be used to create design elements as required for specific projects with traditional methods to communicate the design form. Performance/skills course. *Prerequisite: ART 110* 

#### ART 131 Beginning Ceramics (5)

Introduction to creating ceramic forms using hand-building and wheel-throwing techniques. Student will learn the basic forming methods employed in making ceramic forms, and basic glazing and decorating techniques will be covered. Performance/skills course. *Recommended: ART 102, ART 103 and ART 105.* 

#### ART 132 Intermediate Ceramics I (5)

An intermediate course creating ceramic forms using hand-building and wheel-throwing techniques. Student will learn the intermediate forming methods employed in making ceramic forms, glazing and decorating techniques will be covered. Performance/skills course. *Prerequisite: ART 131. Recommended: ART 102, ART 103 and ART 105.* 

#### ART 133 Intermediate Ceramics II (5)

Further development of ceramic techniques: hand-built and/or wheel-thrown forming techniques, more advanced glazing and decorative techniques. Theory and practice in kiln loading and firing will be covered as part of ART-133. Performance/skills course. *Prerequisite: ART 132 and ART 102, or ART 103, or ART 105. Recommended: ART 102, ART 103 and ART 105.* 

## ART 146 Beginning Photography (5)

Basic black & white photography. Includes 35mm camera operation, film developing, and printing. Attention to the creative process from the conception of the idea to the completion of the image, as well as the aesthetics of composition, lighting, and presentation. Assigned projects provide ample range for personal expression while being devoted to exploring photographic processes. A 35mmSLR type film camera is required and students will be required to purchase black and

white film, photographic printing paper, along with additional supplies. Performance/skills course.

#### ART 147 Introduction to Digital Photography (5)

This course is designed to introduce students to the use of digital cameras, and the use of computers to create prints of images from their cameras. Students learn to use digital tools and techniques to create and manipulate visual images. Students need a digital camera, or film camera (35mm or medium format) capable of being operated in a manual exposure mode. Performance/skills course.

#### ART 150 Beginning Printmaking (5)

Studies in traditional and contemporary print processes including relief, etching, and lithographic methods. Historical and contemporary print developments serve as background material for technical application. Performance/skills course.

#### ART 151 Advanced Printmaking (5)

Expanding basic procedures learned in ART-150 with emphasis on new media, materials, and technique. A continuing study of historical and cultural roles of printmaking with attention to individual artistic contributions. Performance/skills course. *Prerequisite: ART 150.* 

# ART 156 Beginning Painting (5)

Introductory course exploring the principles of representational painting, compositional aesthetics, and painting techniques. Lectures include introductions to new projects with examples of student work and art historical references. Demonstrations cover composition, perspective, color theory, and technique. Performance/skills course.

# ART 157 Intermediate Painting (5)

Further investigation of painting techniques, color theory, composition, and representational painting from observation from Art 156, Beginning Painting. Content will be explored through a series of assignments which expand on art vocabulary/terminology, visual content, and symbolism. Performance/ skills course.

Prerequisite: ART 156.

## ART 158 Advanced Painting (5)

Further investigation of painting techniques, color, composition, and representation painting covered in Art 156/157, Beginning and Intermediate Painting. In addition, abstraction will be explored through mixed media. Content will be explored through a series of assignments which expand on visual concepts, media exploration, and self-expression. Performance/skills course. *Prerequisite: ART 157.* 

## ART 161 Life Studies: Figure Drawing (3)

Drawing from the posed model, clothed and nude. Emphasis is on expressive composition, accurate proportion/foreshortening, and investigation of a variety of drawing media. Performance/skills course.

# ART 172 Beginning Sculpture (5)

A diversity of materials and creative processes will be explored to develop an expressive sculptural form, such as: assemblage, modeling, carving,and casting. Emphasis will focus on creativity, developing technical skills and conceptual themes. Assigned projects will enable students to develop expressive sculptural techniques and to learn the use of materials and tools in the making of sculpture. Performance/skills course.

Recommended: ART 102, ART 103 and ART 105.

#### ART 173 Intermediate Sculpture I (5)

A diversity of materials and technical processes to develop the sculptural form, such as: assemblage, modeling, carving, casting, and fabrication, will be examined. Emphasis will focus on developing conceptual themes. Assigned projects will enable students to develop fabrication techniques and to learn the use of materials in the making of sculpture. Further experience in sculpture design, materials, techniques, tools and approaches. Performance/skills course. *Prerequisite: ART 172. Recommended: ART 102, ART 103 and ART 105.* 

## ART 174 Intermediate Sculpture II (5)

Further experience in sculpture design, materials, techniques, tools and approaches. Performance/skills course. *Prerequisite: ART 173 and Recommended: ART 102, ART 103, and ART 105.* 

# ART 180 Art for Elementary Education (5)

The course is designed for prospective K-6 educators as a lecture/workshop structured to provide students an opportunity to explore materials and techniques suitable for classroom use. Imaginative art experiences and the nature of creativity are stressed and linked to other disciplines. Includes planning and assessment components directed at art education.

# ART 199 Gallery Viewing Lab (1)

Recommended as a concurrent enrollment with any art class, or HUM& 101, 116, 117, 118. ART 199 supplements these mentioned courses and is designed as a "viewing lab" where students can develop their visual vocabulary, sharpen their critical thinking skills, and apply the concepts taught in Art and Humanities classes. Students will visit local galleries and museums, attend or view lectures, and write a series of short reports. May be taken a total of three times. Graded S/U. Note: This class is a self-paced field experience course. Two meetings with instructor are required: Meeting #1 in the first two weeks of the quarter; Meeting #2 at mid-quarter.

Recommended: Concurrent enrollment in any ART course or in HUM& 101, HUM& 116, HUM& 117 or HUM& 118.

#### ART 201 History of Western Art: Ancient (5)

An introductory survey of Western art's foundation and early development. Art and architecture are covered from Prehistoric times through the ancient Middle East, Egyptian, Aegean, Greek, Etruscan, Roman, Early Christian, and Byzantine periods. Emphasis is given to historical and cultural contexts. *Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent*.

#### ART 202 History of Western Art: Medieval & Renaissance (5)

An introductory survey of Western art from approximately 400-1600 AD. From the Late Antique world's legacy, painting, sculpture, architecture, and crafts are covered from Germanic and Celtic tribes through the Carolingians and Medieval Romanesque and Gothic periods, on to Italian and Northern Renaissance art, and ending with the Mannerists.

Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.

#### ART 203 History of Western Art: Baroque through Modern (5)

An overview of the influences on, and development of, Western art, architecture, and craft from 1600 AD to the present. Follows Baroque and Rococo through the French Revolution to the emergence of Neoclassicism, Romanticism, Realism, Impressionism, and Post-Impressionism. Twentieth-century and later art is studied in the context of global diversity. *Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.* 

#### ART 210 Color and Design (5)

Exploration of color theory for advanced studies in two-dimensional media. Emphasis will be on analysis in regard to color perception, color relationships, and the use of color in historical art works. *Prerequisite: ART 102*.

#### ART 231 Low-fire Ceramics (5)

Students will explore the possibilities available in low-fire ceramics. Traditional forms such as Majolica and burnished earthenware will be used as well as nontraditional styles. The ART 230 series is taught as a series of ceramic design courses offering experience in both hand-building and throwing on the wheel in a sequence of increasing involvement and difficulty. Art 231, 232, and 233 are not sequential and may be taken in any order. Performance/Skills course.

Prerequisite: ART 133 and either ART 102, or ART 103 or ART 105 or instructor permission.

#### ART 232 Surface Embellishment and Form Alteration (5)

Course work will concentrate on the alteration of forms and the various techniques for surface textures. The student should be competent in the ability to make basic shapes to use on the techniques assigned. The ART-230 series is taught as a series of ceramic design courses offering experience in both hand-building and throwing on the wheel in a sequence of increasing involvement and difficulty. Art 231, 232, and 233 are not sequential and may be taken in any order. Performance/skills course.

Prerequisite: ART 133 and either ART 102, ART 103 or ART 105 or instructor permission.

#### ART 233 Ceramics Master Study (5)

In this course, each student will research an artist or a type or style of ceramics, and from that research attempt to make replicas of that work. After the initial series of works, the student will use the research work to create a new direction using the master work as a starting point. Art 231, 232, and 233 are not sequential and may be taken in any order. Performance/skills course.

Prerequisite: ART 133 and either ART 102, ART 103 or ART 105 or instructor permission.

#### ART 246 Intermediate Photography (5)

Second quarter of black & white photography with emphasis on seeing, composition, presentation and advanced techniques. Refinements of camera and metering operation, development and printing techniques, darkroom manipulation, toning, coloring and alternative processes. Students must have an adjustable 35mm SLR camera and must provide film, printing paper and other supplies. Performance/skills course. *Prerequisite: ART 146 or instructor permission.* 

#### ART 247 Intermediate Digital Photography (5)

This course will provide students with intermediate instruction in the use of digital and/or film cameras, and the use of computers to create prints of captured images from their images. Students learn to use digital tools and techniques to create and manipulate visual images. Students need a digital camera or film camera (35mm or medium format) capable of being operated in a manual exposure mode. Performance/skills course. *Prerequisite: ART 147 with a minimum arade of C.* 

# ART 272 Sculpture: Modeling, Moldmaking and Casting (5)

Basic experience in direct modeling, assemblage and found objects and mold construction of these objects. Various traditional and non-traditional casting mediums will be explored. Developing conceptual themes for art, as well as learning technical skills and processes, will be emphasized. Performance/skills course. *Prerequisite: ART 174. Recommended: ART 102, ART 103 and ART 105.* 

#### ART 273 Sculpture: Carving of Stone, Wood, and Plaster (5)

Introduction to power tools, hand tools, techniques, and materials used in the carving of wood, stone, plaster and cement to create sculptural forms. Design and craftsmanship will be emphasized. Performance/skills course. *Prerequisite: ART 174. Recommended: ART 102, ART 103 and ART 105.* 

#### ART 274 Sculpture: Fabrication Techniques of Wood and Metal (5)

Introduction to building abstract sculptural forms through the use of a variety of materials, techniques and fabrication processes. Joinery, assemblage, welding and other processes where materials are joined will be covered. Emphasis will focus on technical skills and developing conceptual themes for your projects. Performance/skills course. *Prerequisite: ART 174. Recommended: ART 102, ART 103 and ART 105.* 

#### ART 275 Sculpture: Metal Casting: Iron, Bronze, and Aluminum (5)

Emphasis on pattern fabrication, wax manipulation, model and mold making, and foundry procedures for casting metals through piece-molds and the lost-wax method. Projects will help develop expressive conceptual themes while examining certain technical foundry processes. Performance/ skills course.

Prerequisite: ART 174. Recommended: ART 102, ART 103 and ART 105.

## ART 296 Special Projects in Art (2)

This course involves special group efforts which grow out of departmental need or artistic opportunity. The course will be offered as each art project is identified. The number of participants would be limited by the nature of the project, and involvement would be subject to the applicant's background coursework and the instructor's approval. Performance/skills course. *Prerequisite: Instructor permission.* 

# ART 297 Folio Preparation (2)

Students will prepare a portfolio for application to a transfer institution. Students will be advised regarding their selections of samples, revisions and skill areas that need further attention. Students will learn to photograph samples, mat and frame appropriate pieces, develop directed projects to improve the overall quality and finalize a professional portfolio.

Prerequisite: Students must claim their intent to major in art and must have completed two of the three following courses: ART 102, ART 103, or ART 105. Instructor permission required.

#### ART 299 Special Problems in Art (1-5)

These courses are an extension of existing course sequences and are subject to the same fees as the individual courses within the sequence chosen. All 299 classes require permission of the instructor.

Prerequisite: Prerequisite to registration for any 299 class is the satisfactory completion of the entire course sequence offered by the department in that particular medium.

# Astronomy

Students intending to major in Astronomy at a baccalaureate institution should work towards an Associate of Science degree with an Astronomy/ Physics Specialization.

# ASTR& 110 The Solar System (5)

Study of the structure and composition of the Solar System. Topics discussed include the history of Astronomy, the appearance of the nighttime sky, orbital motion, gravity, the nature of light, theories of Solar System formation, and the characteristics of the planets, moons, asteroids, and comets that inhabit the Solar System. Laboratory included. *Prerequisite: ENGL/ 095 and MATH 090 or MATH 093 with a minimum grade of C or equivalent.* 

## ASTR& 115 Stars, Galaxies and the Cosmos (5)

Study of the structure and composition of the universe including stars and galaxies. Topics discussed include the theories of the formation of stars, galaxies, and the universe; the nature of light and telescopes; the characteristics of the Sun; the cycle of star formation, life and death; the types of stars and galaxies; and the application of physical principles to making astronomical measurements. Laboratory included. *Prerequisite: ENGL/ 095 and MATH 090 or MATH 093 with a minimum grade of C or equivalent.* 

# Biology

Students seeking courses for general interest or natural sciences distribution requirements should consider the following non-major courses: BIOL& 100, BIOL 105, BIOL 125, BIOL 140, BIOL& 175, BOT 101, ENVS& 101, NUTR& 101 or SCI 105.

Students interested in majoring in biology or related disciplines should work toward either an Associate of Science degree with a Biology Specialization or an Associate of Arts in Biology. An academic advisor should be consulted to determine the appropriate courses for your degree goal.

## BIOL& 100 Survey of Biology (5)

An introduction to biological principles. Topics include: scientific method; scientific literacy; basic cellular anatomy and biochemical processes; evolution and genetics; diversity of life; and ecology and environmental issues. Laboratory included.

Prerequisite: ENGL/ 095 with a minimum grade of C; and either MATH 090 or MATH 093 with a minimum grade of C; or equivalent assessment in these areas.

# BIOL 105 Fossils and the History of Life (5)

Introduction to the geological and biological processes and events that generated the amazing record of life on earth. Topics include plate tectonics, rocks, fossilization processes, principles of evolution, and a survey of the history of life. Lab includes studying rock and fossil specimens and involves field trips. This course is the same as GEOL 108. Students may receive credit for either BIOL 105 or GEOL 108, but not both.

Prerequisite: ENGL/ 095 with a minimum grade of C and completion of MATH 090 or MATH 093 with a minimum grade of C or equivalent assessment in these areas.

# Biology

#### BIOL 125 Biology in the Field (5)

An intensive introductory course covering the fundamental principles governing biological assemblages from the species level to communities, as exemplified by the different ecosystems found in the Pacific Northwest. Laboratory activities include learning select biological field methods. Extended field trip(s) required; exact itinerary varies quarterly. *Prerequisite: ENGL/ 095 with a minimum grade of C; and either MATH 090 or MATH 093 with a minimum grade of C; or equivalent assessment in these areas.* 

#### BIOL 140 Marine Biology (5)

Introductory marine biology designed for non-majors. Learn how marine organisms are categorized, about their habitats, how they survive, their ecological relationships, and environmental concerns. Laboratories and field trips included.

Prerequisite: ENGL/ 095 with a minimum grade of C and completion of MATH 090 or MATH 093 with a minimum grade of C or equivalent assessment in these areas.

#### BIOL& 160 General Cell Biology (5)

(Formerly BIOL 111) An introductory cell biology course for students preparing for health professions. Major concepts of cell biology will be introduced, including the chemistry of life, the structure, reproduction, and metabolism of cells, genetics, and evolutionary biology. Lab included. *Prerequisite: ENGL/ 095 with a minimum grade* of *C; and completion of MATH 090 or MATH* 093 with a minimum grade of *C; or equivalent* assessment in these areas.

Recommended Preparation: High School Chemistry; or Introductory-level College Chemistry course.

#### BIOL& 175 Human Biology w/Lab (5)

(Formerly BIOL 118) This course is a onequarter class of human anatomy and physiology. This course offers a brief overview of the human body for the non-science major. It covers some basics of chemistry and cells and then outlines all the major systems of the human body. Laboratory included. *Prerequisite: ENGL/ 095; and either MATH 090 or MATH 093; or BUS 110 with a minimum grade of C or equivalent.* 

#### BIOL 179 Special Topics in Biology (2)

This topic course will explore one varying topic in biology. The specific biological topic will be explored using a variety of methods which may include lectures, discussions, seminars, research projects, field work, laboratory work, or all-day to overnight field trips. Example topics include: genetics, conservation biology, the history of life, or other current topics in biology. *Prerequisite: ENGL/ 095 with a minimum* grade of C or equivalent; and either MATH 090 or MATH 093 with a minimum grade of C or equivalent.

#### BIOL& 221 Introduction to Evolution, Ecology and Biodiversity (5)

(Formerly BIOL 210) Introduction to the evolutionary and ecological processes involved in the generation of our planet's biodiversity, including review of patterns and processes that influence the origin, evolution, distribution and abundance of living things. First of a three-quarter sequence (BIOL& 221, 222, 223) designed for science majors. Laboratory included.

Prerequisite: CHEM& 161 with a minimum grade of C (may be taken concurrently) and BIOL& 160 with a minimum grade of C.

## BIOL& 222 Introduction to Cellular and Molecular Biology (5)

(Formerly BIOL 211) Introduction to the structures and functions of biological molecules; anatomy of prokaryotic and eukaryotic cells; cell metabolism and metabolic diversity; molecular genetics and genomics. Laboratory included. *Prerequisite: CHEM& 161 and BIOL& 221 with a minimum grade of C.* 

#### BIOL& 223 Introduction to the Biology of Organisms (5)

(Formerly BIOL 212) Introduction to the structures and functions of eukaryotic organisms with particular attention to animal and plant anatomy, physiology, and development. Laboratory included. *Prerequisite: BIOL& 222 and CHEM& 162 with a minimum grade of C.* 

#### BIOL& 241 Human Anatomy & Physiology 1 (5)

(Formerly BIOL 220) The first quarter of a standard two quarter sequence in human anatomy and physiology. The course reviews basic molecular and cell biology. New material covers histology, the integumentary system, the skeletal system, the muscular system, the nervous system and the special senses. Laboratory sessions include the study of microscopy, histology, anatomical models, preserved bones and human cadavers. *Prerequisite: BIOL& 160 with a minimum grade of C; and either CHEM& 121 or CHEM& 140 with a minimum grade of C.* 

#### BIOL& 242 Human Anatomy & Physiology 2 (5)

(Formerly BIOL 221) The second quarter of a standard two quarter sequence in human anatomy and physiology. The course will examine the endocrine system, blood, the cardiovascular system, the lymphatic system, the immune system, the respiratory system, the digestive system, the urinary system, and the reproductive system. Laboratory sessions include the study of histology, anatomical models, and the human cadaver. *Prerequisite: BIOL& 241 with a minimum grade of C.* 

#### BIOL 243 Current Advances in Human Anatomy and Physiology (5)

An optional third quarter of human anatomy and physiology. This class will examine human biology through the in-depth exploration of selected disease processes and the analysis of current scientific advances related to their diagnosis and treatment. Students will review the major organ systems and examine homeostatic feedback loops, anatomical and physiological relationships between the different systems, and the relationship between anatomy and physiology in selected body structures from an evidence-based perspective. Laboratory sessions include histology, study of anatomy using models and the human cadaver, and physiology experiments.

Prerequisite: BIOL& 242 or BIOL& 223 with a minimum grade of C.

# Biology

# BIOL& 260 General Microbiology (5)

(Formerly BIOL 201) An introduction to the study of microbiology including microbial structures, metabolism, genetics, classification, pathogenesis, and host defense. The emphasis is on human bacterial and viral pathogens. Laboratory included. *Prerequisite: CHEM& 121 with a minimum* grade of C (or higher level chemistry course with a minimum grade of C); and either BIOL& 160 or BIOL& 222 with a minimum grade of C. Recommended Preparation: CHEM& 131.

## BIOL 280 Human Cadaver Prosection (2)

(Formerly BIOL 260) This is a two-credit laboratory dissection course. Students will dissect a human cadaver to include removal of skin and superficial fascia, isolation of selected muscles, and opening of thoracic and abdomino-pelvic cavities. Students will also participate in the annual Surgical Demonstration event and present selected surgical procedures to the public. *Prerequisite: BIOL& 241 with a minimum* grade of C and instructor recommendation; and instructor permission.

# BIOL 294 Biology Research (1-5)

Students will work as part of a research team on a specific research project for the quarter. The course will involve either laboratory or field study depending on the project, evaluation of primary research papers relevant to the project, and presentation of project results.

Prerequisite: BIOL& 221, BIOL& 222, BIOL& 242 or BIOL& 260 with a minimum grade of C or equivalent.

# Botany

# BOT 101 General Botany (5)

Presents basic concepts of plant biology to non-science majors including plant characteristics, biodiversity, growth, reproduction, and ecology. Students discuss current topics in agriculture, horticulture, medicine, ethnobotany, biotechnology, ecology, conservation, and environmental issues. Labs include lab experiments, greenhouse projects, field trips, and habitat restoration work in the TCC Nature Area. *Prerequisite: ENGL/ 095 with a minimum* grade of C or equivalent; and either MATH 090 or MATH 093 with a minimum grade of C or equivalent.

# BOT 179 Special Topics in Botany (2)

This course will explore various topics in plant biology using a variety of methods, including seminars, laboratory experiments, lectures, research projects, presentations, field work, and all-day or overnight field trips depending on the quarter offered. Topics will vary by quarter. A course may include topics such as ethnobotany, plant taxonomy, etc. *Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent; and either MATH 090 or MATH 093 with a minimum grade of C or equivalent.* 

# Business

# BUS& 101 Introduction to Business (5)

(Formerly BUS-101) For both business and non-business majors. Dynamics and competitive business world are explored through the study of topics including economic systems, forms of business ownership, social responsibility and ethics, entrepreneurship, marketing, management, organizational design, finance, banking, and securities markets.

Prerequisite: ENGL 095 and READ 095 or ENGL/ 095 or instructor permission.

# BUS 102 Customer Service (2)

Students will learn the skills necessary to provide quality customer service of the 21st century in any workplace environment. The course will focus on improving verbal, non-verbal and listening skills; adopting a positive attitude; using effective techniques for handling difficult customers; recognizing ethical behavior and decisions; practicing professional communication etiquette and understanding the multicultural aspects of customer service in the global marketplace.

# BUS 110 Business Math (5)

This course is a review of mathematical computations using fractions, decimals, percentages, and proportions as well as introductory algebra. The focus is on their application to personal finance and business situations with the emphasis on decision-making and problem-solving. Topics may include credit cards, bank reconciliation, foreign currency exchange, discounts, taxes, payroll, installment buying, mortgages, depreciation and interest. *Prerequisite: MATH 085 with a minimum* 

grade of C.

#### BUS 140 Marketing and Business Development (5)

Examines marketing fundamentals and their impact on business and society. Students will study the concepts of consumer needs, demand management, customer behavior, strategies in product development, promotion, advertising, sales and distribution systems. *Prerequisite: ENGL 095 and READ 095 or ENGL/ 095 or instructor permission.* 

#### BUS 150 Global Business (5)

This course examines international business topics including globalization and the outsourcing of jobs; differences in cultures and political, economic, legal, and social systems; international ethics; the international monetary system; multinational corporations; methods of entering offshore markets; global production, logistics and marketing; and international trade organizations. (multicultural content) (writing intensive) *Prerequisite: ENGL 095 and READ 095 or ENGL/ 095 or instructor permission.* 

#### BUS 160 Small Business Entrepreneurship (5)

A practical course concentrating on successfully launching and managing a small business, achieving optimum benefits from limited resources, planning for growth and succession, and developing skills, qualities, and traits that complement entrepreneurial behavior. Students will write a business plan that supports their future entrepreneurial efforts.

Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent or instructor permission. Recommended preparation: knowledge of CU 100 and HD 101.

#### BUS 163 Management Principles and Organizational Systems (5)

Basic theory and common terms of management. Course examines what management is, who managers are, what they do, how they differ from non-managers, and how management contributes to an organization's success.

Prerequisite: ENGL 095 and READ 095 or ENGL/ 095 or instructor permission.

#### BUS 164 Leadership and Human Relations (5)

Applies human relations skills to the work world. Focuses on interpersonal leadership skills that can maximize cooperation, flexibility, sensitivity and teamwork among workers. Students examine how attitudes, values, needs and communication styles affect relationships at work. Small-group projects will practice leadership skills and evaluate individual interpersonal competence. *Prerequisite: ENGL 095 and READ 095 or ENGL/ 095 or instructor permission.* 

#### BUS 165 Human Resource Management (3)

Explores how organizations obtain, retain, and effectively utilize human resources. Topics include workplace diversity, forming quality work teams, equal opportunity, work analysis, staffing, training and development, performance appraisals, compensation, union/management relations, and grievance procedures.

Prerequisite: ENGL 095 and READ 095 or ENGL/ 095 or instructor permission.

#### BUS& 201 Business Law (5)

(Formerly BUS-200) An introduction to the American legal system and the functions of law in a business environment; legal reasoning and the process of resolving disputes in society; a preliminary analysis of contractual arrangements and business association in the business community.

#### BUS 232 Introduction to Project Management (5)

This course will introduce students to the fundamentals of project management including understanding a project's life cycle, setting priorities and expectations, controlling expenses and reporting results. Students will examine the various roles, environments and techniques of planning, evaluation, and control.

Prerequisite: CU 105 with a minimum grade of C or equivalent. Recommended: CU 100 with a minimum grade of C or equivalent.

#### BUS 256 Statistical Analysis (5)

Statistical techniques to be used in guiding business decisions. Introduction to descriptive techniques, probability, estimation, hypothesis testing, regression, correlation and related concepts.

Prerequisite: MATH 095 with a minimum grade of C or equivalent.

#### BUS 257 Social Media for Business (3)

This course is designed to provide students with foundational skills to use social media tools and strategies so that they cam immediately apply them in the workplace. *Prerequisite: CU 105 with a minimum* grade of C or Program Chair permission. *Recommended: CU 101.* 

#### BUS 260 Small Business Operations (5)

Students will acquire key skills and knowledge focused on small business administration, customer relations, marketing and sales, technology utilization, and leading a small organization. The course is a balance between acquiring topic knowledge and gaining key supporting skills through in-class practice and demonstration. Furthermore, student learning is enhanced through teamwork and interacting with the local business community. *Prerequisite: BUS 160 and ENGL& 101 with a minimum grade of C.* 

Recommended Preparation: BUS 140 and BUS 257 with a minimum grade of C.

#### BUS 280 Career Readiness Skills (2)

This course covers employment search skills and the employee skills needed to be successful on the job. It is recommended preparation for internships: ACCT-290, BUS-290, and IT-290.

#### BUS 290 Work Internship (5)

During one quarter of the sophomore year, students may receive college credits for hands-on work experience and training in a private - or public - sector organization. *Prerequisite: Program Chair permission.* 

#### BUS 295 Entrepreneurial and Innovative Mindset (5)

This course is for students who want to learn more about innovation, entrepreneurship and launching a venture. The class will introduce the principles of an entrepreneurial mindset. The characteristics of the entrepreneurial mindset will be dissected and applied to the student's own entrepreneurial potential. Additionally, students will examine needed technical skills including business, finance, marketing, legal issues, and social media. This course is the same as SOC 295. *Prerequisite: Instructor permission.* 

#### BUS 299 Independent Study (1)

Study on an individual basis. Prerequisite: Program Chair permission.

#### BUS 300 Foundations of Management Theory and Practice (3)

This course covers a broad overview of the foundations of management and leadership from a theoretical and practical perspective. It focuses on integrating theory into higher level critical thinking allowing students to apply theory to real world business problems. Topics will include terminology, strategies and techniques to manage and lead, leadership, motivation, team building, change, group dynamics, power and conflict. *Prerequisite: Acceptance into AM BAS. Corequisite: LS 301* 

#### BUS 310 Organizational and Interpersonal Behavior (5)

This course covers managing relationships within an organization. It relates theory and research to organizational problems by reviewing advanced concepts in motivation and perception, leadership, decision-making, communication and influence, group behavior, conflict and cooperation, politics, corporate culture, organizational structure and environmental influences. Students will gain practical experience in managing teams, resolving conflict, and building professional and effective relationships.

Prerequisite: Acceptance into AM BAS.

#### BUS 320 Managerial Accounting (5)

This course covers the basic principles of financial and managerial accounting, including analyzing balance sheets, income statements, cash flow statements, financial analysis, and budgetary control systems. Students also will gain skills in reporting, planning, coordinating, and monitoring organizational performance. *Prerequisite: BUS 300 and MATH 136 or MATH* & 146 or BUS 256 with a minimum grade of C and CU 203 with a minimum grade of B or Microsoft Office Specialist Excel Core Level certification.

#### BUS 330 Legal Environments in Business (5)

This course covers the state and federal laws that affect management behavior and organizational practices, including contracts, business organizations, employment law, product liability, safety issues, and environmental regulations. The focus will be placed on how to manage employees and other relationships legally and ethically. Emphasis will be placed in preventative law as well as strategies to resolve workplace conflict without litigation.

Prerequisite: BUS& 201 and BUS 300 with a minimum grade of C.

#### BUS 340 Financial Management (5)

This course covers financial management principles with a focus on corporations and the concepts associated with allocation of scarce resources across assets over time. Students will learn how managers interface with accounting and finance departments, meet financial objectives, and make decisions. Students will utilize spreadsheets and other analytical methods to study issues and problems related to corporate finance. Topics will include sources and sequencing of financing as a business develops, assessing and forecasting, managing short and long term capital needs, and evaluating the financial plan in relationship to the stated business plan. Prerequisite: BUS 320 with a minimum grade of C.

#### BUS 350 Fundamentals of Project Management (5)

This course covers project management methods and delves into topics covered in the Comptia study guide. This course will prepare students to manage projects from start to finish within any organizational structure. The course features practice in each of the project phases as students learn how to strategically apply project management tools and techniques to help organizations achieve their goals.

Prerequisite: BUS 300 with a minimum grade of C.

## BUS 360 Fundamentals of Human Resources Management (5)

This course provides the tools to create a highly skilled and diversified workforce by implementing effective strategies and best practices for planning, recruiting, selecting and maintaining within the scope of organizational goals. Special emphasis will be placed on creating a diversified workforce within an ethical and inclusive organization. *Prerequisite: BUS 300 with a minimum grade of C.* 

#### BUS 400 Economics for Managers (5)

This course covers issues in microeconomics, macroeconomics, and global economics. Topics include allocation of resources, economic systems, economic institutions and incentives, market structures and prices, and productivity. This course also includes issues related to the global marketplace and globalization, aggregate supply and demand, and governmental policy towards business. *Prerequisite: BUS 300 and MATH 136 or MATH& 146 or BUS 256 with a minimum arade of C.* 

#### BUS 410 Operations and Logistics (5)

This course covers the concepts related to the physical movement and storage of goods, such as raw materials, semi-finished and finished goods, and associated managerial activities that are important for effective control. Students will apply the concepts of total quality Management (TQM), Just in Time (JIT), forecasting, inventory theory and supply chain management. This course will also cover the importance of interrelationships between logistics, production, marketing, financial management, and quality control. *Prerequisite: BUS 300 and BUS 320 with a minimum grade of C.* 

#### BUS 420 Digital and Social Media Management (5)

This course covers the connection between business objectives and social media strategy, platforms, and tactics. The primary focus of this course, is to understand how marketing activities can be implemented online and via social media to reach target customers and strategic objectives.

Prerequisite: BUS 330 with a minimum grade of C.

#### BUS 430 Business Strategy and Sustainability (5)

This course covers an overview of business strategy concepts, tools, and techniques to build and operate a sustainable organization. The course will integrate sustainable development and environmentalism concepts with business management strategy to achieve corporate social responsibility. Students will learn about the ecological and economic benefits of sustainability and 'green' practices. *Prerequisite: BUS 300 and BUS 330 with a minimum grade of C. Recommended preparation: ENVS& 101 with a minimum grade of C.* 

#### BUS 441 Intermediate Project Management (5)

This course covers the behavioral and technical aspects of managing projects. The course will explore various approaches for effectively managing team dynamics, project planning, monitoring, and controlling activities. Students gain insight into project leadership and team management. The goal is to prepare students with the necessary knowledge related to effective project team management as well as project cost, quality, and performance in order to satisfy the business objectives and successfully manage the implementation of a project. Project management software will be used to support the implementation of a project. Students will prepare a project plan at an intermediate level of difficulty. Prerequisite: BUS 350 with a minimum grade of C.

#### BUS 442 Intermediate Human Resource Management (5)

This course focuses on enlarging the competencies of a workforce through training and professional development using adult learning theories and best practices for training. The course also covers compensation and benefit systems using a Total Rewards approach integrating tangible and intangible rewards. *Prerequisite: BUS 360 with a minimum grade of C.* 

#### BUS 443 Entrepreneurial Leadership (5)

This course covers the foundational knowledge and competencies involved in leading and developing entrepreneurial ventures. Both socially-conscious and profit enterprises are researched and explained with an analysis comparing and contrasting these similar, yet different businesses. Students also define problems that each type of venture solves and how the solution supports local, regional, and even global communities. *Prerequisite: BUS 300 and BUS 330 with a minimum grade of C.* 

#### BUS 451 Advanced Project Management (5)

This course covers advanced project management topics necessary for implementation of and excellence in project management. The course will provide a framework for approaching, evaluating, and implementing project risk and quality management in order to obtain optimal project results by identifying and applying relevant quality management tools, activities, and methods for achieving systemic quality management and quality improvement across all phases of the project life cycle. The course will also explore agile project management methodologies. Best practices in the management of international projects, human resource management, risk management, project leadership, quality and communications management will be explored and discussed. Prerequisite: BUS 441 with a minimum grade

#### BUS 452 Advanced Human Resource Management (5)

of C.

This course focuses on the legal and regulatory framework surrounding employment locally, nationally and globally. Students will become familiar with law and regulations pertaining to compensation, employee relations, job safety and health, equal employment opportunity, leave and benefits and other protection laws. Topics will also include labor relations.

Prerequisite: BUS 442 with a minimum grade of C.

#### BUS 453 Advanced Entrepreneurial Leadership (5)

This course covers more advanced knowledge and competency in leading and developing entrepreneurial ventures. The second specialization course supports students selecting either a socio-cultural or a profit enterprise to design, develop and present. Teams work together thinking critically regarding socio-economic problems and potential solutions. Each team designs a new problem-solving business model supporting customer-driven needs. Students begin networking with other entrepreneurs, small business owners, and other liked-minded professionals.

Prerequisite: BUS 443 with a minimum grade of C.

#### BUS 461 Capstone: Managing for Organizational Change (4-5)

This culminating course is the capstone for students with studies concentrated in project management. It includes an indepth investigation of the forces driving organizational change and their impact on people and structure. The course focuses on developing leadership and change capabilities at all levels in an organization. Students will examine the techniques of organizational design and development with emphasis on the methods of planned change to ensure improved effectiveness of organizations in a changing external environment. A planned approach to managing all phases of the organizational change process is emphasized. Prerequisite: BUS 451 with a minimum grade of C.

#### BUS 462 Capstone: Human Resource Management (4-5)

This culminating course is the capstone course for students with studies concentrated in human resource management. Students will evaluate case studies and integrate all human resource management knowledge and skills learned in previous courses including critical strategies in the areas of legal/regulatory compliance, recruitment and selection of personnel, performance and feedback mechanisms, and financial and benefits compensation.

Prerequisite: BUS 452 with a minimum grade of C.

# BUS 463 Capstone: Entrepreneurial Leadership (4-5)

This culminating course is the capstone course for students with studies concentrated in entrepreneurial leadership. Learning advances to a capstone-based experience developing a network of like-minded entrepreneurs and business leaders who offer feedback and analysis regarding the student's new business models. Student's network with venture capital experts, small business owners, socially-conscious leaders, and other entrepreneurship-minded professionals focused on modifying and finalizing their new business model. Each team's model culminates into a fully defined enterprise model with real implementation potential. Prerequisite: BUS 453 with a minimum grade of C.

# BUS 480 Applied Management Internship (2-5)

This internship course is designed to provide students with major-related, supervised, and evaluated practical training work experiences which may be paid or voluntary. Students are 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 are designed and agreed upon by the student, the organization providing the internship, and the faculty member facilitating this course. *Prerequisite: Acceptance into AM BAS and instructor permission.* 

# Chemistry

Students seeking courses for general interest and degree distribution requirements should consider the following non-major course: CHEM& 110.

Students working toward Allied Health Careers should take CHEM& 121, and CHEM& 131 as needed.

Students pursuing science, engineering, pre-med, pre-pharmacy and similar majors/degrees should select courses from CHEM& 161, 162, 163, 261, 262 and 263.

An academic advisor should be consulted to determine the appropriate courses for your degree goal.

Students intending to major in Chemistry at a baccalaureate institution should work towards an Associate of Science degree with Chemistry specialization.

#### CHEM& 110 Chemical Concepts w/lab (5)

Survey of the fundamental principles of chemistry in a relatively non-mathematical way. Course utilitzes themes such as food, the environment, and the global economy. Course covers measurement, atomic and molecular structure, chemical reactions, and applications of chemistry to everyday life. Laboratory included.

Prerequisite: ENGL/ 095 with a minimum grade of C; and either MATH 090 or MATH 093 with a minimum grade of C or equivalent assessment in these areas.

#### CHEM& 121 Introduction to Inorganic Chemistry (5)

(Formerly CHEM 101) (For non-science and non-engineering majors. Intended primarily for students pursuing Nursing or Allied Health careers.) Course includes the study of the metric system, atomic theory, bonding, quantitative relationships, solutions, redox chemistry, equilibrium, gases, acids and bases, salts, and nuclear chemistry. Laboratory included.

Prerequisite: MATH 095 with a minimum grade of C (may be taken concurrently).

#### CHEM& 131 Introduction to Organic/Biochemistry (5)

(Formerly CHEM-102) (For non-science majors.) Study of the structure, properties, and reactions of organic and biological compounds. Includes an introduction to biochemical processes. Laboratory included. *Prerequisite: CHEM& 121 with a minimum grade of C.* 

## CHEM& 140 General Chemistry Prep w/Lab (5)

This course is designed to prepare students with no or minimal prior chemistry background for entry into the General Chemistry course sequence (CHEM& 161, 162, and 163). This course is appropriate for students pursuing science, engineering, pre-med, pre-pharmacy, and similar majors/degrees who have not met the chemistry prerequisite for CHEM& 161. Topics include both the foundational conceptual and quantitative aspects of chemistry such as the metric system, dimensional analysis, basic atomic structure, stoichiometry, and the composition and changes of matter. Laboratory included. Prerequisite: MATH 140 or MATH 147 with a minimum grade of C (may be taken concurrently).

# CHEM& 161 General Chemistry w/Lab I (5)

(Formerly CHEM-140) This is the first quarter of college-level General Chemistry. General Chemistry is appropriate for students on science, engineering, pre-med and similar pathways. This course covers measurements, the structure of matter, compounds, stoichiometry, classes of chemical reactions, gases, thermochemistry, and the quantum mechanical model of hydrogen. Laboratory included.

Prerequisite: CHEM& 140 or CHEM& 121 with a minimum grade of C or one year of high school chemistry; and either MATH& 141 or MATH 147 with a minimum grade of C (may be taken concurrently).

# Chemistry

#### CHEM& 162 General Chemistry w/Lab II (5)

(Formerly CHEM-150) This is the second quarter of college-level freshman chemistry. It covers electronic structure, bonding and bonding theories, molecular shapes, intermolecular forces, solids, liquids, solutions, and chemical equilibrium. Laboratory included. *Prerequisite: CHEM& 161 with a minimum grade of C.* 

#### CHEM& 163 General Chemistry w/Lab III (5)

(Formerly CHEM-160) This is the third quarter of college-level freshman chemistry. It covers chemical kinetics, equilibrium, acids and bases, solubility, complex ions, thermodynamics, electrochemistry, and nuclear chemistry. Laboratory included. *Prerequisite: CHEM& 162 with a minimum grade of C.* 

## CHEM& 261 Organic Chemistry w/Lab I (5)

(Formerly CHEM-231) Organic chemistry for science majors. Study of the application of general chemical principles to organic compounds. Topics include: structure, orbital theory, isomerism, nomenclature, resonance, and chirality; substitution and elimination reactions; introduction to IR spectroscopy. Laboratory included.

Prerequisite: CHEM& 163 with a minimum grade of C.

#### CHEM& 262 Organic Chemistry w/Lab II (5)

(Formerly CHEM-232) Organic chemistry for science majors. Topics include: structure, properties and reactions of alkenes, alkynes, alcohols, radicals, and aromatic compounds; introduction to NMR, UV/VIS, and mass spectroscopy. Laboratory included. *Prerequisite: CHEM& 261 with a minimum* grade of C.

### CHEM& 263 Organic Chemistry w/Lab III (5)

(Formerly CHEM-233) Organic chemistry for science majors. Topics include: structure, properties and reactions of aldehydes, ketones, amines, and carboxylic acids and their derivatives; introduction to biological molecules and biochemical processes. Laboratory included.

Prerequisite: CHEM& 262 with a minimum grade of C.

# Chinese

The basic tenets of communications including reading, writing, speaking and listening are developed in a dynamic second language acquisition environment enhanced by technology.

Grammar is used as a communication tool to express meaning as students take part in small group discussions, cultural investigation, and presentation. Authentic materials will be focused on in the class as well assessment. Students should expect to be immersed in the language. English will be used at a minimum.

#### CHIN& 121 Chinese I (5)

The first year of the beginning Chinese language sequence consists of 121, 122, and 123. CHIN& 121 is the first quarter of the sequence. The basic tenets of communications including reading, writing, speaking and listening are developed in a dynamic second language acquisition environment enhanced by technology. Grammar is used as a communication tool to express meaning as students take part in small group discussions, cultural investigation, and presentation. Authentic materials will be focused on in the class as well assessment. Students should expect to be immersed in the language. English will be used at a minimum. (Multicultural Course)

Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent or instructor permission.

#### CHIN& 122 Chinese II (5)

CHIN& 122 is the second quarter of the first-year language sequence and continues to build on the skills acquired in CHIN&-121. The basic tenets of communications including reading, writing, speaking and listening are developed in a dynamic second language acquisition environment enhanced by technology. Grammar is used as a communication tool to express meaning as students take part in small group discussions, cultural investigation, and presentation. Authentic materials will be focused on in the class as well assessment. Students should expect to be immersed in the language. English will be used at a minimum. (Multicultural Course) Prerequisite: CHIN& 121 with a minimum grade of C or instructor permission.

#### CHIN& 123 Chinese III (5)

CHIN& 123 is the third quarter of the first-year language sequence and continues to build on the skills acquired in CHIN&-122. The basic tenets of communications including reading, writing, speaking and listening are developed in a dynamic second language acquisition environment enhanced by technology. Grammar is used as a communication tool to express meaning as students take part in small group discussions, cultural investigation, and presentation. Authentic materials will be focused on in the class as well assessment. Students should expect to be immersed in the language. English will be used at a minimum. (Multicultural Course)

Prerequisite: CHIN& 122 with a minimum grade of C or instructor permission.

# **Communication Studies**

## CMST& 101 Introduction to Communication (5)

(Formerly SPCH-100) A survey of fundamental principles of communication theory. Students are introduced to verbal and nonverbal communication, effective listening, interpersonal communication, small group discussion as well as culture and gender factors in communication. Written assignments, examinations and informal oral presentations are included.

## CMST 110 Multicultural Communication (5)

(Formerly SPCH-110) A survey of how culture shapes the communication interaction. Emphasis is on the role of world views, how culture affects the development of value systems, interpersonal relationships, workplace and educational expectations. (multicultural content)

Prerequisite: ENGL& 101 with a minimum grade of C (may be taken concurrently).

# CMST 120 The Process of Public Speaking (2)

An introduction to the preparation of and process required to develop and deliver oral presentations. This course does NOT require oral presentations. Rather, focus includes the rhetorical situation, topic development, understanding an audience, appropriate research, understanding speech types, appropriate organization, the outlining process, and ethical considerations.

# CMST 179 Special Topics in Communication (2)

These are seminars designed to provide communication studies students with the opportunity to explore, research, and study selected topics and/or contemporary issues related to communication, public speaking, and the media. Faculty will generally determine material covered; however, material may also reflect the expressed need or interest of students in communication studies courses.

Prerequisite: CMST& 101, CMST 110 or CMST& 220 with a minimum grade of C.

# CMST& 210 Interpersonal Communication (5)

This course focuses on aspects of interpersonal communication in relationships that include philosophical, theoretical, and applied exploration of self-concept, perception, emotions, language, nonverbal cues, listening, and conflict.

# CMST& 220 Public Speaking (5)

(Formerly SPCH-101) An introduction to the preparation and delivery of oral presentations in an extemporaneous style. Emphasis is on ethical research, critical, logical analysis, organization of informative and persuasive presentations.

Prerequisite: ENGL& 101 with a minimum grade of C (may be taken concurrently).

## CMST 230 Small Group Communication (5)

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, empathy skills, problem solving methodologies, and the use of power and status, as related to leadership, group think, effective meetings, systems, ethics, norms, presentation of findings, and conflict management. *Prerequisite: ENGL& 101 with a minimum grade of C.* 

## CMST 320 Professional and Organizational Communication (5)

This course covers an introduction to the communication dynamics of organizations and the role of communication in the professional and management world. Students will analyze structured and informal communication channels, organizational culture, and strategic communication. Content includes workrelated human relations topics such as communicating gender, power dynamics, mission, and identity. Other topics are conflict resolution, persuasive strategy, leadership, corporate culture, globalization, the role of technology, and external communication such as crisis communication. Content includes the major theories of organizational communication, identifying and defining primary concepts and applying them to discussions of real-world situations. The theory and research will be applicable and practically applied through case studies of organizational issues.

Prerequisite: ENGL& 101 with a minimum grade of C and acceptance into AM BAS.

# Community Health Professional

## CHP 101 Community Health Navigation and Care Coordination (5)

This course will explore professional care navigation, coordination, and advocacy roles in the health and human services systems.

# CHP 260 Global Health (2)

This course will compare and contrast healthcare delivery, to include the impact of community health practice, in the United States with that of another country. Students will study an identified population to learn about culture, belief systems, values, and practices that are specific to that population in order to better understand and provide health care that is both culturally competent and culturally sensitive in nature. It introduces students to serving global populations both domestically and internationally as clinicians, educators, and researchers. Students will participate in field work with a target population. (Multicultural course) Prerequisite: ENGL& 101 with a minimum grade of C and instructor permission. Crosslisted course: CHP 360 - Global Health.

# CHP 300 Introduction to Community Health (5)

This course will explore the theories, past and present evidence, and application of key concepts related to understanding and improving community and population health. Students will apply these concepts to health and wellness issues with a focus on social, political, economic, environmental, and biomedical aspects of the field. Health disparities and inequities will be examined and potential solutions will be discussed. Secondary trauma, compassion fatigue, and burnout will also be investigated. *Prerequisite: Acceptance into the Community Health BAS program.* 

# Community Health Professional

#### CHP 305 Community Health Advocacy (5)

This course will examine the procedures and protocols for chronic health screenings, navigation of health insurance and healthcare systems, and the fundamentals of confidentiality. Case management and advocacy principles as they apply to community and population health will be explored. Students will learn basic mental health first aid as well as the signs and symptoms of chronic and preventable health issues.

Prerequisite: Acceptance into the Community Health BAS program.

#### CHP 310 Community Health Communications and Infomatics (5)

This course will focus on three primary areas of ability: to collect, manage, and organize data to produce meaningful exchange of information; to gather, process, and present information to different audiences in person, through technology or other media channels; and to strategically design the information and knowledge exchange process to achieve specific objectives.

Prerequisite: Acceptance into the Community Health BAS program.

#### CHP 315 Health Policy, Law and Ethics (5)

This course will cover healthcare polices, laws, ethics, and social mores as they relate to the application of community health goals of protecting the public from threats of infectious disease, preventing chronic illnesses and injuries, and promoting healthy life styles. The balance between population welfare and individual rights and liberties will be examined from various perspectives. Ethical decision making strategies will be integrated throughout the course.

Prerequisite: Acceptance into the Community Health BAS program.

#### CHP 320 Introduction to Epidemiology (5)

In this introductory course, students will learn and apply basic concepts of epidemiology to multiple domains of public health. Students will illustrate and practice using epidemiology to better understand, characterize, and promote health at a population level. Students will engage in active and collaborative learning through team activities, individual projects, case studies, group discussion, and individual projects. Prerequisite: Acceptance into the Community Health BAS program.

#### CHP 325 Population Health and Wellness (5)

This course provides an overview of the connections between prevention, wellness, and behavioral health with healthcare quality and safety, disease prevention, patient education, and behavior change across the life span. Students will learn to use theories and the four pillars of population health to understand human motives, cultural influences, and the relationship between health and behaviors. The signs and symptoms of chronic health issues will also be examined. *Prerequisite: Acceptance into the Community Health BAS program.* 

#### CHP 330 Program Planning and Evaluation (5)

This course will present a framework for developing, implementing, and evaluating strategies to improve the way healthcare and health promotion efforts are implemented in the community. Evidence based models will be used to bring together resources, logistics, plans, and people to ensure programs are functional and methods of data collection are effective.

Prerequisite: Acceptance into the Community Health BAS program.

#### CHP 335 Healthcare Research & Statistics (5)

This course will focus on the fundamentals of quantitative healthcare and applied research, and explore qualitative research. Students will learn how to identify problems to study, develop hypotheses and research questions, specify independent and dependent variables, check for the validity and reliability of studies and design research projects. Students will be exposed to the broad range of designs used in healthcare research from laboratory and field experiments, surveys, content analysis, focus groups and in-depth interviewing. *Prerequisite: Acceptance into the Community Health BAS program.* 

#### CHP 340 Disaster Preparedness (5)

Effective emergency planning is the key to surviving natural and man-made disasters. Risk analysis and the formulation of a comprehensive plan, followed by a vigorous and continuing testing program, are essential elements to surviving an emergency. Topics covered include threat assessment, risk analysis, formulating a response plan, staffing an emergency operations center (EOC), interagency coordination and liaison, managing an actual incident and conducting effective follow-up analysis.

Prerequisite: Acceptance into the Community Health BAS program.

### CHP 360 Global Health (5)

This course will compare and contrast healthcare delivery, to include the impact of community health practice, in the United States with that of another country. Students will study an identified population to learn about culture, belief systems, values, and practices that are specific to that population in order to better understand and provide health care that is both culturally competent and culturally sensitive in nature. It introduces students to serving global populations both domestically and internationally as clinicians, educators, and researchers. Students will participate in field work with a target population.

Prerequisite: Acceptance into the Community Health BAS program.

#### CHP 400 Environmental Health (5)

This course will examine the role of environmental health in contemporary society through the domains of water and air quality, food safety, solid and liquid waste disposal, occupational health and injuries, agents of disease, and exposure to toxic elements. Environmental policies and regulations and the role of regulatory agencies will also be explored.

Prerequisite: Acceptance into the Community Health BAS program.

## CHP 410 Trauma as a Community Health Issue (5)

This course will introduce students to the Public Health and Social-Ecological Models of Trauma. Students will learn to identify risk and protective factors related to trauma as well as the individual, relationship, community, and societal influences that create trauma and influence the reaction to it.

Prerequisite: Acceptance into the Community Health BAS program.

# Community Health Paramedicine

#### CHP 420 Families as Social Systems (5)

This course will explore the many definitions of "family" as it applies to health and wellness. Students will learn concepts for understanding family processes and how social and cultural contexts shape family development. Students will examine methods and interventions to be applied to the routine of daily family living, families in crisis, and families living with adversity. Focus will include the five areas of health: physical, emotional, psychological, intellectual, and spiritual.

Prerequisite: Acceptance into the Community Health BAS program.

#### CHP 430 Epidemics and Prevention (5)

This course will examine the complex nature of epidemics, the role of healthcare workers in dealing with epidemics, and the costs and benefits of prevention and interventions. The need for long term emergency preparedness and clearly delineated responsibilities among government and non-government agencies in responding to epidemics will also be explored. *Prerequisite: Acceptance into the Community Health BAS program.* 

#### CHP 440 Health, Culture and Diversity (5)

The focus of this course will be to explore ways in which an awareness of the culturehealth relationship can inform and strength community health work. What is meant by culture, the ways in which culture intersects with health issues, and how community health efforts reduce health disparities will also be examined.

Prerequisite: Acceptance into the Community Health BAS program.

#### CHP 490 Community Health Professional Capstone (5)

This is the capstone for the Community Health Professional concentration for the BAS degree.

## CHPM 400 EMS Ethics and Leadership (5)

This course will explore the intersections of the concepts of ethics and leadership from a wide range of contexts as it applies to EMS. Students will explore questions such as: How are values and ethics established in individuals and organizations? Is ethical leadership desirable and necessary? How does ethical leadership apply to me? What are some helpful approaches to ethical questions? What are the responsibilities of leaders to establish ethical climates in their organizations and communities? What are the tensions between ethics and leadership? Are there universal values and ethical principles in leadership? How does culture influence ethics and leadership?

Prerequisite: Acceptance into the Community Health BAS program.

#### CHPM 410 Emergency Management (5)

This course will introduce students to the vocabulary and core components of Emergency Management. We will discuss the importance of this growing field that is changing rapidly as a result of an increase in frequency, complexity, and severity of manmade, natural, and technological disasters. We will examine historical events that have changed the nature of the field, and introduce students to the leadership and management roles that have emerged as a result of these events taking place.

Prerequisite: Acceptance into the Community Health BAS program.

#### CHPM 420 Injury Prevention (5)

The purpose of this course is to provide an overview of the major issues in health promotion and disease and injury prevention. Students are introduced to strategies for promoting health and wellness, the major causes of premature mortality and morbidity, behavioral and environmental contributions to illness and injury, as well as strategies for risk reduction. Students will learn about the economic, public policy, and ethical issues that health promotion raises.

Prerequisite: Acceptance into the Community Health BAS program.

#### CHPM 430 Community Paramedicine (10)

A Community Paramedic (CP) is an advanced paramedic that works to increase access to primary and preventive care and decrease use of emergency departments, which in turn decreases health care costs. Among other things, CPs may play a key role in providing follow–up services after a hospital discharge to prevent hospital readmission. CPs can provide health assessments, chronic disease monitoring and education, medication management, immunizations and vaccinations, laboratory specimen collection, hospital discharge follow–up care and minor medical procedures.

Prerequisite: Acceptance into the Community Health BAS program.

#### CHPM 440 Community Paramedicine Internship (5)

Clinical internship for Community Paramedicine. Prerequisite: Acceptance into the Community Health BAS program.

#### CHPM 450 Critical Care Transport (10)

Critical Care Transport course is designed to prepare the paramedic for advanced critical care on ground and air transports. This includes providing advanced clinical patient assessments and providing invasive care beyond the standard scope of advanced prehospital care. Upon completion of the CHPM series the student may take the Certified Flight Paramedic (FP-C) and/or the Certified Critical Care Paramedic (CCP-C) exams held by the International Board of Specialty Certification (IBSC).

Prerequisite: Acceptance into the Community Health BAS program.

# CHPM 460 Critical Care Transport Internship (5)

The second in the series for students to step into clinical rotations with "hands-on" specialized ICU care rotation, and specialized practice.

Prerequisite: Acceptance into the Community Health BAS program.

#### CHPM 490 EMS Capstone (4-5)

This capstone course integrates activities and responsibilities related to clinical processes in one of the specific advanced practice specialties: critical care, community paramedic, or EMS leadership. *Prerequisite: Acceptance into the Community Health BAS program.* 

# Community Health Respiratory Care

# CHRC 400 Tobacco and Nicotine Treatment (5)

Course focuses on the skills needed to effectively treat tobacco dependence. This course will cover: neuropharmacology of nicotine, optimization of pharmacologic management, conducting a basic counseling session, motivational interviewing and other counseling approaches, and application of treatment of tobacco dependence to people with co-morbid conditions.

Prerequisite: Acceptance into the Community Health BAS program.

## CHRC 410 Leadership for Health Care Professionals (5)

An extensive examination of current practices/ trends of techniques used in the leadership of the health care environment. Emphasis will be placed upon specific skill sets necessary for effective supervision and leadership in a health care environment.

Prerequisite: Acceptance into the Community Health BAS program.

# CHRC 420 Education in Healthcare (5)

An interactive course designed to provide health care professionals with the skills to provide effective peer, student and client education. *Prerequisite: Acceptance into the Community Health BAS program.* 

# CHRC 430 Advanced Patient Care (5)

This comprehensive course gives Respiratory Care Practitioners the opportunity to enhance their knowledge and critical thinking skills in the areas of adult critical care, neonatal/ pediatric critical care and emergency room environments. With content geared toward respiratory critical care and general critical care, this course is a comprehensive orientation to the respiratory therapist's role in caring for critically ill patients. This course prepares practitioners for specialty credentials in adult critical care and neonatal/pediatrics. *Prerequisite: Acceptance into the Community Health BAS program.* 

# CHRC 490 Advanced Respiratory Care Capstone (4-5)

This is a capstone course integrating activities and responsibilities related to clinical processes in one of the specific advanced practice specialties: critical care, neonatal, pediatrics, management or education. *Prerequisite: Acceptance into the Community Health BAS program.* 

# **Computer Science**

Tacoma Community College offers a wide range of courses involving computer applications. The courses listed below are designed to satisfy computer programming requirements for engineering and science majors. Students intending to major in Computer Science at a baccalaureate institution should work toward an Associate of Arts in Computer Science degree. Students intending to major in Computer Engineering at a baccalaureate institution should work toward an Associate of Science (AS-T2) in Computer Engineering. Students interested in introductory computer courses or business applications should see courses listed under Computer User.

## CS 120 Computer Science Principles (5)

Introduction to fundamental concepts of computer science and computational thinking. Course includes logical reasoning, problem solving, data representation, abstraction, the creation of "digital artifacts" such as Web pages and programs, managing complexity, operation of computers and networks, effective Web searching, ethical, legal and social aspects of information technology. *Prerequisite: ENGL/ 095 and MATH 090 or MATH 093 with a minimum grade of C or equivalent.* 

#### CS 142 Java Programming for Engineers and Scientists I (5)

Using the Java programming language, students learn general principles of objectoriented programming, including how to design, implement, document, test, and debug computer programs. Topics include classes, objects, messages, expressions, decision structures, iteration, arrays, collections, events, and interfaces. *Prerequisite: MATH& 141 with a minimum grade of C or equivalent.* 

#### CS 143 Java Programming for Engineers and Scientists II (5)

An intermediate programming course, using Java. Topics will include classes, interfaces, inheritance, polymorphism, exception handling, recursion, data structures, and an introduction to performance analysis and implementation trade-offs. *Prerequisite: CS 142 with a minimum grade of C.* 

# Computer User

Tacoma Community College offers computer courses for students at all levels of skill.

CU 091, CU 100 and CU 101 are introductory courses designed for students who are new to computers and online learning or for those needing to update or refresh their skills. CU 102 and CU 103 cover introductory levels of Microsoft Word and Microsoft Excel, respectively. Students can opt to take both Microsoft Word and Miscrosoft Excel in one class, CU 105. CU 202 and CU 203 cover advanced levels of Microsoft Word and Microsoft Excel, respectively. CU 110 and CU 210 cover introductory and advanced levels of Microsoft Access. CU 104 covers Microsoft PowerPoint and CU 108 covers Microsoft Outlook.

# CU 091 Introduction To The Keyboard (2)

Learn to use the computer keyboard by touch and begin to develop accuracy and speed. *Recommended preparation: ENGL/ 085 or equivalent.* 

**CU 100** Introduction to Practical Computing (2) To provide individuals with an opportunity to cultivate the computer usage skills necessary to become confident, successful students. This course is an introduction to computer usage skills using the most current Microsoft Windows operating system. Topics include: developing computer literacy, navigation, organization, printing, file location and management, accessing help. *Recommended: READ 095 or ENGL/095* and HD 101.

#### CU 101 Web-Enabled Learning and Communication (2)

Introduction to web-enabled learning and communication. Student will receive guidance in how to effectively navigate and use online TCC resources; Angel, Portal, Outlook Web Access. Emphasis on virtual communication, security concerns, Internet search effectiveness, and ethical behaviors for virtual learning communities.

Prerequisite: Knowledge of Microsoft Windows operating system required or Program Chair permission. Recommended: CU 100.

# Computer User

# CU 102 Word I (2)

Students will use MSWord to create multipage documents for a variety of purposes and situations such as reports, newsletters, resumes and business correspondence. This course can be used as preparation for the MOS Word Core Level certification exam. *Recommended preparation: CU 100 and ENGL/ 095.* 

# CU 103 Excel I (3)

Students will create and edit a workbook with multiple sheets and use a graphic elemen 13t to visually represent data. Workbook examples include professional-looking budgets, financial statements, team performance charts, sales invoices, and data-entry logs. This course can be used as preparation for the MOS Excel Core Level certification exam.

Recommended: CU 100, MATH 075 and ENGL/ 095.

# CU 104 PowerPoint (1)

Students will create, edit, and enhance presentations and slideshows. Presentation examples include professional-grade sales presentations, employee training, instructional materials, and kiosk slideshows. This course can be used as preparation for the MOS PowerPoint Core Level certification exam. *Prerequisite: CU 102 or CU 105 with a minimum grade of C (may be taken concurrently).* 

# CU 105 Word I & Excel I (5)

Students will use MS Word to create multipage documents for a variety of purposes and situations such as reports, newsletters, resumes and business correspondence. Students will also use MS Excel to will create and edit a workbook with multiple sheets, and use a graphic element to represent data visually. Workbook examples include professional-looking budgets, financial statements, team performance charts, sales invoices, and data-entry logs. This course can be used for preparation for the MOS Word Core Level certification exam and the MOS Excel Core Level certification exam. This course is equivalent to the combination of CU102 and CU103.

Recommended: CU 100, MATH 075 and ENGL/ 095.

# CU 108 Outlook (2)

Students will use MS Outlook to enhance professional correspondence, create calendars, and schedule appointments. Application examples include coordinating building resources, sending messages for marketing campaigns, planning staff meetings, and assigning meeting action items. This course can be used as preparation for the MOS Outlook Core Level certification exam.

Prerequisite: CU 102 or CU 105 with a minimum grade of C or equivalent.

# CU 110 Access I (2)

Students will apply database design principles to create and maintain basic MS Access database objects including tables, relationships, forms, reports, and queries. This course, along with CU 210, can be used as preparation for the MOS Access Core Level certification exam.

Prerequisite: CU 103 or CU 105 with a minimum grade of C or equivalent.

# CU 202 Word II (3)

Students will use MS Word to create and manage professional documents of four pages or more for a variety of specialized purposes and situations. They will learn to customize the Word environment to meet project needs and enhance productivity. Examples of documents include a business plan, a research paper, a book, a specialized brochure, and a mass mailing. This course can be used for preparation for the MOS Word Expert Level certification exam.

Prerequisite: CU 102 or CU 105 with a minimum grade of C or equivalent.

# CU 203 Excel II (3)

Student will be able to create, manage, and distribute professional spreadsheets for a variety of specialized purposes and situations. They will customize their Excel environments to meet project needs and to enhance productivity. Expert workbook examples include custom business templates, multipleaxis financial charts, amortization tables, and inventory schedules. This course can be used for preparation for the MOS Excel Expert Level certification.

Prerequisite: CU 103 or CU 105 with a minimum grade of C or equivalent.

# CU 210 Access II (3)

Students will apply database design principles to create and maintain advanced MS Access database objects including tables, relationships, forms, reports, queries, macros, and modules. This course can be used as preparation for the MOS Access Core Level certification exam.

Prerequisite: CU 110 with a minimum grade of C.

# Diagnostic Medical Sonography

#### DMS 101 Sonography Lab I (2)

This course is designed to develop the foundations of sonography by introducing students to sonographic equipment, exams and patient care techniques. Student will also begin to learn how to apply critical thinking, communication and problem solving skills in the healthcare setting. Activities will emphasize the use of terminology, patient care practices, scanning techniques and image optimization while focusing on abdominal structures. Prerequisite: Acceptance into DMS program or Program Chair approval. ENGL& 101, ENGL& 102, or ENGL 103; MATH& 141; CMST& 101, CMST 110 or CMST& 220; PHYS& 115 or PHYS& 116; HIT 130; BIOL& 241 and BIOL& 242 with a minimum grade of C+.

#### DMS 102 Sonography Lab II (3)

This course builds on the scanning fundamentals developed in DMS 101 with an emphasis on advanced scanning techniques and patient care practices. Activities will focus on relating clinical and pathologic information, effective verbal/written communication methods and caring for high needs patients while evaluating superficial, gynecologic and obstetric structures.

Prerequisite: DMS 101 with a minimum grade of C or Program Chair approval.

#### DMS 103 Sonography Lab III (2)

As the last course in the scanning laboratory series, students will practice independence while performing exams, critically evaluating clinical situations and exploring their role in the clinical setting. Activities will emphasize autonomy, independent decision making, professional behavior and timeliness. *Prerequisite: DMS 102 with a minimum grade of C or Program Chair approval.* 

#### DMS 105 Ultrasound Cross-Sectional Anatomy (5)

This course explores the human body in the common sonographic directional planes and other imaging modalities. Activities will emphasize the use of directional, anatomic and sonographic terminology, anatomic relationships, directional correlation with transducer position and image optimization. The lab portion of this course focuses on three-dimensional anatomic relationships. Prerequisite: Acceptance into DMS program or Program Chair approval. ENGL& 101, ENGL& 102 or ENGL 103 with a minimum grade of C+; MATH& 141 with a minimum grade of C+; CMST& 101, CMST 110 or CMST& 220 with a minimum grade of C+; PHYS& 115 or PHYS& 116 with a minimum grade of C+; HIT 130 with a minimum grade of C+; BIOL& 241 and BIOL& 242 with a minimum grade of C+.

#### DMS 110 Pathophysiology I (3)

This course introduces students to the fundamentals of investigating disease processes by evaluating high risk populations, associating clinical indications, identifying pathologic features in sonographic images and communicating exam findings to healthcare team members. Activities emphasize the use of terminology, problems solving and image recognition related to abdominal structures. *Prerequisite: Acceptance into DMS program or Program Chair approval. ENGL& 101, ENGL& 102 or ENGL 103; MATH& 141; CMST& 101, CMST 110 or CMST& 220; PHYS& 115 or PHYS& 116; HIT 130; BIOL& 241 and BIOL& 242 with a minimum grade of C+.* 

#### DMS 111 Pathophysiology II (3)

As the second course in sonographic pathophysiology, students will further advance their understanding of investigating disease processes while focusing on superficial structures. Critical thinking, problem solving and independent decision making will be emphasized.

Prerequisite: DMS 110 with a minimum grade of C or Program Chair approval.

#### DMS 120 Abdominal Sonography (3)

This course focuses on the anatomy, physiology and sonographic appearance of abdominal organs and structures. Students will be introduced to the fundamentals of abdominal sonographic terminology, image identification and optimization in addition to lab values and clinical findings. *Prerequisite: Acceptance into DMS program or Program Chair approval. ENGL& 101, ENGL& 102 or ENGL 103; MATH& 141; CMST& 101, CMST 110 or CMST& 220; PHYS& 115 or PHYS& 116; HIT 130; BIOL& 241 and BIOL& 242 with a minimum grade of C+.* 

#### DMS 121 Small Parts and Superficial Structures Sonography (3)

This course focuses on the anatomy, physiology and sonographic appearance of superficial organs and structures. Terminology, imaging considerations, optimization techniques and patient care requirements specific to superficial structures will also be covered.

Prerequisite: DMS 120 with a minimum grade of C or Program Chair approval.

#### DMS 122 Gynecology and Obstetrics I (3)

This course focuses on the anatomy, physiology and sonographic appearance of gynecologic and first trimester obstetric structures. Clinical indications, imaging considerations and patient care requirements specific to OB/GYN patients will also be covered. Students will learn the pathologic processes associated with first trimester obstetrics and gain skills related to identifying and documenting abnormalities. *Prerequisite: DMS 120 with a minimum* grade of C or Program Chair approval.

#### DMS 123 Gynecology and Obstetrics II (5)

This is the second course in a two part OB/ GYN series that focuses on the anatomy, physiology and sonographic appearance of the developing pregnancy and the postpartum pelvis. Clinical indications, imaging considerations and patient care requirements specific to late term and post-partum patients will be covered and students will also learn the current methods for distinguishing and documenting pathologic conditions. *Prerequisite: DMS 122 with a minimum* grade of C or Program Chair approval.

#### DMS 124 Introduction to Vascular Sonography (3)

This course is an introduction to vascular sonography and combines material from the physics, superficial pathology and cross sectional anatomy courses. Students will also apply general sonographic scanning and patient care techniques to vascular patients and broaden their understanding of cardiovascular pathologic processes and the effect on the body.

Prerequisite: Acceptance into the DMS program; Program Chair Approval. DMS 102, DMS 111, DMS 121, DMS 122 and DMS 131 with a minimum grade of C.

# Diagnostic Medical Sonography

## DMS 125 Advanced Sonography (2)

This course is designed to further develop student's critical thinking skills related to integrating clinical, imaging and pathologic information in preparation for their clinical internships. Case studies and scenarios will be used to refine student's problem solving, reasoning, and independent decision making skills.

Prerequisite: DMS 120, DMS 121 and DMS 122 with a minimum grade of C or Program Chair approval.

## DMS 130 Ultrasound Physics & Instrumentation I (3)

This is the first of two courses focusing on the mastery of sonographic physics principals. Basic wave terminology, sound and media interactions and system functions will be covered. Students will also begin creating a personalized study guide to utilize when preparing for their first national registry exam. *Prerequisite: Acceptance into DMS program or Program Chair approval. ENGL& 101, ENGL& 102 or ENGL 103; MATH& 141; CMST& 101, CMST 110 or CMST& 220; PHYS& 115 or PHYS& 116; HIT 130; BIOL& 241 and BIOL& 242 with a minimum grade of C+.* 

#### DMS 131 Ultrasound Physics & Instrumentation II (3)

This is the second of two courses focusing in the mastery of sonographic physics principals. Advanced theory will be covered including Doppler, harmonic imaging and pulse phasing techniques. Quality assurance and hemodynamics will also be covered. Students will complete their study guides and prepare to sit for their first national registry exam, the Scientific Principals and Instrumentation exam.

Prerequisite: DMS 130 with a minimum grade of C or Program Chair approval.

# DMS 140 Patient Care and Scope of Practice (2)

This course further develops patient care skills and defines a sonographer's role in the healthcare team. Students learn to perform a basic patient assessment, predict and respond to barriers in patient care, provide support during invasive procedures and alternative patient positioning techniques. *Prerequisite: Program Chair approval; DMS 102 with a minimum grade of C.* 

# DMS 150 Introduction to Clinicals (2)

This course is designed to transition students from the academic setting into the clinical setting. Students will develop skills related to interacting with clinical instructors, explore their role as a student in the clinical setting and develop strategies to take advantage of educational opportunities in the healthcare setting.

Prerequisite: DMS 102 with a minimum grade of C or Program Chair approval.

# DMS 151 Ultrasound Clinical I (13)

This course is the first of a four quarter clinical internship designed to take students from scanning in the classroom to integrating themselves into an imaging department. Under the guidance of clinical instructors, students will apply their fundamental scanning, patient care and clinical skills while performing a supportive role in the imaging department.

Prerequisite: DMS 150 with a minimum grade of C or Program Chair approval.

# DMS 160 Clinical Seminar I (2)

In this course, students will reflect on their role in the clinical setting and educate their peers based on their own learning experiences. Presentations and discussions will be centered on identifying barriers to learning, strategies to maximize educational opportunities and discussing applications of their didactic knowledge in the clinical setting. Students will also begin to plan a continuing education seminar for the benefit of community sonographers.

Prerequisite: Acceptance into DMS program or Program Director approval.

# DMS 175 DMS Orientation (2)

This course familiarizes students with their instructors, classroom and provides a detailed overview of the expectations within the laboratory and clinical settings. Students will also complete basic healthcare certifications and instructions on how to maintain their online immunization records.

Prerequisite: Acceptance into DMS program or Program Chair approval. ENGL& 101, ENGL& 102 or ENGL 103; MATH& 141; CMST& 101, CMST 110 or CMST& 220; PHYS& 115 or PHYS& 116; HIT 130; BIOL& 241 and BIOL& 242 with a minimum grade of C+.

# DMS 250 Ultrasound Clinical II (13)

As the second quarter in the four quarter long clinical internship, students will further their scanning, pathologic identification and basic patient care skills. Students will be performing partial sonographic examinations under the supervision of clinical instructors and refine their communication skills with patients, families and healthcare workers. *Prerequisite: DMS 151 and DMS 160 with a minimum grade of C.* 

# DMS 251 Ultrasound Clinical III (13)

This is the third quarter of the four quarter long clinical internship designed to further promote the student's development as an entry level sonographer. Students will being to independently perform basic sonographic exams and advanced patient care techniques under minimal direct supervision of clinical instructors.

Prerequisite: DMS 250 with a minimum grade of C or Program Chair approval.

# DMS 252 Ultrasound Clinical IV (13)

As the last quarter of the clinical internship, students will focusing on mastery of advanced scanning, patient care and communication techniques. Students will fully integrate themselves into the imaging department by independently performing sonographic examinations, autonomously responding to high needs patients and functioning as entry level sonographer under the observation and assistance of clinical instructors. *Prerequisite: DMS 251 with a minimum* grade of C or Program Chair approval.

# DMS 260 Ultrasound Seminar and Critique II (2)

In this course, students will reflect on their role in the clinical setting and educate their peers based on their own learning experiences. Presentations and discussions will be centered on analyzing barriers to learning and developing skills on how to overcome them, strategies to maximize educational opportunities and application of didactic knowledge in the clinical setting. Students will continue to plan a continuing education seminar for the benefit of community sonographers. *Prerequisite: DMS 151 and DMS 160 with a minimum grade of C.* 

# Diagnostic Medical Sonography

# DMS 261 Ultrasound Seminar and Critique III (2)

In this course, students will reflect on their role in the clinical setting and educate their peers based on their own learning experiences. Presentations and discussions will be centered on developing strategies to overcome barriers to learning, skills to maximize educational opportunities and how the integration of didactic and clinical knowledge applies to the role of an entry level sonographer. Students will continue to plan a continuing education seminar for the benefit of community sonographers.

Prerequisite: DMS 260 with a minimum grade of C or Program Chair approval.

#### DMS 270 Sonography Registry Review (2)

This course prepares students to sit for national registry exams required by the American Registry of Diagnostic Medical Sonographers. Testing strategies, study guide development and mock exams will be used to prepare students for the Abdominal and Obstetric/Gynecology specialties. *Prerequisite: DMS 251 with a minimum* grade of C or Program Chair approval.

#### DMS 299 Clinical Independent Study (3-13)

This supplementary clinical course allows students to continue their skill development in the clinical setting.

Prerequisite: DMS and all DMS didactic and lab coursework with a minimum grade of C.

# Early Childhood Education

#### ECE 102 Math, Science, and Technology for Young Children (3)

(Formerly EDP 102) This course focuses on the integration of developmentally appropriate math, science, and technology content into the early childhood classroom curriculum. The process of using inquiry tools and problem-solving strategies and focused learning centers with content embedded in all other classroom areas is explored. Examine numerous evidence-based instructional strategies for teaching young children, birth to eight years old, including those who are culturally, linguistically and ability diverse.

#### ECED& 105 Introduction to Early Childhood Education (5)

(Formerly ECE 100) 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.

#### ECED& 107 Health/Safety/Nutrition (5)

(Formerly ECE 202) Introduction to the 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, Washington State licensing, and Head Start Performance standards. Develop skills necessary to keep children health and safe, report abuse and neglect, and connect families to community resources.

#### ECED& 120 Practicum: Nurturing Relationships (2)

(Formerly ECE 191) In an early learning setting, engage in establishing nurturing, supportive relationships with all children and professional peers. Focus on children's health and safety, promoting growth and development, and creating a culturally responsive environment.

## ECE 121 Child, Family and Community Relations I - Creating Community Among Adults in Early Care Settings (1)

(Formerly EDP 121) Early care and education professionals will learn about the importance of adult relationships in child care and early learning settings.

# ECE 122 Child, Family and Community Relations II Building a Caring Community with Children (1)

(Formerly EDP 122) Caregivers will learn about concepts and the value of the caregiver-child relationship. The course will focus on care giving practices to strengthen and build skills to promote positive interactions and relationships.

## ECE 123 Child, Family and Community Relations III Building Quality Relationships with Families (1)

(Formerly EDP 123) Caregivers will explore ways to form culturally-responsive partnerships with families and parents.

#### ECE 130 Cultural Competency and Responsiveness in Early Childhood Education (2)

(Formerly EDP 130) This course covers evidence-based practices related to providing responsive care and education in home, classroom, and community settings serving culturally, linguistically, and ability-diverse children, birth to eight-years-old, and their families. Students will be required to examine their own personal culture and to explore ways in which to become an effective teacher to each young child. Included are strategies for helping teachers, children, families, and colleagues to communicate, negotiate, and resolve dilemmas caused by cultural differences. There will be a focus on using an anti-bias approach. (multicultural content)

# ECED& 132 Infant/Toddler Care (3)

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 retentive care.

#### ECED& 139 Administration of ECE (3)

Develop administrative skills required to develop, operate, manage, and improve early childhood and care programs. Acquire basic business management skills. Explore resources and supports for meeting Washington State licensing and professional NAEYC standards.

# Early Childhood Education

## ECE 141 Promoting Positive Behavior I (1)

(Formerly EDP 141) In this course students will explore social-emotional development and child guidance. The foundational aspect of building relationships with children, including those who are culturally, linguistically, and ability diverse, will be emphasized and students will examine how terminology impacts adult perspectives on child guidance. Completion of ECE-141, 142, 143 will be equivalent to ECE-140.

## ECE 142 Promoting Positive Behavior II (1)

(Formerly EDP 142) This course is an exploration of how the environment influences children's behavior. Environmental variables such as the physical and temporal aspects of the classroom, interactions, and using social-emotional teaching strategies with all children, including those who are culturally, linguistically, and ability diverse, will be addressed. Completion of ECE-141, 142, 143 will be equivalent to ECE-140.

#### ECE 143 Promoting Positive Behavior III (1)

(Formerly EDP 143) In this course, students will review the foundational components of child guidance and learn about creating an individual plan for children who need extra support to function effectively in the classroom. Students will compare teacher conduct as a professional vs. a technician and address how to ensure success for each child, including those who are culturally, linguistically, and ability diverse. Completion of ECE-141, 142, 143 will be equivalent to ECE-140.

#### ECED& 160 Curriculum Development (5)

Investigate learning theory, program planning, tools, and methods for curriculum development that promotes language, fine/ gross motor, social/emotional, cognitive, and creative skills and growth in children birth through age eight by using developmentally appropriate and culturally responsive practices.

# ECED& 170 Learning Environments (3)

(Formerly ECE 101) This class focuses on the adult's role in designing, evaluating, and improving indoor and outdoor environments that ensure quality learning, nurturing experiences, and optimal development of young children.

## ECED& 180 Language and Literacy (3)

(Formerly ECE 112) Teaching strategies for language acquisition and literacy skill development are examined at each developmental stage (birth-age eight) through the four interrelated areas of speaking, listening, writing, and reading.

#### ECED& 190 Observation and Assessment (3)

Collect and record observation and assessment data in order to plan for and support the child, the family, the group, and the community. Practice reflection techniques, summarizing conclusions, and communicating findings.

**ECE 192 Early Childhood Clinical Experience II (2)** Clinical experience that provides students the opportunity to observe and practice the skills, theories and behaviors taught in the coursework for the child development specialist certificate.

# ECE 193 Early Childhood Clinical Experience III (2)

Clinical experience that provides students the opportunity to observe and practice the skills, theories and behaviors taught in the coursework for the child development specialist certificate.

#### ECE 201 Effective Communication with Colleagues and Families (3)

(Formerly EDP 204)This course teaches effective communication techniques for interacting with colleagues and families of young children, birth to eight-yearsold, including those who are culturally, linguistically, and ability diverse in a variety of early childhood education settings.

#### ECE 203 Family Systems & Supports (3)

(Formerly EDP 203) This course offers an introduction to varying family dynamics within family systems as they relate to working with young children (birth to 8 years old) and their families who are culturally, linguistically and ability diverse in community, home, and early childhood education settings. This includes describing evidence-based, supportive, and culturally responsive approaches for working collaboratively with families to address their concerns, resources, and priorities.

#### ECE 211 Administration of Early Learning Programs I – Program Administration (1)

(Formerly EDP 211) This course emphasizes the technical knowledge necessary to develop and maintain a quality early care and education program. It focuses on planning, developing and managing a center; and meeting licensing, accreditation regulations and guidelines.

# ECE 212 Administration of Early Learning Programs II - Operation of Children's Programs (1)

(Formerly EDP 212) This course focuses on the operation of children's programs in early learning centers. It addresses the grouping of children; creating developmentally appropriate curriculum that is relevant for children for birth through age eight; and implementing a food program.

#### ECE 213 Administration of Early Learning Programs III - Staffing and Professional Development (1)

(Formerly EDP 213) This course addresses staff recruitment, retention, support, and supervision which will lay a foundation for positive personnel management. Professional responsibilities such as cultural responsiveness and reflective practice are also examined.

# ECE 290 Practicum (3)

(Formerly EDP 290) This is a 99 hour, supervised classroom experience in an integrated early childhood education setting and is the capstone class for the Early Childhood Education with an Emphasis on Children with Exceptionalities program. This includes birth to eight-year-old children who are culturally, linguistically, and ability diverse in either a school and/or current work site. This practicum providess students the opportunity to demonstrate the skills and knowledge they gained in their previous early childhood education courses which must be successfully completed before taking this class. Students are expected to follow practicum expectations, procedures, responsibilities, and

expectations, procedures, responsibilities, and methods of evaluation. Criminal background clearances are required.

Prerequisite: Instructor permission and criminal background clearances required.

# Economics

#### ECON& 201 Micro Economics (5)

(Formerly ECON-201) Theory of the market systems as a method of allocating resources and distributing income and products. Analysis of current problems including government regulation, subsidies, monopoly, and taxation. *Prerequisite: MATH 095 with a minimum* grade of C or equivalent or assessment above MATH 095 or MATH 094 with a minimum grade of C.

#### ECON& 202 Macro Economics (5)

(Formerly ECON-200) History and development of the United States' economy, including effects of government taxing and spending, control of the money supply, and effects of international trade.

Prerequisite: MATH 095 with a minimum grade of C or equivalent or assessment above MATH 095 or MATH 094 with a minimum grade of C.

# Education

#### EDUC& 115 Child Development (5)

The purpose of this course is to provide the student with an overview of the study of child development, including those children who are culturally, linguistically, and ability diverse. The scientific and theoretical approaches to studying the development of the physical, cognitive, communication, social, and emotional changes that occur from conception through adolescence and the biological and/ or environmental influences that affect this development will be addressed. Materials and resources regarding communication with families, brain development, and milestones for each stage of development will also be provided. Four field observations within inclusive child care settings are required outside of class time. Prerequisite: PSYC& 100.

## EDUC& 130 Guiding Behavior (3)

(Formerly ECE 140) Examine the principles and theories promoting social competence in young children and creating safe environments. Develop skills in promoting effective interactions, providing positive individual guidance, and enhancing group experiences. Completion of ECE 141, 142, 143 is equivalent to EDUC&130.

#### EDUC& 150 Child, Family, Community (3)

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.

#### EDUC& 204 Exceptional Child (5)

This introductory course will address supports and services across home and community settings for culturally, linguistically, and ability diverse young children, ages birth to eight. Emphasis will be placed on identifying and using evidence-based practices for working with children with special needs and their families, and the resources and tools for navigating early intervention and special education services, including the history, legislation, policies, and competencies that guide early intervention in the State of Washington. As part of this course, 40 hours in a supervised Field Experience are required. The integration of theory and developmentally appropriate evidence-based practice will be expected. Emphasis will be placed on professional relationships, appropriate adult/ child interactions, basic curriculum planning, and program routines for young children with special needs and their families. A criminal background check is required.

#### EDUC& 205 Introduction to Education w/Field Experience (5)

(Formerly EDUC-201) Designed for students who are considering teaching as a profession, the course will examine historical and philosophical foundations of American education, learning theories, contemporary students, and curriculum development. The course will also explore the social, political, cultural, and economic pressures that influence current issues and trends in education. Includes a required field experience in a public school K-12 setting (40 hours) that provides students opportunities to observe and reflect upon today's classrooms, students, and teachers.

Prerequisite: Assessment at college-level reading and writing.

#### EDUC 220 Diversity in Education (5)

Examination of the relationship of cultural values to the formation of the child's selfconcept and learning styles. Examination of the role of prejudice, stereotyping and cultural incompatibilities in education. Emphasis on preparing future teachers to offer an equal educational opportunity to children of all socioeconomic and cultural groups, as well as inclusion of exceptional children. (multicultural content)

#### EDUC 299 Early Childhood Field Experience (2)

A 2-credit course based on an independent study contracted between an instructor and a student. This class is taken concurrently with EDP-100 wich will provide the opportunity to work with children in ECE classrooms, learning and implementing developmentally appropriate practices in guidance, curriculum, observation, assessment and the preparation of the physical environment. *Prerequisite: EDP 100 must be taken concurrently.* 

# Emergency Medical & Health Services

#### EMC 110 Emergency Medical Technician Basic (10)

Upon completion of this course, students are prepared to fulfill state and/or National Registry requirements for certification as an EMT-Basic, the entry level position in EMS for pre-hospital care providers. EMT-Bs provide basic life support and transportation for victims of illness and injury. Includes 121 hours of lecture and practical class-work time, and some clinical observation. Class also meets a portion of the prerequisites for the Paramedic program. Program adheres to the U.S. Department of Transportation guidelines and the Washington State Department of Social and Health Services standards. Prerequisite: MATH 075 with a minimum grade of C or ACCUPLACER™ assessment exam showing placement in MATH 085 or higher; and ACCUPLACER™ assessment exam showing placement in ENGL/085 or higher. Corequisite: EMC 111.

## EMC 111 Emergency Medical Technician Lab (2)

Laboratory Section for the EMT Basic *Corequisite: EMC 110* 

#### EMC 112 Emergency Medical Technician Recertification (4)

For the currently certified EMT-Basic who needs to fulfill state, county, and/or National Registry requirements for recertification. *Prerequisite: Current state, county, or National Registry EMT-Basic Certification and Program Chair permission.* 

## EMC 116 Introduction to Emergency Medical Care (4)

EMC introduces the concept of pre-hospital care. Fundamental principles of the practice are presented in this hybrid course, i.e., medical ethics, role & responsibilities, critical thinking, medical math, and health and wellness. *Prerequisite: Acceptance into the Paramedic Program.* 

## EMC 117 Prehospital Emergency Pharmacology (3)

Course relating between specific emergencies to the types of medications used for treatment. Includes classifications, actions, indications, administration and dosages, as well as side effects of each medication used in pre-hospital treatment of medical and traumatic injuries. In addition students will learn common prescription medications found in the home.

## EMC 118 Human Body Systems (3)

Review of Anatomy and Physiology, Pathophysiology and Life Span Development.

# EMC 130 Paramedic Clinical I (4)

First-quarter clinical and infield experience for paramedic students taken in conjunction with EMC 120. Includes clinical experience in hospital and infield experience.

Prerequisite: Acceptance into the Paramedic Certificate Program.

# EMC 131 Paramedic Clinical II (7)

Second-quarter clinical and field experience for Paramedic students taken in conjunction with EMC 121. Students will have assigned clinical and infield rotations.

Prerequisite: EMC 120 and EMC 130.

# EMC 132 Paramedic Clinical III (9)

Continuation of EMC-131. Emphasis is on clinical and extensive in-field experience. Third quarter clinical and in-field experience for paramedic students includes specified hospital assignments and extensive in-field experience. *Prerequisite: EMC 121 and EMC 131.* 

#### EMC 140 Supplemental Education for EMC Programs I (1)

This course offers individualized didactic instruction to assist previously educated and/ or certified personnel in meeting state, county, local or national certification or recertification requirements.

Prerequisite: Instructor permission.

## EMC 150 Supplemental Education for EMC Programs II (1)

This course offers individualized clinical instruction to assist previously educated and/ or certified personnel in meeting state, county, local or national certification or recertification requirements.

Prerequisite: Instructor permission.

# EMC 200 Contemporary Issues in Pre-hospital Care (2)

This is a dynamic course that focuses on the various components of quality EMS. The course utilizes assorted current readings in conjunction with small group work that promotes critical thinking and a global understanding of what comprises state of the art out-of-hospital care. *Prerequisite: Instructor permission.* 

# EMC 218 Basic Electrocardiography (4)

Fundamentals of electrocardiography and interpretation of normal and abnormal ECG patterns. Normal and abnormal wave patterns, presentation, and treatment of common cardiac diseases.

Prerequisite: EMC 116, EMC 117 and EMC 118. Corequisite: EMC 130, EMC 225 and EMC 230.

# EMC 219 Advanced Electrocardiography (2)

Building upon basic ECG knowledge, this course advances into 12-lead ECG interpretation and pre-hospital treatment. Focusing on signs and symptoms of ischemia or infarction, axis deviation, and other ECG anomalies, students learn about various treatment modalities.

Prerequisite: EMC 130, EMC 218, EMC 230, and EMC 225 with a minimum grade of C. Corequisite: EMC 131, EMC 220, EMC 226 and EMC 231.

# EMC 220 Management of Traumatic Injuries and Special Populations (2)

Assessment and management of traumatic injuries and special populations. Prerequisite: EMC 218, EMC 230, EMC 130 and EMC 225 with a minimum grade of C. Corequisite: EMC 131, EMC 219, EMC 226 and EMC 231.

# Emergency Medical & Health Services

#### EMC 225 Paramedic Skills Lab I (3)

The first of three courses, reviews EMT level skills and introduces the advanced paramedic skills. Students learn safe and effective skills performance and begin to integrate assessment, management and skills performance into simulated patient scenarios. *Prerequisite: EMC 116, EMC 117 and EMC 118. Corequisite: EMC 130, EMC 218 and EMC 230.* 

#### EMC 226 Paramedic Skills Lab II (3)

The second course in the series continues the development of advanced level skills proficiency. Students integrate knowledge of specific patient complaints with assessment and management skills.

Prerequisite: EMC 218, EMC 230, EMC 130 and EMC 225 with a minimum grade of C. Corequisite: EMC 131, EMC 219, EMC 220 and EMC 231.

#### EMC 227 Paramedic Skills Lab III (3)

The third course in the series of advanced level skills development. Students demonstrate proficiency and prepare for the paramedic credentialing exam. *Prerequisite: EMC 218, EMC 220, EMC 231, EMC 131 and EMC 226 with a minimum* grade of C. Corequisite: EMC 132, EMC 232, and EMC 240.

#### EMC 230 Medical Emergencies I (6)

The first in a series of three courses addressing the epidemiology and pathophysiology of various respiratory and cardiac medical complaints. Students will learn to integrate assessment findings with the formulation of a treatment plan for the acute illness.

Prerequisite: EMC 116, EMC 117 and EMC 118. Corequisite: EMC 130, EMC 218 and EMC 225.

#### EMC 231 Medical Emergencies II (3)

A continuation of the series of three courses addressing epidemiology, and pathophysiology of various medical and trauma complaints. Students will learn to integrate patient assessment and diagnostic findings with the formulation of a treatment plan for acute illness and injury.

Prerequisite: EMC 218, EMC 230, EMC 130 and EMC 225 with a minimum grade of C. Corequisite: EMC 131, EMC 219, EMC 220 and EMC 226.

#### EMC 232 Medical Emergencies III (3)

The conclusion of the sequence in medical emergencies where the epidemiology, pathophysiology, diagnostic and assessment findings are integrated to form a treatment plan for acute illness or injury in the emergency setting. This course will also include considerations for special patient populations as well as EMS operations. *Prerequisite: EMC 218, EMC 220, EMC 231, EMC 131 and EMC 226 with a minimum* grade of C. Corequisite: EMC 132, EMC 227, and EMC 240.

#### EMC 240 Paramedic Crisis Resource Management (2)

This course addresses the human factors contributing to EMS scene management. Focusing on human error, perception modalities, emotion, cognitive attention, working in a healthcare environment challenges, crisis communication, on-scene management, and coping with stress. *Prerequisite: EMC 218, EMC 220, EMC 231, EMC 131 and EMC 226 with a minimum grade of C. Corequisite: EMC 132, EMC 227 and EMC 232.* 

# Engineering

The Engineering transfer program is designed to offer students the same courses as the first two years at a baccalaureate institution.

There are three engineering Major Related Program (MRP) Associate of Science degrees: (1) Civil, Mechanical, Industrial, Aeronautical/Astronautical and Material Science Engineering, (2) Electrical and Computer Engineering, and (3) Bioengineering and Chemical Engineering. There is also an engineering Associate of Science (AS-T2) in Computer Engineering. In some cases, students will work toward a general AS-T2 on the recommendation of an advisor. Students are strongly encouraged to meet with an engineering advisor as early as possible.

Students seeking courses for general interest, upgrading skills, or college-level electives should consider ENGR& 104 and ENGR& 114.

TCC supports a local chapter of the ASME (American Society of Mechanical Engineers) and encourages student involvement.

#### ENGR& 104 Introduction to Engineering and Design (5)

(Formerly ENGR-100) Introduction to the engineering profession and its design process by building group skills, understanding the effects of different learning styles, producing strategies for innovation, and fostering creativity in problem solving. Includes design projects, journal keeping, professionalism and ethical issues, and oral presentations. Acquaints students with disciplines and opportunities in engineering. *Prerequisite: ENGL/095 and MATH 090 or MATH 093 with a minimum grade of C or equivalent.* 

# Engineering

## ENGR& 114 Engineering Graphics (5)

(Formerly ENGR-123) An introduction to Computer Aided Design (CAD) using software based on parametric solid modeling. Students will use the software to create virtual models, show the models in various projections and views, manage the associated computer files, and produce engineering drawings. The course includes the engineering graphics topics of three-dimensional visualization, sketching, displaying solid objects in two-dimensional views, dimensioning, and reading engineering drawings.

Prerequisite: ENGL/ 095 and MATH 090 or MATH 093 with a minimum grade of C or equivalent.

#### ENGR& 170 Introduction to Materials Science (5)

Fundamental principles of structures and properties of materials used in engineering practice. Topics covered in this course include structures-properties relationship, imperfections of materials, diffusion, phase equilibrium and transformation, and application and processing of materials in engineering practice. Metal, ceramics, polymeric, and composite materials. Mechanical, chemical, and electrical properties of materials. *Prerequisite:* 

CHEM& 162 (may be taken concurrently) and MATH& 141

# ENGR& 204 Electrical Circuits (6)

(Formerly ENGR 215) An introduction to electrical engineering through basic circuit and system concepts. Topics include: resistors, sources, capacitors, inductors, operational amplifiers, node and mesh analysis, Thevenin and Norton equivalents, RLC circuits, phasors and steady state power in AC transmission. Solution of first and second order linear differential equations associated with basic circuit forms will be used. Laboratory activities illustrate principles explored in lecture. *Prerequisite: MATH 238 (may be taken concurrently) and PHYS& 222.* 

# ENGR& 214 Statics (5)

(Formerly ENGR-210) Scalar and vector analysis of two, and three-dimensional static structures. Topics include: vector notation, equilibrium, moments, couples, distributed loads, resultants, trusses, frames and machines, center of mass, inertia, shear and bending moment diagrams, and friction. Includes a team project.

Prerequisite: PHYS& 221 and MATH& 153.

# ENGR& 215 Dynamics (5)

(Formerly ENGR-230) Dynamics of particles and rigid bodies, using the vector notation. Topics covered in this course include: kinematics, kinetics, rectangular coordinates, normal and tangent coordinates, polar coordinates, curvilinear motion, work, energy, impulse, momentum, impact, steady mass flow, rotation, absolute motion and relative motion. Includes design project. *Prerequisite: ENGR& 214 and MATH& 153.* 

#### ENGR& 224 Engineering Thermodynamics (5)

(Formerly ENGR-260) Introduction to principles of thermodynamics from a predominantly macroscopic point of view. Development of the basic laws of thermodynamics and their application to energy transformation and state changes in engineering problems. Topics include work, heat, energy, entropy, specific heat, open and closed system analysis, and applications to devices and systems. Simple power and refrigeration cycles, including Carnot, Otto, Diesel, Brayton and Rankine are introduced. *Prerequisite: PHYS& 221, MATH& 152 and CHEM& 161.* 

## ENGR& 225 Mechanics of Materials (5)

(Formerly ENGR-220) An introduction to the concepts of stress, strain, deformation, and failure theory in solid materials. Applies mechanics of materials concepts to structural and machine elements in tension, compression, bending, and torsion. Topics include deformation of members, Poisson's ratio, stress concentrations, thermal stress, statically indeterminate techniques, flexure formula, shear formula, stress transformation, Mohr's circle, strain gauges, deflections, and columns. Includes a design project. *Prerequisite: MATH& 153 (may be taken concurrently) and ENGR& 214.* 

## ENGR 240 Applied Numerical Methods (5)

Numerical solutions to problems in engineering and science using modern scientific computing tools. Application of mathematical judgment in selecting computational algorithms and communicating results. Introduction to MATLAB programming for numerical computation. *Prerequisite: MATH& 153. Recommended: MATH 220.* 

#### ENGR 299 Independent Study (1-5)

Independent design, observation, analysis, and reporting of an engineering project or topic.

Prerequisite: Instructor permission.

# English: Composition

Students enrolled in the English for Academic Purposes program are strongly advised to complete the program before attempting the English program designed for native speakers. Courses numbered below 100 cannot be applied towards certificate or degree requirements.

Basic Education for Adults offers affordable alternatives to ENGL/ 085 and 095. See BEdA section on page 156 for more detail.

#### ENGL/ 085 Academic Reading and Writing I: Foundations (7-10)

A pre-college course that integrates basic reading, critical thinking, and writing, using materials that present a variety of perspectives from across the curriculum. This course prepares students for entry into English 095. Course work emphasizes applying the reading and writing process in various contexts both inside and outside the classroom, developing information literacy, communicating a critical awareness of the relationship between power and literacy, identifying and interpreting relationships to text, self and community, and navigating complex reading in multiple situations, disciplines, and text. Classes may be offered in an e-learning format.

Prerequisite: EAP 155 and EAP 159 with a minimum grade of C or assessment into ENGL 085/ or equivalent. Cross listed courses: ABE 074, ABE 075, ABE 077, ABE 078, ABE 079.

#### ENGL/ 095 Academic Reading and Writing II: Threshold (7-10)

A pre-college course that integrates reading, critical thinking, and writing, using materials that present a variety of perspectives from across the curriculum. This course prepares students for entrance into ENGL&101 and other college-level courses. Course work focuses on emphasizing the reading and writing process in various contexts as well as research, both inside and outside the classroom, developing information literacy, communicating a critical awareness of the relationship between power and literacy, identifying and interpreting relationships to text, self and community, and navigating complex reading in multiple situations, disciplines, and text. Students will use technology to complete informal and formal writing assignments. Classes may be offered in an e-learning format.

Prerequisite: EAP 154 with; or both EAP 155 and EAP 159; or ENGL/ 085 with a minimum grade of C or equivalent; or ABE 074, ABE 075, ABE 077, ABE 078, or ABE 079 with a minimum grade of C. Coss listed courses: ABE 094.

## ENGL& 101 English Composition I (5)

(Previously ENGL-101) Study and application of the principles of college writing. Students read, analyze, and write expository, descriptive, and argumentative essays, as well as learn to develop ideas fully, organize them effectively, and express them clearly. ENGL 101 readings focus on the essay. This course may not be taken "S/U."

Prerequisite: ENGL 095 and READ 095 with a minimum grade of C or ENGL/095 or ABE 094 with a minimum grade of C or assessment at or above college-level reading and writing.

## ENGL& 102 Composition II: Argument and Persuasion (5)

(Formerly ENGL-102) The application and further development of writing principles covered in ENGL&-101. ENGL&-102 is a composition course designed to develop the student's ability to write sound and cogent arguments in several academic disciplines. Course work focuses on strategies for developing convincing evidence, with emphasis on critical thinking and library research skills. This course may not be taken S/U.

Prerequisite: ENGL& 101 with a minimum grade of C.

#### ENGL 103 Composition III: Writing about Literature (5)

The application and further development of writing principles covered in ENGL&-101. The writing - primarily analytical - is based on the reading and discussion of literature. This course may not be taken S/U. *Prerequisite: ENGL& 101 with a minimum grade of C.* 

# ENGL 180 Una Voce Workshop (2)

Una Voce Workshop provides practical, handson experience at every stage of the production of a magazine: solicitation of essays, selection of submissions, arrangement of submissions, writing of introductions, proofreading, and publication.

Prerequisite: ENGL& 101 with a minimum grade of C.

#### ENGL& 235 Technical Writing (5)

(Formerly ENGR 231) A practical course in organizing, developing and writing technical information, including reports. Attention given to organizational patterns and report formats common to scientific and technical disciplines and technical writing conventions, including headings, illustrations, style and tone. *Prerequisite: ENGL& 101 with a grade of C or higher.* 

#### ENGL 301 Professional Writing and Communication in Health Care (5)

This course will expose the learner to professional writing and communication in the healthcare field. Students will explore methods of writing persuasive requests, justifying decisions through citation of evidence, and communicating complex ideas at the appropriate level of the audience. *Prerequisite: Admission into HIM BAS program and ENGL& 101 with a minimum grade of C.* 

Recommended preparation: ENGL& 102 with a minimum grade of *C*.

# English: Literature

#### ENGL 178 Trillium Production Workshop (2)

(Formerly ENGL 179) Course covers the basics of editing, design, and production of a literary magazine offering practical hands-on experience.

Prerequisite: Instructor permission.

#### ENGL& 220 Introduction to Shakespeare (5)

(Formerly ENGL-250) Introduction to Shakespeare through a study of several of his tragedies, histories, comedies, and sonnets. (writing intensive)

Prerequisite: ENGL& 101 with a minimum grade of C.

#### ENGL& 226 British Literature I (5)

(Formerly ENGL 264) Survey of British literature from its beginnings to the Renaissance up to 1600 examining the following literary periods or genres: Old English, Middle English and the English Renaissance. Writers may include Chaucer, Malory, Milton, Jonson, and Shakespeare. Writing assignments—primarily analytical—are based on the reading, research and discussion of literature. (writing intensive) *Prerequisite: ENGL& 101 with a minimum arade of C.* 

#### ENGL& 227 British Literature II (5)

(Formerly ENGL 265) Survey of British literature from 1600 to 1780 examining the following literary periods or genres: Elizabethan Age, Neoclassical Period, Restoration Period, Age of Sensibility and early Romanticism. Writers may include Sidney, Raleigh, Bacon, Blake, Dryden, Locke, Pope, Johnson, Fielding, and Donne. Writing assignments—primarily analytical—are based on the reading, research and discussion of literature. (multicultural content) (writing intensive)

Prerequisite: ENGL& 101 with a minimum grade of C.

#### ENGL 234 Introduction to Mythology and Folk Stories (5)

A comparative study of myths and folklore throughout the world. Emphasis is on the commonality of concerns and values expressed by both western and non-western cultures and on the literary value of myths and folklore. (multicultural content) (writing intensive)

Prerequisite: ENGL& 101 with a minimum grade C or equivalent.

#### ENGL 242 Contemporary Non-Western Literature (5)

A survey of contemporary non-Western literature. Various cultural and historical themes will be studied from quarter to quarter. (multicultural content) (writing intensive) *Prerequisite: ENGL& 101 with a minimum grade of C or equivalent.* 

#### ENGL& 244 American Literature I (5)

(Formerly ENGL 267) Survey of American literature from the beginnings through the Civil War. (multicultural content) (writing intensive) *Prerequisite: ENGL& 101 with a minimum grade of C or equivalent.* 

#### ENGL& 245 American Literature II (5)

(Formerly ENGL 268) Survey of American literature from the Civil War to the eve of World War I examining the current literary periods or genres: Slave and Abolition narratives, Transcendentalism, Pastoral Tradition, Naturalism, Early Feminism, American Gothic, Expressionism, and Romanticism. Writing assignments, primarily analytical, are based on the reading, research and discussion of literature. (multicultural content) (writing intensive) *Prerequisite: ENGL& 101 with a minimum grade of C or equivalent.* 

#### ENGL& 246 American Literature III (5)

(Formerly ENGL 269) Survey of American literature from 1910-1960 examining the current literary periods: Imagism, Confessional Poetry, Beat Generation, Lost Generation, Southern Renaissance, Harlem Renaissance, Modernism, Realism, Naturalism, Post-Modernism, and Metafiction. Writing assignments, primarily analytical, are based on the reading, research and discussion of literature. (multicultural content) (writing intensive)

Prerequisite: ENGL& 101 with a minimum grade of C or equivalent.

## ENGL 261 The Bible as Literature (5)

The Bible as Literature examines the Bible, both the Hebrew Bible and the Christian Testament, as a collection of literary works. Students learn to recognize plot, theme, character, setting, style, and figurative language and to consider the interaction of those elements. They also learn about the history of the composition, transmission, and translation of the works. There is emphasis on the original cultural context of the stories and on the ways they have been revised and reinterpreted in other cultures. The purpose of the course is not to supplant the Bible as a religious text, but to enhance each student's appreciation of the Bible regardless of his or her religious convictions. (multicultural content) (writing intensive) Prerequisite: ENGL& 101 with a minimum

grade of C.

#### ENGL 262 Children's Literature (5)

Children's Literature is the study of classic and contemporary fiction and poetry for children, from the early reading levels through high school. Although the course is intended for students who plan to become teachers, it is open to all students who meet the prerequisites. Students examine and critique a variety of works on the basis of the elements of literature, such as plot, character, theme, setting, and style. They research the historical contexts of the works. They present their critiques and findings in written form, along with specific suggestions for teaching the works. (multicultural content) (writing intensive) Prerequisite: ENGL& 101 with a minimum grade of C.

#### ENGL 271 Contemporary American Fiction (5)

Study of American fiction written since 1960 with an emphasis on the major writers and themes of contemporary fiction. (multicultural content) (writing intensive) *Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.* 

# English: Literature

#### ENGL 276 Creative Writing: Fiction (3)

A workshop for the writing of fiction (short story, novel), with particular attention to techniques used by contemporary authors. Course is flexible to meet needs of individual students. Performance/skills course. (writing intensive)

Prerequisite: ENGL& 101 with a minimum grade of C.

#### ENGL 278 Creative Writing: Poetry (2)

A workshop for the writing of poetry, and the study and analysis of poetry techniques. Course is flexible to meet the needs of the individual students and may be repeated. Performance/skills course. (writing intensive) *Prerequisite: ENGL& 101 with a minimum grade of C.* 

#### ENGL 279 Creative Writing: Poetry Workshop (2)

A workshop for the writing of poetry, and the study and analysis of poetry techniques. Instruction is flexible to meet the needs of individual students. (writing intensive) *Prerequisite: ENGL& 101 with a minimum grade of C.* 

#### ENGL 280 Literatures of Diversity (5)

An introduction to the literatures of various cultures. Includes a study of historical and cultural context within which the literature evolved. Various single authors or a combination of authors will be studied from quarter to quarter. May be taken twice as cultures or authors covered are different each offering. (multicultural content) (writing intensive)

Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.

#### ENGL 299 Independent Study (1-5)

Individual study, project-oriented. Instructor permission required and the successful completion of ENGL& 101 and 102. *Prerequisite: Program Chair approval* 

# **Environmental Science**

Students seeking courses for general interest or degree distribution requirements may consider any environmental science courses.

Students intending to major in Environmental Science at a baccalaureate institution should work towards an Associate of Science degree with an Environmental Science specialization and consult with an environmental science advisor in the biology or earth science departments.

#### ENVS& 101 Introduction to Environmental Science (5)

(Formerly ENVSC 106) An interdisciplinary science course for both non-science majors and beginning science students. Topics such as overpopulation, energy, biodiversity, climate change, and pollution are covered. Underlying scientific principles are identified and related to relevant global, national and local perspectives. Laboratories and field trips included.

Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent; and either MATH 090 or MATH 093 with a minimum grade of C or equivalent.

#### ENVS 179 Special Topics in Environmental Science (2)

Specific environmental topics will be explored using a variety of methods which may include seminars, lectures, research projects, presentations, laboratory experiments, field work, and all-day or overnight field trips depending on the quarter offered. Topics for any one quarter may include biodiversity, toxins and human health, invasive species, water quality, climate change etc. *Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent; and either MATH 090 or MATH 093 with a minimum grade of C or equivalent.* 

#### ENVS 210 Maps, GIS and the Environment (5)

Introduces students to the elements of geographic information systems (GIS) including cartography, data structure, map overlays, and spatial analysis. Applications of GIS to environmental issues relating to hydrology and watershed management, soil science, land-use planning, and conservation are explored in a hands-on style, incorporating both field activities and GIS software. This course is the same course as GEOG 210. Students may receive credit for either ENVS 210 or GEOG 210 but not both. Laboratories and field trips included.

Prerequisite: ENGL/ 095 with a minimum grade of C and either MATH 090 or MATH 093 with a minimum grade of C or equivalent assessment in these areas.

# Experiential Learning

# EXPLR 190 Electronic Portfolio (2)

Students will clarify their educational intent, study academic standards and work independently. They create inventories of prior learning, participate in discussions, share and collect feedback about experiential learning. Students combine theory with practice through reflective assignments. They develop a professional portfolio for prior learning assessment, transfer and/or future employers.

# EXPLR 290 Internship Experience (3)

Transfer students may enroll in a work experience internship related to their major area of interest. The work experience may be in either a private or public sector organization. Course includes an orientation, training, site supervision and hour reporting. Internship orientation, mentoring and reporting will be done through Transition Services.

# EXPLR 295 Service Learning Experience (2)

This course assists students to develop a greater civic awareness and engagement. Students complete an orientation, complete 30-60 service hours and participate in an online classroom. Students combine theory with practice through reflective assignments. When combined with EXPLR-296, this class satisfies the culminating project requirements for local school districts.

# EXPLR 296 Capstone Experience (1)

This course will assist students to develop an overarching view of their learning through a capstone experience bridging their classroom and community experiences. Students develop a portfolio of their work, prepare a scholarly paper reflecting the knowledge and skills acquired through their external experience and deliver a public presentation. *Prerequisite: EXPLR 295.* 

# Fresh Start

# FRSH 098 English - Fresh Start (5)

Introduction to literacy and study skills for beginning students enrolled in the Fresh Start program. Academically, the focus is on developing competence in Reading, English, and Technology, but instruction is also provided for social development and is aimed at providing students with skills to be resilient and to focus on program completion.

# FRSH 100 Pathways to College Success (5)

This course is designed as an introduction to college for students entering the Fresh Start program. Its purpose is to prepare students to meet the demands of college, understand the expectations of instructors, develop social skills, and improve life management techniques in order to increase their success once they transition into regular TCC courses. Topics will include goal setting, time management, values identification, conflict management, problem solving, and resource identification.

# Geography

# GEOG 205 Physical Geography (5)

Study of the formation and evolution of the physical features of the earth, including the atmosphere, climate, and weather; rocks, minerals, vegetation, and soils; erosion and modification of the earth's surfaces; and human impact and modification. Laboratory included.

Prerequisite: ENGL/ 095 with a minimum grade of C and MATH 090 or MATH 093 with a minimum grade of C or equivalent assessment in these areas.

# GEOG 210 Maps, GIS and the Environment (5)

Introduces students to the elements of geographic information systems (GIS) including cartography, data structure, map overlays, and spatial analysis. Applications of GIS to environmental issues relating to hydrology and watershed management, soil science, land-use planning, and conservation are explored in a hands-on style, incorporating both field activities and GIS software. This course is the same course as ENVS 210. Students may receive credit for either GEOG 210 or ENVS 210 but not both. Laboratories and field trips included.

Prerequisite: ENGL/ 095 with a minimum grade of C and MATH 090 or MATH 093 with a minimum grade of C or equivalent assessment in these areas.

# Geology

Students seeking courses for general interest or degree distribution requirements may consider any of the Geology courses except GEOL 299 for the Associate of Arts, General Studies and Applied Sciences degrees. Students intending to major in Geology at a baccalaureate institution should work towards an Associate of Science degree with an Earth Sciences Specialization and consult with the earth sciences advisor.

#### GEOL& 101 Introduction to Physical Geology (5)

(Formerly GEOL 101) Introduces students to the materials and landscapes of the earth and the diverse geological processes that produce and change them. Subjects include rock formation, volcanoes, glaciers, rivers, and earthquakes. The laboratory includes various activities such as studying rock and mineral specimens, and local field trips. *Prerequisite: ENGL/ 095 with a minimum grade of C and MATH 090 or MATH 093 with a minimum grade of C or equivalent assessment in these areas.* 

## GEOL 108 Fossils and the History of Life (5)

Introduction to the geological and biological processes and events that generated the amazing record of life on earth. Topics include plate tectonics, rocks, fossilization processes, principles of evolution, and a survey of the history of life. Lab includes studying rock and fossil specimens and involves field trips. This course is the same as BIOL 105. Students may receive credit for either GEOL 108 or BIOL 105 but not both. *Prerequisite: ENGL/ 095 with a minimum grade of C and MATH 090 or MATH 093 with a minimum grade of C or equivalent assessment in these areas.* 

#### GEOL 125 Geology in the Field (5)

An intensive course in introductory geology, covering the fundamental principles of physical geology and an introduction to field methods. Extended field trip required. Exact itinerary varies quarterly. Laboratory included. *Prerequisite: ENGL/ 095 with a minimum* grade of C and MATH 090 or MATH 093 with a minimum grade of C or equivalent assessment in these areas.

#### GEOL 179 Special Topics in Geology (1-5)

These are seminars designed to provide geology students with the opportunity to study selected geologic topics and techniques. Topics and/or techniques covered will generally be determined by the instructor but may also reflect the expressed need or interest of students in the earth science program. The seminars will be comprised of lecture, laboratory and fieldtrip activities in varying proportions depending on the specific topic and needs of participating students.

# GEOL& 208 Geology of the Pacific Northwest (5)

(Formerly GEOL 208) Study of the geologic history of the Pacific Northwest. Emphasis on both the role of plate tectonics in assembling the region as well as how surface processes such as rivers and volcanism have shaped the landscapes of the area. Field trips required. Laboratory included.

Prerequisite: ENGL/ 095 with a minimum grade of C and MATH 090 or MATH 093 with a minimum grade of C or equivalent assessment in these areas.

**GEOL 299** Independent Study in Geology (1) Independent study of selected geologic topics.

Prerequisite: Instructor permission.

# German

The basic tenets of communications including reading, writing, speaking, and listening are developed in a dynamic second language acquisition environment enhanced by technology.

Grammar is used as a communication tool to express meaning as students take part in small group discussions, cultural investigation, and presentation. Authentic materials will be focused on in the class as well as assessment. Students should expect to be immersed in the language. English will be used at a minimum.

# GERM& 121 German I (5)

(Formerly GERM-101) This is the first quarter course in the sequence of GERM& 121, GERM& 122, and GERM& 123. The basic tenets of communications including reading, writing, speaking, and listening are developed in a dynamic second language acquisition environment enhanced by technology. Grammar is used as a communication tool to express meaning as students take part in small group discussions, cultural investigation, and presentation. Authentic materials will be focused on in the class as well as assessment. Students should expect to be immersed in the language. English will be used at a minimum. (Multicultural Course) Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.

#### GERM& 122 German II (5)

(Formerly GERM-102) GERM& 122 is the second quarter course in the sequence of GERM& 121, GERM& 122, and GERM& 123. The basic tenets of communications including reading, writing, speaking, and listening are developed in a dynamic second language acquisition environment enhanced by technology. Grammar is used as a communication tool to express meaning as students take part in small group discussions, cultural investigation, and presentation. Authentic materials will be focused on in the class as well as assessment. Students should expect to be immersed in the language. English will be used at a minimum. (Multicultural Course) Prerequisite: GERM& 121 with a minimum

grade of C or instructor permission.

# German

# GERM& 123 German III (5)

(Formerly GERM-102) GERM& 122 is the third guarter course in the sequence of GERM& 121, GERM& 122, and GERM& 123. The basic tenets of communications including reading, writing, speaking, and listening are developed in a dynamic second language acquisition environment enhanced by technology. Grammar is used as a communication tool to express meaning as students take part in small group discussions, cultural investigation, and presentation. Authentic materials will be focused on in the class as well as assessment. Students should expect to be immersed in the language. English will be used at a minimum. This course satisfies the Multicultural distribution requirement. (Multicultural Course)

Prerequisite: GERM& 122 with a minimum grade of C or instructor permission.

#### GERM 201 Intermediate German I (7.5)

The second year intermediate level German language sequence consists of 201 and 202 (consistent with PLU's intermediate sequence). GERM 201 is the first semester of the sequence. Classes will focus on continued development of listening, speaking, reading and writing skills in the German language, using authentic materials that reflect contemporary life as well as German cultural heritage.

Prerequisite: GERM& 123 with a minimum grade of C and permission of the chair of World Languages.

# GERM 202 Intermediate German II (7.5)

The second year intermediate level German language sequence consists of 201 and 202 (consistent with PLU's intermediate sequence). GERM 202 is the second semester of the sequence. Classes will focus on continued development of listening, speaking, reading and writing skills in the German language, using authentic materials that reflect contemporary life as well as German cultural heritage.

Prerequisite: GERM& 201 with a minimum grade of C and permission of the chair of World Languages.

# Health Information Management

Note: Classes are offered in online format.

# HIM 299 Individual Study in HIM (1-6)

Individual study of an aspect of HIM in accordance with the interest and ability of the student and the approval of the instructor. Credits to be arranged on the basis of the nature and extent of the project undertaken. *Prerequisite: Acceptance into the HIM BAS Program - instructor permission only.* 

#### HIM 301 Foundations in Health Information (5)

This course covers foundational Health Information concepts related to healthcare delivery in the United States. Students will be introduced to health record content, health information access and protection, record storage, retention, and destruction, legal principles related to health information, revenue cycle management, and regulatory and legislative initiatives that affect healthcare. *Prerequisite: Acceptance into the HIM BAS Program - instructor permission only.* 

# HIM 310 Data Governance (5)

This course covers the management of healthcare data including integration needs and the standardization of data. Topics include documentation guidelines, the exchange of data, health information technologies and data integrity.

Prerequisite: Acceptance into the HIM BAS Program – Instructor permission only.

#### HIM 320 Healthcare Privacy, Confidentiality, and Security (3)

This course covers privacy, security and confidentiality of internal and external health information use and exchange. Students will gain knowledge of data quality and monitoring programs and the legal and ethical implications of health data disclosure. Topics will include privacy, confidentiality, security principles, policies, and procedures, health information laws, regulations, and standards, and elements of a compliance program. *Prerequisite: Acceptance into the HIM BAS Program – Instructor permission only.* 

#### HIM 330 Revenue Cycle Management (5)

This course will cover an in depth analysis of revenue cycle and reimbursement methodologies. Students will learn how to develop and implement healthcare finance and compliance processes in response to increasing demands of the healthcare industry. Topics will include reimbursement management, severity of illness systems, chargemaster management, casemix management, audit processes, and payment systems.

Prerequisite: Acceptance into the HIM BAS Program – Instructor permission only.

# HIM 340 Data Quality Management and Performance Improvement (5)

This course covers the foundational base that guides facilities in the management and analysis of healthcare data and that ensures data integrity. Topics include quality assessment and management tools, utilization and resource management, risk management, and disease management processes. *Prerequisite: Acceptance into the HIM BAS Program. Instructor permission only.* 

# HIM 350 Health Information Systems Analysis and Design (5)

This course will examine the tools and knowledge necessary to take part in the planning, design, selection, implementation, integration, testing, evaluation, and support of health information technologies. *Prerequisite: Acceptance into the HIM BAS Program – Instructor permission only.* 

#### HIM 410 Healthcare Compliance (5)

This course will evaluate current laws and standards related to health information initiatives. Students will study the link between regulatory compliance, revenue cycle and quality of care. Fraud and abuse trends will be discussed with an emphasis on establishing and managing policies and procedures for compliance.

Prerequisite: Acceptance into the HIM BAS Program. Instructor permission only.

# Health Information Management

#### HIM 420 Human Resource Management and Leadership (5)

This course covers theories and best practices of human resource management in healthcare. Topics will include leadership styles, workplace diversity, forming quality work teams, equal opportunity, work analysis, staffing, training and development, performance appraisals, compensation, and grievance procedures.

Prerequisite: Acceptance into the HIM BAS Program – Instructor permission only.

#### HIM 430 Data Analytics (5)

This course covers methods for extracting and analyzing data for decision making. Students will learn to analyze clinical data to identify trends. Students will gain knowledge of database querying, data exploration, and mining techniques to facilitate information retrieval.

Prerequisite: Acceptance into the HIM BAS Program - instructor permission only.

#### HIM 440 Organizational Management in Healthcare (5)

This course covers the foundational tools to effectively create and implement organizational management policies and procedures in a healthcare environment. *Prerequisite: Acceptance into the HIM BAS Program – Instructor permission only.* 

## HIM 450 HIM Professional Practice Experience (3)

This course covers an environmental scan of emerging issues and trends in the HIM field. Students will focus on individualized projects that showcase their knowledge. All students will be paired with local health care institutions that will provide students with the opportunity to reinforce their competencies and skills sets. *Prerequisite: HIM 310, HIM 320, HIM 330, HIM 340, HIM 350, HIM 410, HIM 420 and HIM 430 with a minimum grade of C; and HIM 440 with a minimum grade of C or concurrent enrollment.* 

#### HIM 455 HIM Capstone (2)

This course includes the creation of a culminating project focused at educating the public on current issues surrounding health information management.

Prerequisite: HIM 310, HIM 320, HIM 330, HIM 340, HIM 350, HIM 410, HIM 420, and HIM 430 with a minimum grade of C; and HIM 440 with a minimum grade of C or concurrent enrollment.

# Health Information Technology

#### HIT 105 Comprehensive Medical Terminology (5)

(Formerly HIM 105) This course covers the comprehensive study of roots, prefixes, suffixes, principles of word building, study of diagnostic, operative, and symptomatic terms of body systems with an emphasis on accurate spelling and pronunciation of all medical terms; study of medical abbreviations, eponyms, clinical laboratory and radiology terminology. Introduction to common diseases and pharmacology also included. This course is intended for Health Information Technology students. Taking both HIT 130/131 is equivalent to HIT 105.

Prerequisite: BIOL& 175 with a minimum grade of C.

#### HIT 110 Health Care Delivery Systems (5)

(Formerly HIM 110) This course covers healthcare delivery systems in the United States. Students will identify laws, regulations, standards, initiatives, and payment systems, and policies and procedures applicable to the various healthcare organizations. Students will learn the roles and disciplines of providers through the continuum of healthcare in the United States.

Prerequisite: ENGL& 101, BIOL& 175 and HIT 105 with a minimum grade of C; and either MATH& 146 with a minimum grade of C or both MATH 093 and MATH 136 with a minimum grade of C.

#### HIT 125 Record Content and Standards I (5)

(Formerly HIM 125) This course covers the structure and format of health records across various settings as well as storage systems used in Health Information Management. Students will gain insight into the numerous databases, registries, and indices used in healthcare. Federal and state regulations involving Health Information Management will also be addressed.

Prerequisite: ENGL& 101, BIOL& 175 and HIT 105 with a minimum grade of C; HIT 110 with a minimum grade of C or concurrent enrollment; and either MATH& 146 or both MATH 093 and MATH 136 with a mnimum grade of C.

# Health Information Technology

# HIT 126 Health Information Technologies (5)

(formerly HIT 115) This course covers healthcare information systems and concepts such as EHR, PHR, CPOE systems, data storage, retrieval, and security. Students will evaluate communication and Internet technologies in common software applications utilized in healthcare.

Prerequisite: HIT 110 and HIT 125 with a minimum grade of C.

# HIT 130 Medical Terminology I (3)

(Formerly HIM 130) This course covers the study of roots, prefixes, suffixes; principles of word building, study of diagnostic, operative, and symptomatic terms of body systems, emphasis on accurate spelling and pronunciations; study of medical abbreviations, selected eponyms, clinical laboratory and radiology terminology. Course covers multiple systems with a focus on musculoskeletal, respiratory, and cardiovascular systems.

# HIT 131 Medical Terminology II (5)

(Formerly HIM 131) This course covers the continuing study of selected roots, prefixes and suffixes; principles of word building; study of diagnostic, operative, and symptomatic terms of body systems with emphasis on accurate spelling and pronunciation of all medical terms; study of medical abbreviations, selected eponyms, clinical laboratory and radiology terminology.

# HIT 141 Outpatient Diagnostic Coding (2)

(Formerly HIM 141) Instruction to the basic principles of diagnostic coding. Designed as an introductory course for beginners. Focus is on diagnostic coding in the outpatient care setting.

Prerequisite: HIT 105 with a minimum grade of C; and either HIT 110 or MO 101 with a minimum grade of C.

# HIT 145 Healthcare Statistics (2)

(Formerly HIM 145) This course covers common statistics foound in healthcare, to include length of stay and death/autopsy/ infection/birth rates. Students will be exposed to proper graphics used in statistics, identification of data sources, and use of reliable resources for research.

# HIT 160 Pathophysiology (5)

(Formerly HIM 160) Selected general medical conditions and diseases of specific body systems, including etiology, signs, symptoms, diagnostic procedures, clinical course, therapy and prognosis will be discussed. *Prerequisite: HIT 105, HIT 110 and HIT 125 with a minimum grade of C.* 

# HIT 165 Pharmacology for Health Information Technology (2)

(Formerly HIM 150 and HIT 200) This course covers an introduction in pharmacology for health information technicians to include terminology, drug classification and usage. This course emphasizes the clinical application of medications and treatment of disease.

# HIT 170 CPT Coding (5)

(Formerly HIM 216) Instruction in basic, comprehensive, and more advanced aspects of coding with Current Procedural Terminology (CPT-4) for use in various health care settings. Designed to provide the student with an understanding of CPT coding guidelines, rules, and regulations; a basic understanding of HCPCS Level II Coding; a basic working knowledge of E/M coding methods; and a thorough working knowledge of CPT-4. *Prerequisite: HIT 141 or HIT 140 with a minimum grade of C.* 

# HIT 173 Data Analytics (5)

This course covers the basic fundamentals of data analytics, to include using statistics, identifying trends, researching methodologies, and making decisions based off results of analysis. Topics will include taxonomies, nomenclatures, and terminologies required for healthcare analytics.

## HIT 175 Data Quality and Performance Improvement (5)

(Formerly HIM 241) This course covers the study and application of continuous quality improvement, utilization management, and standards for hospital accreditation and licensure. This course also addresses the role of the Joint Commission, government agencies, and the use of vital statistics. *Prerequisite: HIT 173 with a minimum grade of C.* 

# HIT 176 Advanced Outpatient Coding (5)

(Formerly HIT 152) This course covers advanced coding principles in the outpatient setting for the more difficult sections of the coding system. Course includes extensive advanced practice using coding exercises and abstracted medical records in a virtual environment.

## HIT 179 Ethical Issues in Health Information Technology Seminar (1)

Students will discuss current ethical issues in Health Information Management (topics change each quarter)

Prerequisite: HIT 110 and HIT 125 with a minimum grade of C or concurrent enrollment.

# HIT 186 Outpatient Coding Clinical (2)

(Formerly HIM 186) Students will apply skills and knowledge acquired in previous courses to outpatient coding settings in the community.

Prerequisite: HIT 176 with a minimum grade of C or concurrent enrollment.

# HIT 195 Health Law and Ethics (3)

(Formerly HIM 195) This course covers the legislative and regulatory process, laws, regulations, and policies and procedures pertaining to confidentiality, privacy, release of information, and professional and practice-related ethical issues.

Prerequisite: HIT 110, 125 and 126 with a minimum grade of C.

Recommended Preparation: ENGL& 102 or ENGL& 235 with a minimum grade of C.

# HIT 221 Intermediate Coding (5)

(Formerly HIM 221) This course covers the coding rules and guidelines surrounding inpatient diagnostic and procedural coding using ICD 10 CM and ICD 10 PCS. *Prerequisite: HIT 141 and HIT 160 with a minimum grade of C.* 

# HIT 225 Record Content and Standards II (5)

(Formerly HIM 225) This course covers healthcare data requirements, including Joint Commission standards, Governmental regulations, corporate compliance, and HIPAA applications in healthcare settings. *Prerequisite: HIT 173 and HIT 195 with a minimum grade of C.* 

# Health Information Technology

## HIT 230 Revenue Cycle (5)

(Formerly HIT 210) This course covers healthcare reimbursements and various payment methodologies used in healthcare in the United States. Students will gain an understanding of the importance of coding and compliance and its impact on healthcare reimbursements and the revenue cycle process. In addition students will learn about the importance of linking quality to reimbursements and how third-party payers are implementing various value-based purchasing and pay-for-performance criteria in healthcare. Students will be exposed to the practice of calculating various payment methodologies frequently used in healthcare. Prerequisite: HIT 170, HIT 175, HIT 221 and HIT 225 with a minimum grade of C.

## HIT 235 Health Records in Alternative Care (2)

(Formerly HIT 222) This course covers health record systems for alternative sites such as psychiatric, long-term care, home health, and hospice. The course includes coding compliance, licensure and accreditation standards.

## HIT 242 Leadership and Management I (5)

(Formerly HIM 153) This course covers oversight duties in a healthcare office to include managing the revenue cycle, compliance regulations, human resources, health information, and general business processes.

Prerequisite: HIT 173, 221 and 225 with a minimum grade of C.

### HIT 245 Advanced Coding and Compliance (5)

(Formerly HIM 245) This course covers advanced application and instruction on the more difficult sections of the coding systems for both inpatient and outpatient coding. Topics also include coding compliance issues. Discussion of legacy and alternative coding systems is also included in this course. *Prerequisite: HIT 170, 221 and 230 with a minimum grade of C.* 

#### HIT 250 Inpatient Coding Professional Practice Experience (2)

(Formally HIM 250) This professional practice experience allows students to apply skills and knowledge acquired in previous courses to the outpatient coding setting.

Prerequisite: HIT 245 with a minimum grade of C.

### HIT 254 HIT Capstone (5)

(Formerly HIM 254) This course is the culminating class for the HIT program. Students will participate in leadership projects, create capstone projects to strengthen their AHIMA Entry Level Competencies, prepare for the national Registered Health Information Technician exam, and prepare for employment. *Prerequisite: HIT 210, 235, and 245 with a minimum grade of C; HIT 242 with a minimum grade of C or concurrent.* 

#### HIT 255 HIT Professional Practice Experience (5)

(Formerly HIM 255)Students will apply skills and knowledge acquired in previous courses in their professional practice experiences. *Prerequisite: HIT 254.* 

# HIT 279Ethical Issues in Healthcare Leadership (1)

Students will discuss the implications of ethics in healthcare leadership. Focus of discussion will change quarterly.

#### MO 101 Healthcare Delivery and Alternate Care (5)

Students will be introduced to the many types of health care delivery systems in the United States. Students will identify laws, regulations, standards, initiatives, and payment systems; policies and procedures applicable to the various health care organizations. Students will gain an appreciation of the roles and disciplines of the providers throughout the continuum of health care in the U.S.

#### MO 110 Medical Office Procedures (5)

This class covers customary daily activities of a medical office including computerized appointment setting, insurance verification and compliance, chart maintenance, documentation creation, filing, customer service skills, confidentiality, patient referrals, and being part of the healthcare team. *Prerequisite: CU 105, MO 101 and HIT 130 with a minimum grade of C.* 

#### MO 115 Medical Scribe (4)

This course provides students with skills necessary to enter information into a patient's electronic health record or chart at the direction of a physician or licensed independent practitioner. Topics include Basic Coding, HIPAA Compliance, Medico-legal risk mitigation, EHR functionality, elements of documentation, CMS Physician Quality Reporting Systems, The Joint Commission's Accountability Measures, and a general knowledge of the roles and responsibilities of medical personnel.

Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment; HIT 105 with a minimum grade of C or equivalent; and either BIOL& 175, BIOL& 241 or BIOL& 242 with a minimum grade of C or concurrent enrollment.

### MO 143 Medical Office Professional Development and Ethics (3)

This course covers professional development and ethical issues in the medical office. Students will prepare professional portfolios to showcase skills. Students will discuss interviewing techniques. This course will cover professional ethics.

### MO 151 Insurance/Claims Processing (5)

(Formerly HIT 151) This course is designed to introduce information about major insurance programs and federal healthcare legislation, provide a basic knowledge of national diagnosis and procedural coding systems, and learn to simplify the process of completing claims.

Prerequisite: MO 101, 110 and HIT 141 with a minimum grade of C; and either MO 159 or HIT 170 with a minimum grade of C.

### MO 159 Introduction to Outpatient Procedure Coding (4)

This course covers procedural coding used in hospitals, physicians offices and medical clinics serving outpatients at an introductory level. Familiarization with basic coding concepts in procedure coding to include CPT and HCPCS. Emphasis is on CPT ambulatory services coding. Discussion of coding for medical necessity.

# Health Information Technology

### MO 185 Medical Reimbursement Specialist Clinical (3)

(Formerly HIT 185) Students will apply skills and knowledge acquired in previous courses to medical reimbursement settings in the community.

Prerequisite: MO 151 with a minimum grade of C or concurrent enrollment.

# OLL 101 Success in Online Learning (3)

This course will help prepare students for success in online courses in any discipline. Students will explore strategies for online communication, identify online tools and resources, identify problem solving techniques for technology, and identify coping skills for working in an online environment. This course is open to all students.

# History

# HIST& 126 World Civilizations I (5)

(Formerly HIST 111) Historical study of human societies in the world, with emphasis on their interactions with each other and the continuous transitions of their traditions from antiquity to the 9th century. (multicultural content) *Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.* 

## HIST& 127 World Civilizations II (5)

(Formerly HIST 112) Historical study of human societies in the world, with emphasis on their interactions with each other, and the continuous transitions of their traditions from the 9th to the 18th century. (multicultural content) *Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.* 

# HIST& 128 World Civilization III (5)

(Formerly HIST 113) Historical study of human societies in the world, with emphasis on their interactions with each other, and the continuous transitions of their traditions from the 18th century to the present. (multicultural content) *Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.* 

# HIST& 146 U.S. History I (5)

(Formerly HIST 241) The course will explore the key political, social, cultural, and economic events in the American colonies in the 17th and 18th centuries. Discussions will focus on the individuals, issues, ideas, and events most responsible for shaping modern America. *Prerequisite: ENGL/ 095 with a minimum* grade of C or equivalent.

# HIST& 147 U.S. History II (5)

(Formerly HIST 242) The course will explore the key political, social, cultural, and economic events in American society in the 19th Century. Discussions will focus on the individuals, issues, ideas, and events most responsible for shaping modern America. *Prerequisite: ENGL/ 095 with a minimum* grade of C or equivalent.

# HIST& 148 U.S. History III (5)

(Formerly HIST 243) The course will explore the key political, social, cultural, and economic events in American society in the 20th Century. Discussions will focus on the individuals, issues, ideas, and events most responsible for shaping modern America. *Prerequisite: ENGL/ 095 with a minimum* grade of C or equivalent.

# HIST 210 History of Modern Europe (5)

An introduction of the common heritage, global dynamics, and historical components that crafted the making of modern Europe. The course will assess the unfolding historical events from the 17th century up to the present, examining major societies in the region, including British, French, German, Italian, and Russian societies, among others. The focus will be on the interactions among Europe's different societies, and between Europe and the larger world. (multicultural content)

Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.

# HIST 211 History of China (5)

Historical study of human societies in China, with emphasis on their interactions with other societies in the greater world, and the continuous transitions of their traditions from antiquity to the present. (multicultural content) *Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.* 

# HIST& 214 Pacific NW History (5)

(Formerly HIST 264) The course will examine the exploration, settlement and growth of the Pacific Northwest, with an emphasis on Washington State. Topics will include the settlement and creation of Washington Territory, as well as the social, economic and political issues that have shaped Washington State in the 19th and 20th centuries. *Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.* 

# History

### HIST& 219 Native American History (5)

(Formerly HIST 251) This course will examine the history of Native American cultures in the United States. Through readings, lectures, and class discussions, students will explore the unique histories of several specific Native cultures, as well as the impact that these cultures had in shaping the course of American history. (multicultural content)

Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.

### HIST& 220 African-American History (5)

Formerly HIST 254) The course will examine the history of African-Americans in the United States, tracing the African-American experience from colonial times to present-day America. Topics will include the development of the institution of slavery in America, the post-Civil War experience of African-Americans, and the struggle for civil rights and social justice in America in the 20th Century.

(multicultural content)

Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.

### HIST 230 History of Japan (5)

Historical study of human societies in Japan with emphasis on their interactions with other societies in the greater world, and the transitions of their traditions from antiquity to the present. (multicultural content) *Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.* 

#### HIST 231 American History, American Film (5)

This course will examine U.S. History, society and culture since 1929 through the lens of Hollywood feature films. Topics include: the Great Depression, the Cold War at home and abroad, gender roles and the American family, and the civil rights movement. (multicultural content)

Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.

### HIST 240 Religion in America (5)

The course will examine the history and impact of different religions and religious ideas in the modern world, with a focus on how these various religions and ideas have impacted the social, political, and cultural history of the United States. (multicultural content)

Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.

### HIST 244 The 1960s (5)

This course will examine key political, social, cultural, economic, and diplomatic trends in American society from 1960 to 1974. Topics covered will include John F. Kennedy and the "New Frontier," Lyndon Johnson's "Great Society," the civil rights movement, the women's movement, the war in Vietnam, the anti-war movement, and Richard Nixon and Watergate. Particular focus will be on the individuals, issues, ideas and events most responsible for shaping this period and our understanding of it.

Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.

#### HIST 249 America and the Rise to Globalism (5)

This course will survey the United States' rise to world power from 1898 to the present, with particular attention given to the causes and consequences of increased U.S. participation in world affairs, America's initial reluctance and ultimate acceptance of the responsibility of world leadership.

Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.

# Human Development

### HD 098 Managing Math Anxiety (2)

Increasing our awareness of why we have math anxiety and an appreciation of our own attitudes can actually help us to learn anxiety management tools and strategies to learn math. An emphasis is placed on understanding problem solving techniques and math assertiveness.

Prerequisite: Concurrent enrollment in any TCC Math course or BUS 110 or instructor permission.

#### HD 101 Student Success Seminar (3)

To provide individuals with an opportunity to cultivate the skills necessary to become confident, successful students. Topics may include: personal learning styles, time management, goal setting, test-taking techniques, academic planning, degree audit, self care, money management, relationships, communication, exploring careers, memory techniques, college and community resources, ethics, respecting diversity, and information literacy.

### HD 105 Career and Life Planning (3)

Students will assess their unique interests, values, capabilities and personalities as related to career choice and future life planning. Practical and effective job search and decision making skills will be taught, as well as skills to prepare students for an ever-changing world of work.

### HD 110 Human Relations (3)

Introductory course in personal growth through interpersonal communication. Primarily an experiential course, designed to facilitate learning and growth in self-awareness, self-esteem, and self-expression, with the goal of promoting positive relationships with others. (multicultural content)

# Human Development

# HD 114 Exploring Human Potential (3)

This course helps students discover and develop their individual potential. Students explore who they are and how to set meaningful goals in their own terms. We identify ways to unlock our individual potential and learn how to establish an action plan for positive change.

# HD 116 Life Choices (3)

Students will increase self-awareness and decision making skills by exploring: adult growth and development; the influence of culture, roles and stereotypes; and steps to successfully navigate the process of constant change and transition.

Prerequisite: ENGL/085 with a minimum grade of C or equivalent.

## HD 299 Independent Study (1)

Independent observation, analysis and reporting of a selected problem in Human Development.

Prerequisite: Instructor permission.

# Humanities

Note: These courses are NOT sequential. Nor is one prerequisite to another.

## HUM& 101 Intro. to Humanities (5)

(Formerly HUMAN-100) An introduction to the humanities through investigation of current cultural events offered by local communities. Study of the arts - painting, sculpture, architecture, drama, film, music and dance - will be enhanced by attending performances and on-location field trips to sites in the community. Students will become familiar with terminology of the arts and with community performance/demonstrations of these same arts. (multicultural content) (writing intensive) *Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.* 

## HUM 110 Introduction to Pacific Rim Cultures (5)

(Formerly HUMAN-110) A general introduction to a Pacific Rim culture (Southeast Asia, China, Japan, Korea, Mexico or Central America) emphasizing history, language, literature, arts, politics, economy, and society. (multicultural content)

Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent. Recommended Preparation: ENGL& 101 with a minimum grade of C or LS 101 with a minimum grade of C.

## HUM& 116 Humanities I (5)

(Formerly HUMAN-101) An introduction to the global humanities through the study of six major art forms: literature, drama, music, painting, sculpture, and architecture from the ancient world to 1400. The course will focus on connecting ideas and beliefs with their expressions. (writing intensive) *Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.* 

## HUM& 117 Humanities II (5)

(Formerly HUMAN-102) An introduction to the global humanities through the study of six major art forms: literature, drama, music, painting, sculpture, and architecture from 1400 to 1800. The course will focus on connecting ideas and beliefs with their expressions. (multicultural content) (writing intensive) *Prerequisite: ENGL/ 095 with a minimum* grade of C or equivalent.

# HUM& 118 Humanities III (5)

(Formerly HUMAN-103) An introduction to the global humanities through the study of seven major art forms: literature, drama, music, film, painting, sculpture, and architecture from 1800 to the present. The course will focus on connecting ideas and beliefs with their expressions. (multicultural content) (writing intensive)

Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.

## HUM 120 The American Multicultural Arts Experience (5)

(Formerly HUMAN-120) An introduction to the unique contributions of American art, theater, dance, literature, and/or music by various American ethnic cultures. (multicultural content)

Prerequisite: ENGL/ 095 with a minimum grade of C or better or equivalent.

# HUM 130 Introduction to Film (5)

(Formerly HUMAN-130) Study in motion picture techniques and the development of cinema as an art form.

Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.

## HUM 179 Themes or Topics in Humanities (Revolving Topics) (5)

(Formerly HUM 260) A study of a theme or topic through its expressions, notably literature, drama, music, film, painting, sculpture and architecture. Various themes or topics will be studied from quarter to quarter. May be taken twice as themes and topics are different each offering.

Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.

# HUM 285 The City (5)

(Formerly HUMAN-285) An in-depth study covering history, philosophy, religion, art, architecture and literature of a culturally significant city. A different city, time, and place will be studied each quarter Humanities 285 is offered.

Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent. Recommended Preparation: ENGL& 101 or LS 101 with a minimum grade of C.

# Human Services

### HSP 100 Introduction To Human Services (5)

This course provides an overview of the history, philosophy, and present status of the major Human Services delivery systems; examination of the roles of practitioners as well as occupational and educational alternatives for graduates; exploration of services provided by local social service agencies.

Prerequisite: ENGL 095 or ENGL/095 with a minimum grade of C or assessment at college-level reading and writing.

### HSP 103 Therapeutic Approaches and Techniques (5)

This course examines principles, concepts, and processes related to counseling and interviewing; role and function of the helping professional is examined; counseling and interviewing skills are demonstrated and practiced in class.

Prerequisite: ENGL 095 or ENGL/095 with a minimum grade of C or assessment at reading and writing.

#### HSP 107 Behavioral Health and Wellness (5)

(Formerly HSP 207) This course explores theories ans strategies for wellness and self-care. A life-long approach is used to learn relaxation techniques and coping strategies to reduce stress. Therapeutic use of pharmacology and illicit use of drugs and their impact on the community is also examined. *Prerequisite: ENGL/ 095 with a minimum* grade of C or equivalent.

#### HSP 112 Best Practices in Human Services (5)

This course examines the fundamental roles and functions of managing client case loads in a variety of systems including substance treatment and social services; Will explore best practices in acquiring client data, documentation, and file management; ASAM criteria for adult and adolescent assessment and treatment planning will be covered. *Prerequisite: HSP 100 and HSP 103 with a minimum grade of C; or instructor permission.* 

### HSP 113 Advanced Helping Strategies (5)

(Formerly HSP 106) This course explores the role of group, family, and treatment systems; strategies for helping in these areas and other relevant Human Services issues will be examined.

Prerequisite: HSP 100 and HSP 103 with a minimum grade of C; or instructor permission.

### HSP 117 Ethics and Professional Development (5)

(Formerly HSP 105) This course will examine personal belief systems, ethical principles, and laws related to the Human Services field; Develop critical thinking skills to explore central work-related issues and develop leadership skills while preparing to enter the helping field, internships, and careers. *Prerequisite: HSP 100 and HSP 103 with a minimum grade of C; or instructor permission.* 

### HSP 121 Survey of Addictions and Pharmacology (5)

(Formerly HSP 200) This course is an introduction to the physiological, psychological and socio-cultural aspects of addiction related issues. An overview of the pharmacology of psychoactive drugs including an explanation of the how brain chemistry changes result in compulsive use is examined. *Prerequisite: HSP 100, HSP 103, HSP 112, HSP 113 and HSP 117 with a minimum grade of C; or instructor permission.* 

### HSP 126 Cultural Competencies for Human Services (5)

(Formerly HSP 261) This is an online course that will examine the elements that create differences within society. The primary goal of this course is to expose learners to a variety of cultural ideas, promote tolerance for differences, and assistant in learning cultural competence when working with diverse populations. Culture, ethnicity, lifestyles, religion, disabilities, age, and gender will be explored to increase awareness of cultural biases and related concerns. (multicultural content)

Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent or instructor permission.

### HSP 130 Recovery Education (5)

This course will provide an overview of treatment and recovery from substance abuse dependency and impulse control disorders. Included in this course will be the physiological, psychosocial, and systemic concerns about alcohol/drugs and the related issues of process addictions. *Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent; or concurrent enrollment.* 

## HSP 212 Systems and Case Work (5)

This course examines the systems that support and hinder case work with vulnerable client populations; the unique problems, issues, and concerns of case work with various special needs groups. Information necessary to develop and implement effective, complex, and compounded service plans and how to effectively negotiate social service systems will also be explored. *Prerequisite: HSP 100, HSP 103, HSP 112, HSP 113 and HSP 117 with a minimum grade of C; or instructor permission.* 

### HSP 217 Advocacy in Human Services (5)

This course will explore the distinct components of advocacy in the helping professions. Topics to be covered will be: how to identify and challenge oppressive practices, policies, and mindsets; how to defend clients' rights; and how to overcome barriers that prevent clients from having their needs met. *Prerequisite: HSP 100, HSP 103, HSP 112, HSP 113 and HSP 117 with a minimum grade of C; or instructor permission.* 

### HSP 218 Trauma Informed Care (5)

This course will explore the definitions of trauma; oppression as a catalyst for trauma; inter-generational, community, and historical trauma; the many ways in which humans express the effects of their traumatic experiences; and what to do to help people heal. In addition, students will identify vicarious/secondary trauma in the helping professions and examine self-care practices to mitigate the effects of exposure to other people's trauma experiences. *HSP 100, HSP 103, HSP 112, HSP 113 and HSP 117 with a minimum grade of C; or instructor permission.* 

# Human Services

### HSP 224 Dynamics of Family Violence (5)

(Formerly HSP 214) This course explores the history, philosophy, and present status of violence in the family; examines cultural and social perspectives regarding violence across the life span including child mistreatment, sexual abuse, and elder maltreatment; and exposure to service delivery systems specific to family violence.

Prerequisite: HSP 100, HSP 103, HSP 112, HSP 113 and HSP 117 with a minimum grade of C; or instructor permission.

### HSP 230 Co-occurring Disorders Assessment and Treatment (5)

This course is an overview of co-occurring disorders in behavioral health and Human Services settings. A brief overview of specific mental disorders, substance use disorders, and evidence based strategies used to serve those with co-occurring disorders will be covered. This course will survey effective co-occurring programming, screening processes, and practices used to serve this population. *Prerequisite: HSP 100, HSP 103, HSP 112, HSP 113, and HSP 117 with a minimum grade of C; and HSP 121 with a minimum grade of C or concurrent enrollment or instructor permission.* 

### HSP 241 Working with Youth and Families (5)

(Formerly HSP 203) This course explores the theory of social learning and application to the development with appropriate social skills. Part of the course learning will occur through the actual experiences of working with children, youth, and families. *Prerequisite: HSP 100, HSP 103, HSP 112, HSP 113 and HSP 117 with a minimum grade of C; or instructor permission.* 

#### HSP 245 Sexual Orientation and Gender Identity Issues in Human Services (5)

This course will explore the field of Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) issues and its relationship to the lives of LGBTQ people, Human Services, and society more broadly. Using intercultural competency development and interdisciplinary approaches, we will incorporate race, class, gender, sexuality, and culture as Human Service issues facing LGBTQ individuals. We will develop professional resources and skills used to develop intercultural competency when serving LGBTQ individuals. Human Services topics will include social and scientific constructions of sexuality and gender; understandings of sexual identity from the ancient world to the current United States; religion and sexual identity; mental health and wellness; physical health issues. Specific training in serving LGBTQ individuals will be related to violence, trauma, substance related disorders, mental health, suicide risk, and medical care.

Prerequisite: HSP 113 and HSP 117 with a minimum grade of C. Recommended preparation: HSP 126 with a minimum grade of C.

### HSP 251 Prevention Strategies (5)

(Formerly HSP 205) This course content includes an overview of prevention, current research, prevention planning, role of the media, program models, and evaluation methodology.

Prerequisite: HSP 100, HSP 103, HSP 112, HSP 113 and HSP 117 with a minimum grade of C; or instructor permission.

## HSP 262 Loss and Grief through the Lifespan (5)

This course focuses on losses ranging from everyday setbacks to stigmatizing issues. The grief process will be examined from a variety of approaches including cultural, religious, and developmental perspectives. End of life concerns will also be covered. *Prerequisite: HSP 100, HSP 103, HSP 112, HSP 113 and HSP 117 with a minimum grade* of *C*; or instructor permission.

### HSP 265 Aging and Adult Services (5)

(Formerly HSP 209) This course reviews the changing needs of people as they progress through the later stages of life. Social interactions, cognitive abilities, physical changes, health issues, psychological adaptations, recreational options, and other life domain concerns will be explored to prepare the students wishing to work with an aging population.

Prerequisite: HSP 100, HSP 103, HSP 112, HSP 113 and HSP 117 with a minimum grade of C; or instructor permission.

### HSP 282 Program and Proposal Development (5)

(Formerly HSP 208 Program Planning and Grant Writing) This course will examine the various elements required to create a new program or project; research potential funding sources; write an effective funding proposal; create and apply program evaluation strategies.

Prerequisite: HSP 100, HSP 103, HSP 112, HSP 113 and HSP 117 with a minimum grade of C; or instructor permission.

### HSP 283 Leadership Development (5)

This course will engage students in learning and developing their own leadership skills. Roles and functions of leadership will be explored and opportunities to lead will be extended. Special attention will be placed on the relationship of service leadership development in their lives and the helping field.

Prerequiste: HSP 100, HSP 103, HSP 112, HSP 113 and HSP 117 with a minimum grade of C; or instruction permission.

# Human Services

### HSP 291 Supervised Clinical Practicum I (5)

(Formerly HSP 191) This course is the first of supervised clinical practicum experiences and requires 116 hours of work during the quarter in a community setting. The focus of HSP 291 is on integrating oneself into the workplace. The weekly seminars offer helpful suggestions and discussions on how to establish a good work relationship and strengthen communication skills.

Prerequisite: HSP 100, HSP 103, HSP 112, HSP 113 and HSP 117 with a minimum grade of C.

### HSP 292 Supervised Clinical Practicum II (5)

(Formerly HSP 192) This course requires 116 hours of supervised work experience. The focus of the HSP 292 weekly seminars shifts to understanding integration into the professional role within the Human Services field. Students will examine the organization of agencies and other pertinent professional issues related to students' experiences. *Prerequisite: HSP 291 with a minimum grade of C.* 

## HSP 293 Supervised Clinical Practicum III (5)

(Formerly HSP 193) This final clinical practicum experience again requires 116 hours of supervised work. The focus on HSP 293 is on integration of field experience with classroom learning to form a personal theory of helping. Weekly seminars will alternate between discussing issues that arise from the field and refining helping strategies as well as helping students to synthesize theories and techniques into a working model.

Prerequisite: HSP 292 with a minimum grade of C.

# Information Technology

### IT 102 Microcomputer Fundamentals (5)

This course provides concepts and hands-on experience in understanding and supporting a PC-compatible microcomputer. Topics include microprocessors, system architecture, system boards, expansion cards, memory, input/output devices, and peripherals. The student learns how to build, configure, and troubleshoot a personal computer, and install its operating system. The objectives of the course are based on those of the COMPTIA A+ Certification Exam.

Prerequisite: CU 100 with a minimum grade of C or Program Chair permission.

### IT 110 Operating Systems I (5)

The student is introduced to operating systems used on desktop microcomputers. The course covers installation and configuration, memory and storage management, batch and script files, device drivers, troubleshooting and maintenance tools, and virus protection. Emphasis is on current Windows operating systems. The objectives of the course are based on those of the COMPTIA A+Certification Exam. *Prerequisite: CU 100 with a minimum grade* of *C or Program Chair permission*.

### IT 112 Help Desk Operations (2)

The goal of this course is to provide the student with a good understanding of the concepts, technologies, and processes used in the business community to support in-house and remote staff through help desk operations.

Prerequisite: CU 100 with a minimum grade of C or Program Chair permission.

#### IT 201 Introduction to Programming (5)

An introduction to programming and programming concepts. Students will use process mapping, flowcharting, pseudocode, and critical thinking skills to analyze various types of problems as preliminary design tools, and then will design, code, test, and debug programs using a programming language. *Prerequisite: BUS 110 or MATH& 107 with a minimum grade of C. Co-Requisite: IT 262 with a minimum grade of C or Program Chair permission.* 

#### IT 210 Operating Systems II (5)

This course extends the skills learned in IT-110 to more advanced desktop operating systems. Installation, maintenance, and troubleshooting are stressed.

Prerequisite: IT 102 and IT 110 with a minimum grade of C or Program Chair permission.

### IT 211 Operating Systems III (5)

Provides hands-on experience in installation, configuration and administration of the UNIX/ Linux operating system in a networked environment.

Prerequisite: IT 102 and IT 110 with a minimum grade of C; or Program Chair permission.

### IT 230 Introduction to Project Management (2)

An introduction to Project Management from a team member perspective. Students will learn the different tools and techniques used in initiating, planning, developing, documenting and completing a project.

Prerequisite: ENGL& 101 and BUS& 101 or BUS 164 or Program Chair permission.

#### IT 246 Database Implementation (5)

(Formerly IT 246 and 248 combined) Students will learn to implement a SQL database for business needs. Students will use a graphical user interface and structured query language to implement databases and reporting solutions.

Prerequisite: BUS 110 with a minimum grade of C or equivalent; program chair permission. Recommended preparation: CU 210 with a minimum grade of C or equivalent.

### IT 247 IT Project Management (5)

Project Management for IT professionals and projects from a team member perspective. Students will learn the different tools and techniques used in initiating, planning, developing, documenting and completing an IT project.

Prerequisite: IT 230 or IT 261 with a minimum grade of C or Program Chair permission.

# Information Technology

# IT 249 Database Programming (3)

The Database Programming course is focused on different aspects of integration of applications with database design and development. Students hone their technical skills by learning how to analyze, design and develop database systems. This course is designed to further develop programming proficiency. Emphasis is on data definition, data manipulation, and data control statements including database cursors, triggers, procedures and functions. Students will be required to learn and develop skills using the developer tools, Forms Builder and Reports Builder in this course for report generation and publication. Upon completion, students should be able to write programs which create, update, and produce reports. Prerequisite: IT 246 with a minimum grade of C or program chair permission. Recommended Preparation: CU 210 with a minimum grade of C.

## IT 257 Social Media (3)

This course is designed to provide students with a foundational skill set in the new, evolving world of social media tools and strategies so that they can immediately apply them in the workplace.

Prerequisite: CU 105 with a minimum grade of C or Program Chair permission. Recommended Preparation: CU 101.

### IT 260 Client/Server Technology - LANs (5)

This course introduces the student to the concepts of data communication in a Local Area Network (LAN) environment. It includes training in the methods and protocols used to allow networked computer systems to communicate in local environments. Topics include the OSI Communication Model, transmission media, protocol stacks especially TCP/IP, simple internetworking, and LAN services. Course objectives are based on those of the COMPTIA Network + certification exams.

Prerequisite: IT 102 and IT 110 with a minimum grade of C and IT 261 (may be taken concurrently) or Program Chair permission.

## IT 261 Administration of Networks (5)

The student is introduced to networking and to a detailed study of network administration techniques. This is an applied course in the concepts of local area networks (LANs). The student focuses on configuration of file and print services. Methods and tools for designing, implementing, and maintaining a secure, expandable local area network environments are studied. Microsoft Windows Server is used as the platform for this course. *Prerequisite: IT 102 and IT 110 with a minimum grade of C and IT 260 (may be taken concurrently) or Program Chair permission.* 

### IT 262 Technical Support of Windows Networks (5)

This is a practical course in the installation, configuration, maintenance, and support of Local Area Networks (LANs) using the Windows Network Operating Systems (NOSs). A Microsoft Windows Server is installed and configured for secure and efficient file, print and application services. The architecture and functionality of the Windows Server OS are studied. The course also provides the theoretical, hands on, and practical techniques that can be used in preparation for the COMPTIA Server+ exam.

Prerequisite: IT 260 and IT 261, with a minimum grade of C and IT 270 (may be taken concurrently) or Program Chair permission. Recommended: IT 210.

### IT 270 Service and Support Fundamentals (5)

This course is an introduction to the methodologies and tools for personal computer and Local Area Network (LAN) troubleshooting from a proactive viewpoint. The student studies the methods to identify and repair the most likely causes of network faults caused by user, hardware, and software problems. Disaster Plans, including a Backup Plan, are developed. Quality customer service, journaling and documentation are emphasized. Configuration management and patch/ service release installation is learned. Server performance monitoring is discussed. Prerequisite: IT 260 and IT 261 with a minimum grade of C and IT 262 (may be taken concurrently) or Program Chair permission. Recommended: IT 210.

### IT 271 Internetworking (5)

The skills learned in IT 270 are extended to applications on wide-area networks. Equipment, such as client computers, servers, bridges, hubs, switches, routers, and DSU/ CSU units, are installed and configured. While the course is not specific to one vendor, many objectives parallel those of the Cisco Certified Network Associate (CCNA) Certification. *Prerequisite: IT 262 and IT 270 with a minimum grade of C and IT 280 (may be taken concurrently) or Program Chair permission.* 

### IT 274 Network Security Fundamentals (5)

The Network Security Fundamentals course is an introduction to the various technical and administrative aspects of Information Security and Assurance in a network-centric computing environment. The course provides the foundation for understanding the key issues associated with determining appropriate levels of protection for information and computing assets. The course will also provide information on how to design and manage a secure network infrastructure. *Prerequisite: CU 105 with a minimum grade of* 

C or equivalent knowledge or Program Chair permission. Recommended: IT 260.

## IT 275 Security Assessment & Remediation (5)

This course is a continuation of study in Network Security with added emphasis on security assessment, risks and remediation options for security networks. *Prerequisite: IT 274 and IT 260 with a minimum grade of C or Program Chair permission.* 

### IT 277 Data Storage Security and Management (5)

This course covers the core elements of storage infrastructure including various storage networking technologies, business continuity, information availability, storage management and security concepts, principles and best practices.

Prerequisite: IT 274 and IT 261 with a minimum grade of C or Program Chair permission.

# Information Technology

### IT 278 Incident Response & Intrusion Analysis (5)

This course presents network defense in depth for enterprise networks, attach methods, intrusion analysis and detection. *Prerequisite: IT 275 with a minimum grade of C; or Program Chair permission. Co-requisite: IT 281.* 

### IT 280 Advanced Networking Technologies (5)

This is a capstone course for the Network and Cyber Security program. Students will demostrate a complete foundation skill set by using the knowledge and skills acquired in previous course work to implement a complete and secure network using project management, business analysis, budget development, presentation, and technical knowledge and skills.

Prerequisite: IT 262 and IT 270 with a minimum grade of C and IT 271 (may be taken concurrently) or Program Chair permission.

## IT 281 Cyber Security Capstone (5)

This is a capstone course for the Network Administration and Support degree program Cyber Security option. Students will use knowledge learned in previous course work to implement robust security solutions for enterprise networks.

Prerequisite: IT 275 with a minimum grade of C and Program Chair permission. Co-requisite: IT 278.

### IT 282 Database Management Capstone (5)

This is a capstone course for the Networking & Cyber Security degree program Database Management certificate option. Students will use knowledge learned in previous course work to implement robust data security solutions for enterprise networks. *Prerequisite: IT 246 with a minimum grade of C and program chair permission. Co-requisite: IT 249.* 

### IT 290 Work Internship (5)

During one quarter of the sophomore year, students can receive college credits for hands-on computer related work experience and training in a private or public sector organization.

Prerequisite: Program Chair permission.

### IT 299 Indpendent Study & Special Projects (1)

Study on an individual basis Prerequisite: Program Chair permission.

# Japanese

The basic tenets of communications including reading, writing, speaking, and listening are developed in a dynamic second language acquisition environment enhanced by technology.

Grammar is used as a communication tool to express meaning as students take part in small group discussions, cultural investigation, and presentation. Authentic materials will be focused on in the class as well as assessment. Students should expect to be immersed in the language. English will be used at a minimum.

## JAPN& 121 Japanese I (5)

(Formerly JAPAN 101) The first year of the beginning Japanese language sequence of 121, 122, and 123. JAPN& 121 is the first quarter of the sequence. (multicultural content)

Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.

## JAPN& 122 Japanese II (5)

(Formerly JAPAN 102) JAPN& 122 is the second quarter of the first-year language sequence and continues to build on the skills acquired in JAPN& 121. (multicultural content) *Prerequisite: JAPN& 121 with a minimum grade of C or instructor permission.* 

## JAPN& 123 Japanese III (5)

(Formerly JAPAN 123) JAPN& 123 is the third quarter of the first-year language sequence and continues to build on the skills acquired in JAPN& 122. (multicultural content) *Prerequisite: JAPN& 122 with a minimum grade of C or instructor permission.* 

# Library Science

## LS 101 Introduction to Research (2)

Meet course-related research needs by learning to identify, find, evaluate, incorporate, and cite appropriate sources using a range of research tools.

### LS 102 Research for Writing in the Disciplines (2)

Students concurrently registered in 200-level social sciences courses will meet courserelated research needs by developing strategies to identify, find, evaluate, incorporate and cite appropriate sources using a broad range of research tools. Evaluation and use of sources for specific disciplines will be emphasized.

Prerequisite: ENGL& 101 with a minimum grade of C.

## LS 301 Research Skills for BAS (2)

This course will help the student to meet course-related research needs by developing strategies to identify, find, evaluate, incorporate and cite appropriate sources used in their program of study. Evaluation and use of sources specific to the student's program of study will be emphasized.

Prerequisite: ENGL& 101 with a minimum grade of C and Co-requisite HIM 320 or BUS 300 or admission to the Community Health BAS Program.

# Logistics

### LOG 102 Transportation & Distribution (5)

This course will introduce students to the role and importance of transportation and distribution of cargo in the nation's economy and to overview the operations of each mode of the transportation industry. Students will be introduced to the carrier cost structures and operating characteristics, and public policy as it relates to transportation regulations. Practical aspects of transportation and distribution such as planning, routing, scheduling and loading cargo, and adhering to regulatory, safety, security and adminsitrative requirements will be stressed.

Prerequisite: ENGL/ 095 with a minimum grade of C or assessment at college-level reading and witing. Recommended: LOG 102.

## LOG 104 Applied Warehousing and Inventory Management (5)

This course introduces students to practical concepts of warehousing and inventory management including the types of equipment, storage processes and systems, the technologies used to identify and track units in a warehouse, and the regulations designed to ensure safety in warehouse operations. Students will gain a better understanding of warehouse processes through field trips and/or applied lab exercise. Includes a series of applied hands-on exercises. This version of Warehousing & Inventory Management is required for students in the Business AAS degree. Prerequisite: ENGL/095 with a minimum grade of C or assessment at college-level reading and writing. Recommended: LOG 102.

## LOG 110 International Logistics (3)

This course is an introduction to International Logistics and how organizations enter into and maintain a global presence. Students will learn global trade strategies and some of the controllable and uncontrollable factors that determine success in a global market.

### LOG 112 Importing & Exporting (3)

This course is an introduction to the processes and documentation used in importing and exporting products in today's international marketplace.

Prerequisite: ENGL/ 095 with a minimum grade of C or assessment at college-level reading and writing. Recommended: LOG 102.

## LOG 115 Logistics Security and Risk Management (5)

This course overviews logistics security threats and risks and the countermeasures that can be used to secure fixed assets and assets in transit. Students will become familiar with applicable domestic and international standards, laws, and regulations as well as the technologies that are used in ensuring that the supply chain is safe.

Prerequisite: LOG 102 with a minimum grade of C.

# Mathematics

TCC offers both college transfer and precollege-level courses. TCC uses multiple measures for placement into its math courses (see Placement section, page 10. Courses numbered below 100 cannot be applied toward degree or certificate requirements. See Advising for details.

Students considering a major in mathematics, engineering, science or computer science will normally complete MATH& 141, 142, 151, 152, 153, 254 and MATH 220, 238. Business and economics majors should complete MATH 147 and MATH& 148.

The use of computer applications, including spreadsheets, is included in MATH& 146, MATH 147 and MATH& 148. For these classes, CU 103 and CU 203 are recommended as prerequisites if a student does not have spreadsheet experience.

Many developmental math courses are offered in a computer-mediated format (designated with "CM" in the section number of the class). Students learn by using computer software under their instructor's direction, often working independently or in small groups. Students are required to complete material within a time line established by the instructor. Additional time is required working on a home computer or in a TCC computer lab.

TCC's BEdA program offers affordable alternatives to MATH 085, 090, and 095. See page 156 for more information.

### MATH 075 Review Arithmetic (5)

(Previously MATH 086) Review of basic mathematics including arithmetic of whole numbers, fractions, decimals, percentages, ratios, proportions and plane geometry. Fourfunction basic calculator required. *Prerequisite: ENGL/ 085 with a minimum* grade of *C (may be taken concurrently) or equivalent; and placement at MATH 075 level.* 

### MATH 085 Introduction to Elementary Algebra (5)

(Previously MATH 088) Beginning algebra specifically designed for students with no algebra background. Topics include introduction to variables and signed numbers, solutions to linear equations and inequalities, simplification of algebraic expressions, evaluation and manipulation of formulas, an emphasis on word problems and graphing of linear equations.

Prerequisite: ENGL/ 085 with a minimum grade of C (may be taken concurrently) or equivalent; and either MATH 075 with a minimum grade of C or equivalent or ABE 083 with a minimum grade of C.

### MATH 090 Elementary Algebra (5)

Topics include linear equations, polynomials, factoring, rational expressions, and graphing. Scientific calculator required. *Prerequisite: ENGL/ 085 with a minimum grade of C or equivalent; and either MATH 085 with a minimum grade of C or ABE 085 with a minimum grade of C or equivalent.* 

#### MATH 093 Descriptive Statistics with Algebra (5)

Based on the Statway curriculum for teaching statistics with integrated algebra. Introduction to descriptive statistics. Topics include data analysis and statistical studies, graphical and tabular summaries of data, measures of central tendency and variability, basic probability, functions, linear equations, linear regression and two-way tables. Preparation course for MATH-136.

Prerequisite: MATH 085 or ABE 085 with a minimum grade of C or assessment above MATH 085 and ENGL/ 095 (may be taken concurrently) with a minimum grade of C or equivalent.

### MATH 094 Statway Bridge to Business Algebra (5)

Topics include rates of change, introduction to functions, linear, quadratic, exponential and logarithmic functions and their applications, systems of linear equations and inequalities and their applications.

Prerequisite: MATH 136 with a minimum grade of C.

#### MATH 095 Intermediate Algebra (5)

(Formerly MATH 099) Topics include introduction to functions; linear, quadratic, exponential and logarithmic functions and their applications; systems of linear equations and inequalities and their applications; rational exponents and radicals.

Prerequisite: MATH 090 with a minimum grade of C or assessment above MATH 090; and ENGL/ 085 with a minimum grade of C or equivalent.

#### MATH 096 Accelerated Algebra (3)

A survey of algebraic concepts and skills intended for students majoring in math, science, or engineering. Topics include linear, quadratic, and radical functions, simplifying expressions, and solving equations. This course integrates the necessary algebraic skills and concepts into MATH-140 Introduction to Precalculus.

Prerequisite: MATH 090 with a minimum grade of B or MATH 095 with a minimum grade of C or appropriate MATH placement; and ENGL/ 095 with a minimum grade of C or equivalent. Co-requisite: MATH 140.

### MATH& 107 Math in Society (5)

(Formerly MATH 107) A general education course investigating quantitative reasoning and its applications and role in society. Topics may include graph theory, statistics, coding, game theory, symmetry, and geometric and numerical patterns. Mathematical theory combined with quantitative skills will be used in applications to a variety of problems encountered in mathematics and the world. A thematic approach may be taken in this course.

Prerequisite: MATH 095 with a minimum grade of C or equivalent; and ENGL/ 095 with a minimum grade of C or assessment above ENGL/ 095 or equivalent.

# Mathematics

### MATH& 131 Math for Elementary Education 1 (5)

(Formerly MATH 170) A course for prospective teachers focusing on the mathematics underlying modern elementary school math curricula. Topics include deductive reasoning, set theory, whole numbers, fractions, decimals and their operations, and proportion and percentage. Emphasizes deep conceptual understanding, problem solving, and communication of mathematical ideas. *Prerequisite: MATH 095 and ENGL/ 095 with a minimum grade of C or equivalent.* 

### MATH& 132 Math for Elementary Education 2 (5)

(Formerly MATH 171) A course for prospective teachers focusing on the mathematics underlying modern elementary school math curricula. Topics include geometry, measurement, probability, and statistics. Emphasizes deep conceptual understanding, problem solving and communication of mathematical ideas.

Prerequisite: MATH 095 and ENGL/ 095 with a minimum grade of C or equivalent.

### MATH 136 Inferential Statistics (5)

Based on the Statway curriculum for teaching statistics with integrated algebra. Introduction to inferential statistics. Topics include modeling with linear, exponential and quadratic functions, probability distributions, confidence intervals and hypothesis testing for one and two sample proportions and means tests. Completion of MATH 136 is equivalent to completion of MATH& 146. *Prerequisite: MATH 093 with a minimum arade of C.* 

## MATH 140 Introduction to Precalculus (2)

This course integrates analytic geometry concepts into MATH 096 Accelerated Algebra. Topics include one-dimensional and two-dimensional coordinate geometry, parameterized families of functions and their graphs.

Prerequisite: MATH 090 with a minimum grade of B or MATH 095 with a minimum grade of C or appropriate MATH placement; and ENGL/ 095 with a minimum grade of C or equivalent. Co-requisite: MATH 096.

## MATH& 141 Precalculus I (5)

(Formerly MATH 115) In-depth study of the concept of a function, including graphs, transformations, operations on functions, and inverse functions. General theory of functions is applied to the study of polynomial, absolute value, radical, rational, exponential, and logarithmic functions. First course in a two course sequence designed to prepare students for Calculus. Graphing calculator required.

Prerequisite: MATH 140 with a minimum grade of C or appropriate MATH placement; and ENGL/ 095 with a minimum grade of C or equivalent.

# MATH& 142 Precalculus II (5)

(Formerly MATH 116) An introduction to trigonometric functions and their applications. Topics include unit circle definition of trigonometric functions, graphs, identities, inverse trigonometric functions, and solving equations and triangles. Also included is an introduction to conic sections and parametric equations. Second course in a two course sequence designed to prepare students for Calculus. Graphing calculators are required. *Prerequisite: MATH& 141 with a minimum* grade of C or appropriate MATH placement; and ENGL/ 095 with a minimum grade of C or equivalent.

## MATH& 146 Introduction to Statistics (5)

(Formerly MATH 108) Introduction to the basic principles of probability, descriptive statistics, and inferential statistics. Topics include properties of probability, graphical and tabular summaries of data, measures of central tendency and variability, probability distributions, confidence intervals, hypothesis testing, and linear regression.

Prerequisite: MATH 095 with a minimum grade of C or assessment above MATH 095 with a minimum grade of C; and ENGL/095 with a minimum grade of C or equivalent.

## MATH 147 College Algebra for Business and Economics (5)

(Formerly MATH 111) A precalculus course for business majors. Topics include: polynomials, inequalities, rational functions, marginal revenue and costs, matrix algebra, systems of equations, linear programming by graphing and simplex methods, exponential and logarithmic functions, linear regression, and the time value of money. Required: graphing calculator and knowledge of Excel spreadsheets including graphing. *Prerequisite: MATH 095 with a minimum grade of C or MATH 094 with a minimum grade of C or equivalent; and ENGL/ 095 with a minimum grade of C or equivalent.* 

# MATH& 148 Business Calculus (5)

(Formerly MATH 112) (For students in business, economics, social sciences and other fields requiring minimal calculus.) Topics include the derivative, rates of change, maxima and minima, the integral and applications of integrals. Required: graphing calculator and knowledge of Excel spreadsheets including graphing. *Prerequisite: MATH 147 with a minimum* grade of C or appropriate MATH placement and department permission; and ENGL/ 095 with a minimum grade of C or equivalent; and knowledge of Excel spreadsheet software including graphing.

# MATH& 151 Calculus I (5)

Topics of calculus are presented geometrically, numerically, and symbolically. MATH& 151 topics include limits, introduction to differentiation (including derivatives of exponential and logarithmic functions), and applications of the derivative. Graphing calculator required.

Prerequisite: MATH& 142 with a minimum grade of C or appropriate MATH placement and department permission; and ENGL/095 with a minimum grade of C or equivalent.

# MATH& 152 Calculus II (5)

Topics of calculus are presented geometrically, numerically, and symbolically. MATH& 152 topics include applications of integration, differentiation, and methods of integration including improper integrals. Graphing calculator required.

Prerequisite: MATH& 151 with a minimum grade of C or appropriate MATH placement and department permission; and ENGL/095 with a minimum grade of C or equivalent.

# Mathematics

### MATH& 153 Calculus III (5)

Topics of calculus are presented geometrically, numerically, and symbolically. MATH& 153 topics include sequences, infinite series, Taylor series, Taylor polynomials, vectors, and functions of several variables. Graphing calculator required.

Prerequisite: MATH& 152 with a minimum grade of C or appropriate MATH placement and department permission; and ENGL/095 with a minimum grade of C or equivalent.

#### MATH 220 Linear Algebra (5)

Topics include linear systems of equations, matrices, determinants, vectors, abstract vector spaces, linear transformations, eigenvectors and applications. Graphing calculator required.

Prerequisite: MATH& 153 with a minimum grade of C or appropriate MATH placement and department permission; and ENGL/095 with a minimum grade of C or equivalent.

### MATH 238 Elements of Differential Equations (5)

Introductory Course in ordinary differential equations. Topics includes first- and secondorder differential equations, Laplace transform, power series solutions, applications and modeling. Graphing calculator required. *Prerequisite: MATH& 153 with a minimum grade of C or appropriate MATH placement and department permission; and ENGL/ 095 with a minimum grade of C or equivalent.* 

### MATH& 254 Calculus IV (5)

(Formerly MATH 224) Topics of multivariable calculus are presented geometrically, numerically, and algebraically. Emphasis is on problem-solving and understanding concepts. Computers and graphing calculators are used as tools to assist the student in learning to think mathematically. Topics include cylindrical and spherical coordinates, vector valued functions, functions of several variables, partial differentiation, gradients, and double and triple integrals and vector calculus, including Green's and Stokes' theorems. Graphing calculator required.

Prerequisite: MATH& 153 with a minimum grade of C or appropriate MATH placement and department permission; and ENGL/095 with a minimum grade of C or equivalent.

# Music

#### MUSC& 105 Music Appreciation (5)

(Formerly MUS 107) (For the general college student; recommended for education majors.) A focus on listening to music with understanding. A strong emphasis on learning the elements of music, and how they relate to different styles of music.

## MUSC 106 World Music (5)

(Formerly MUS 106) An introduction to musics of various cultures of the world. This class explores the elements of music, music as an expression of human values, music as an identity, and music as a lifestyle. (multicultural content)

### MUSC 110 Introduction to Digital Music (5)

This course introduces students to using computers and digital audio work station applications to make music. Topics covered include: an applied understanding of the elements of music, basic audio editing techniques, basic recording techniques, basic MIDI sequencing, and live performance with digital technology.

#### MUSC 120 Music in the Classroom (5)

(Formerly MUS 120) Designed to instruct elementary education majors in practices with which they might implement music into their classrooms. This course will encompass individual music lesson plans as well as techniques to utilize music within other classroom subjects. Students will lead songs, lessons, and practice exercises in teaching music.

#### MUSC 122 Class Applied Music: Voice (2)

(Formerly MUSC 151 and MUSC 251) Class instruction for the beginning voice student. Development of vocal skills required for performance in solo singing and ensembles as well as an emphasis on reading music and an understanding of basic music theory.

### MUSC 124 Class Applied Music: Piano I (2)

(Formerly MUS 124) Class instruction for the beginning piano student. Development of physical skills required for performance on keyboard instruments as well as an emphasis on reading music and an understanding of basic music theory. Performance/skills course.

### MUSC 125 Class Applied Music: Piano II (2)

(Formerly MUS 125) Second class in a sequence of instruction for the beginning piano student. Continued development of physical skills required for performance on keyboard instruments, as well as an an emphasis on reading music and an understanding of basic music theory. Performance/skills course. *Prerequisite: MUSC 124 or instructor* 

## MUSC 126 Class Applied Music: Piano III (2)

permission.

(Formerly MUS 126) Third quarter of class instruction for the beginning piano student. Continued development of physical skills required for performance on keyboard instruments, as well as an emphasis on reading intermediate/advanced piano music and an understanding of music theory. Performance/skills course. *Prerequisite: MUSC 125 or instructor permission.* 

### MUSC 131 Applied Lessons: String I (1)

Private instruction on a string instrument (violin, viola, cello, bass, harp, guitar). One-on-one instruction in weekly lessons. Performance/skills course. *Prerequisite: Instructor permission.* 

#### MUSC 132 Applied Lessons: Brass I (1)

Private instruction on brass instrument (horn, trumpet, trombone, euphonium, tuba). One-on-one instruction in weekly lessons. Performance/skills course. *Prerequisite: Instructor permission.* 

### MUSC 133 Applied Lessons: Woodwind I (1)

Private instruction on a woodwind instrument (flute, oboe, clarinet, bassoon, or saxophone). One-on-one instruction in weekly lessons. Performance/skills course. *Prerequisite: Instructor permission.* 

#### MUSC 134 Applied Lessons: Percussion I (1)

Private instruction on traditional concert percussion instruments. One-on-one instruction in weekly lessons. Performance/skills course. *Prerequisite: Instructor permission.* 

# Music

# MUSC 135 Applied Lessons: Keyboard I (1)

Private instruction on traditional keyboard instruments (piano, organ). One-on-one instruction in weekly lessons. Performance/ skills course.

Prerequisite: Instructor permission.

### MUSC 136 Applied Lessons: Voice I (1)

Private instruction in singing. One-on-one instruction in weekly lessons. Performance/ skills course.

Prerequisite: Instructor permission.

## MUSC& 141 Music Theory I (5)

(Formerly MUSC 141) Introduction to the materials of Western music, notation, rhythm, scales, intervals, and diatonic triads. Includes elementary ear-training and sight-singing.

## MUSC& 142 Music Theory II (5)

(Formerly MUSC 142) Introduction to the study of Western diatonic harmony. Analysis of 18th and 19th century harmonic usage; composition exercises stressing correct voice-leading and chord succession. Further development of aural skills through ear-training and sight-singing.

Prerequisite: MUSC& 141 with a minimum grade of C or instructor permission.

## MUSC& 143 Music Theory III (5)

(Formerly MUSC 143) Continued study of Western diatonic harmony, and introduction to chromatic harmony through analysis and composition exercises. Further development of aural skills through ear-training and sightsinging.

Prerequisite: MUSC& 142 with a minimum grade of C or instructor permission.

## MUSC 152 Chamber Choir I (2)

(Formerly MUS 180 and MUSC 180) Chamber Choir is the primary vocal ensemble here at Tacoma Community College. Chamber Choir sings a wide range of music. Known for its versatility and polished performances, this group can sing both on and off campus throughout the quarter. May be taken three times. Performance/skills course. *Recommended: MUSC 122 with a minimum* grade of C.

## MUSC 160 Orchestra I (2)

(Formerly MUS 160) Preparation and performance of orchestra music. Students are expected to attend weekly rehearsals, and participate in all concerts. The orchestra is a combination of student and volunteer community musicians. This course is designed for experienced orchestra musicians, in their first year of participation in ensembles at TCC. May be taken 3 times. Performance/skills course.

Prerequisite: Audition or instructor permission.

## MUSC 161 Symphonic Band (2)

(Formerly MUS 290 and MUSC 290) Preparation and performance of concert band music. Students are expected to attend weekly rehearsals, and participate in at least one quarterly concert. This band is a combination of student and volunteer community musicians. This course is designed for students in their first year of participation in the TCC symphonic band. May be taken three times. Performance/skills course. *Prerequisite: Audition only - instructor approval needed.* 

## MUSC 165 Jazz Band I (2)

(Formerly MUS 291 and MUSC 291) Preparation and performance of jazz band music. Students are expected to attend weekly rehearsals, and participate in at least one quarterly concert. this band is a combination of student and volunteer community musicians. This course is designed for students in their first year of participation in the TCC jazz band. Performance/skills course. *Prerequisite: Audition only - instructor approval needed.* 

## MUSC 179 Special Topics in Music (5)

(Formerly MUSC 150) Studies of music related topics outside of the normal course offerings. Topics may include: focused analysis of a music genre, application of different music media, or a detailed examination of historical music styles.

## MUSC 231 Applied Lessons: String II (1)

Private instruction on string instruments (violin, viola, cello, bass, harp, guitar), at an intermediate through advanced level. One-on-one instruction in weekly lessons. Performance/skills course.

Prerequisite: MUSC 131 with a minimum grade of C and instructor permission.

## MUSC 232 Applied Lessons: Brass II (1)

Private instruction on brass instruments (horn, trumpet, trombone, euphonium, tuba), at an intermediate through advanced level. One-on-one instruction in weekly lessons. Performance/skills course. Prerequisite: MUSC 132 with a minimum grade of C and instructor permission.

# MUSC 233 Applied Lessons: Woodwind II (1)

Private instruction on woodwind instrument (flute, oboe, clarinet, bassoon, or saxophone), at an intermediate through advanced level. One-on-one instruction in weekly lessons. Performance/skills course.

Prerequisite: MUSC 133 with a minimum grade of C and instructor permission.

## MUSC 234 Applied Lessons: Percussion II (1)

Private instruction on traditional concert percussion instruments, at an intermediate through advanced level. One-on-one instruction in weekly lessons. Performance/skills course. *Prerequisite: MUSC 134 with a minimum grade of C and instructor permission.* 

## MUSC 235 Applied Lessons: Keyboard II (1)

Private instruction on traditional keyboard instruments (piano, organ) at intermediate or advanced level. One-on-one instruction in weekly lessons. Performance/skills course. *Prerequisite: MUSC 135 with a minimum* grade of C and instructor permission.

## MUSC 236 Applied Lessons: Voice II (1)

Private instruction in singing at an intermediate through advanced level. One-on-one instruction in weekly lessons. Performance/ skills course.

Prerequisite: MUSC 136 with a minimum grade of C and instructor permission.

# Music

### MUSC& 241 Music Theory IV (5)

The study of chromatic harmony in Western music. Analysis of 18th and 19th century harmonic usage; continued secondary chord functions and temporary harmonic modulations. Introduction to large-scale binary and ternary form and analysis. Further development of aural skills through ear training and sight singing.

MUSC& 143 with a minimum grade of C or instructor permission by audition.

### MUSC& 242 Music Theory V (5)

The study of extended chromatic harmony. An analysis of 18th and 19th century harmonic usage; modulations, extended chromatic chord structures, and mode mixture. Continued study of binary and ternary forms and analysis. Further development of aural skills through ear training and sight singing.

Prerequisite: MUSC& 241 with a minimum grade of C or instructor permission.

### MUSC& 243 Music Theory VI (5)

Introduction to Western and non-Western post-chromatic theory. Analysis of 20th and 21st century harmonic usage; modal theory, and atonal theory. Further development of aural skills through ear training and sight singing.

Prerequisite: MUSC& 242 with a minimum grade of C or instructor permission.

#### MUSC 252 Chamber Choir II (2)

(Formerly MUS 280 and MUSC 280) A vocal ensemble whose members are selected by audition. Known for their versatility and polished performances, this group sings both on and off campus several times each quarter. Designed for students that have completed 3 quarters of MUSC 152. May be taken 3 times. Performance/skills course.

Prerequisite: Instructor permission and/or three quarters of MUSC 152.

## MUSC 260 Orchestra II (2)

(Formerly MUS-260) Advanced preparation and performance of orchestra music. Students are expected to attend weekly rehearsals, and participate in at least 1 quarterly concert. This orchestra is a combination of student and volunteer community musicians. This course is designed for students in their second year of participation in the TCC orchestra. May be taken three times. Performance/skills course. *Prerequisite: MUSC 160 with a minimum* grade of C or audition or instructor permission.

### MUSC 261 Symphonic Band II (2)

Advanced preparation and performance of concert band music. Students are expected to attend weekly rehearsals, and participate in at least 1 quarterly concert. This band is a combination of student and volunteer community musicians. This course is designed for students in their second year of participation in the TCC concert band. May be taken three times. Performance/skills course. *Prerequisite: MUSC 161 with a minimum grade* of *C or instructor permission by audition.* 

## MUSC 265 Jazz Band II (2)

Advanced preparation and performance of jazz band music. Students are expected to attend weekly rehearsals, and participate in at least 1 quarterly concert. This orchestra is a combination of student and volunteer community musicians. This course is designed for students in their second year of participation in the TCC jazz band. May be taken three times. Performance/skills course. *Prerequisite: MUSC 165 with a minimum grade of C or instructor permission by audition.* 

#### MUSC 299 Independent Study (1-5)

Independent learning activity designed jointly by student and instructor to improve and/or increase the learner's knowledge and skill in the area of music. This course is an elective, and transferability is inconsistent. Instructor approval needed for enrollment. Variable credit course.

Prerequisite: Instructor permission.

# Nursing

## NURS 101 Health & Illness - Level 1 (2)

This course introduces the student to beginning knowledge of nursing practice. It focuses on the concepts Assessment; Health, Wellness & Illness; and Comfort across the lifespan.

Prerequisite: Admission to the Nursing Program.

### NURS 102 Health & Illness - Level 2 (5)

This course introduces the student to beginning knowledge of nursing practice. Health and Illness concepts included in this course are: Sexuality, Reproduction, Mobility, Sensory Perception, Tissue Integrity, Immunity, Elimination, and Nutrition. All concepts are applied to the care of individuals across the lifespan.

Prerequisite: NURSS 101, NURS 115, NURS 153, NURS 181, NURS 191, and SOCSC 204 with a minimum grade of C.

### NURS 103 Health & Illness - Level 3 (3)

This course introduces the student to intermediate knowledge of nursing practice. Health and Illness concepts included in this course are: Fluid and Electrolytes, Acid-Base Balance, Inflammation, Infection and Metabolism. All concepts are applied to the care of individuals across the lifespan. *Prerequisite: NURS 154, NURS 116, NURS 192 and NURS 102 with a minimum grade of C.* 

### NURS 115 Skills and Assessment Lab I (2)

This course introduces the nursing student to the application of concepts through clinical skills in the laboratory setting. Concepts of assessment, caring interventions, teaching and learning, safety, mobility, elimination, perfusion, oxygenation, and infection will be included across the lifespan. Students will participate in supervised practice and competency validation under simulated conditions.

Prerequisite: Admission to the Nursing program.

## NURS 116 Skills and Assessment Lab II (3)

This course introduces the nursing student to the application of concepts through clinical skills in the laboratory setting. Concepts of assessment, caring interventions, comfort, fluid and electrolytes, elimination, nutrition, metabolism, tissue integrity, and infection will be included across the lifespan. Accurate calculation, measurement, and administration of medications will be also be emphasized. Students will participate in supervised practice and competency validation under simulated conditions

Prerequisite: NURS 101, NURS 115, NURS 153, NURS 181, NURS 191, and SOCSC 204 with a minimum grade of C.

### NURS 117 Skills and Assessment Lab - LPN Transition (3)

This course is designed for LPNs transitioning to the RN program. It reinforces the application of concepts through clinical skills in the laboratory setting and introduces the LPN to skills necessary to successfully transition to the role of RN. Concepts of assessment, caring interventions, comfort, fluid and electrolytes, elimination, nutrition and digestion, metabolism, tissue integrity, and infection will be included. Accurate calculation, measurement, and administration of medications will also be emphasized. Students will participate in supervised practice and competency validation under simulated conditions.

Prerequisite: Active unencumbered WA LPN License and admission to the Nursing program.

## NURS 124 Clinical Simulation III (2)

This course provides learning opportunities through simulated practice of nursing care delivery. It includes participation in select patient scenarios across the lifespan in a simulation lab setting, using application of concepts in coordination with other courses in the program.

Prerequisite: NURS 102, NURS 116, NURS 154, and NURS 192 with a minimum grade of C.

### NURS 125 Clinical and Simulation - LPN Transition (3)

This course provides continued learning opportunities through simulated and actual clinical practice of nursing care delivery. It includes select patient scenarios across the lifespan in a simulated lab setting, using application of concepts in coordination with other courses in the program. In the clinical setting, the students will have learning opportunities to apply concepts and skills in the caring of patients with medical-surgical needs in the acute care or specialty care setting across the lifespan. Principles of communication, safety, and application of the nursing process, including accurate calculation, measurement, and administration of medications, will be included in both the simulated and the clinical settings Prerequisite: Admission to the Nursing program.

## NURS 153 Pharmacology I (1)

This course introduces the student to pharmacology. Pharmacological concepts included in this course are: pharmacokinetics, routes of administration, dosage calculation, safe medication administration, therapeutic effects, side and adverse effects, interactions, and contraindications. Specific medications related to the concepts Health, Wellness & Illness, Comfort, Stress & Coping, and Development are included. *Prerequisite: Admission to the Nursing program.* 

## NURS 154 Pharmacology II (1)

This course continues with pharmacological concepts about the pharmacokinetics, routes of administration, dosage calculation, safe medication administration, therapeutic effects, side and adverse effects, interactions, and contraindications of specific medications for the following areas: Immunity, Sexuality, Reproduction, Elimination, and Nutrition across the lifespan.

Prerequisite: NURS 101, NURS 115, NURS 191, NURS 181, NURS 153, and SOCSC 204 with a minimum grade of C.

## NURS 155 Pharmacology III (1)

This course continues with pharmacological concepts about the pharmacokinetics, routes of administration, dosage calculation, safe medication administration, therapeutic effects, side and adverse effects, interactions, and contraindications of specific medications for these areas across the lifespan: Fluid and Electrolytes, Acid-Base Balance, Inflammation, Infection, and Metabolism.

Prerequisite: NURS 116, NURS 192, NURS 154 and NURS 102 with a minimum grade of *C*.

## NURS 156 Pharmacology - LPN Transition (1)

This course continues with pharmacological concepts about the pharmacokinetics, routes of administration, dosage calculation, safe medication administration, therapeutic effects, side and adverse effects, interactions, and contraindications of specific medications for these areas across the lifespan: Fluid and Electrolyte and Acid-Base Balance, Inflammation, Tissue Integrity, Infection, Cellular Regulation, Metabolism, Immunity, and Elimination.

Prerequisite: Acceptance into the LPN to RN Bridge program.

### NURS 177 Health & Illness Concepts - LPN Transition (3)

This course introduces the student to intermediate knowledge of nursing practice. Health and illness concepts included in this course are: Cellular Regulation, Metabolism, Immunity, and Elimination. All concepts are applied to the care of individuals across the lifespan and include elements of nutrition as applicable.

Prerequisite: Acceptance into the LPN to RN Bridge program..

## NURS 181 Professional Concepts I (1)

This course introduces the student to beginning knowledge, skills and attitudes of nursing as a profession and includes the following concepts across the lifespan: Professional Behaviors, Collaboration, and Clinical Decision Making. *Prerequisite: Admission to the Nursing Program.* 

### NURS 182 Professional Concepts II (1)

This course introduces the student to beginning knowledge, skills and attitudes of nursing as a profession and includes the following concepts across the lifespan: Legal Issues, Health Care Systems, and Informatics. *Prerequisite: NURS 101, NURS115, NURS 153, NURS 181 and NURS 191 with a minimum grade of C.* 

### NURS 183 Professional Concepts III (1)

This course introduces the student to intermediate knowledge, skills and attitudes of nursing as a profession and includes the following concepts across the lifespan: Teaching and Learning, Safety, and Evidence-Based Practice.

Prerequisite: NURS 116, NURS 154, NURS 182 and NURS 192 with a minimum grade of C; or either NURS 102 with a minimum grade of C.

#### NURS 184 Professional Concepts - LPN Transition (2)

This course introduces students to intermediate knowledge, skills, and attitudes of nursing as a profession and includes the following concepts across the lifespan: Accountability, Clinical Decision Making, Legal, Informatics, Teaching and Learning, Safety, and Evidence Based Practice.

Prerequisite: Acceptance into the LPN to RN Bridge program.

### NURS 191 Clinical I (3)

This course introduces students to the application of concepts and skills in sub-acute care and community settings. Principles of communication, assessment, safety, and application of the nursing process will be included across the lifespan.

Prerequisite: Admission to the Nursing program.

## NURS 192 Clinical II (3)

This course introduces students to the application of concepts and skills in subacute and acute care settings across the lifespan, including maternal-child and pediatrics. Mental health concepts are an additional focus as applied to patients/clients in non-psychiatric settings. Principles of communication, safety, and application of the nursing process, including accurate calculation, measurement, and administration of medications, will be included.

Prerequisite: NURS 101, NURS 115, NURS 153, NURS 181, NURS 191, and SOCSC 204 with a minimum grade of C.

## NURS 193 Clinical III (3)

This course introduces students to the application of concepts and skills in caring for patients with medical-surgical needs in the acute care setting across the lifespan. Principles of communication, safety, and application of the nursing process, including accurate calculation, measurement, and administration of medications, will be included. *Prerequisite: NURS 102, NURS 116, NURS 154, NURS 192 with a minimum grade of C.* 

#### NURS 201 Health & Illness - Level 4 (4)

This course introduces the student to intermediate knowledge of nursing practice. Health and Illness concepts included in this course are: Neuroprotection, Oxygenation, Perfusion, and Thermoregulation. All concepts are applied to the care of individuals across the lifespan.

Prerequisite: NURS 103, NURS 124, NURS 155, NURS 193, and PHIL 201 with a minimum grade of C.

#### NURS 202 Health & Illness - Level 5 (5)

This course introduces the student to advanced knowledge of nursing practice. It addresses complex aspects of the following health and illness concepts: Immunity, Fluid and Electrolytes, Tissue Integrity, Cellular Regulation, Comfort, and Grief and Loss. All concepts are applied to the care of individuals across the lifespan.

Prerequisite: NURS 201, NURS 226, NURS 256, NURS 294, and PHIL 202 with a minimum grade of C.

### NURS 226 Clinical Simulation IV (2)

This course provides continued learning opportunities through simulated practice of nursing care delivery. It includes participation in select patient/client scenarios across the lifespan in a simulation lab setting, using application of concepts in coordination with other courses in the program. *Prerequisite: NURS 103, NURS 124, NURS 155, NURS 193, and PHIL 201 with a minimum grade of C; or NURS 117, NURS 125, NURS 156, NURS 177, and NURS 184 with a minimum grade of C.* 

#### NURS 227 Clinical Simulation V (2)

This course provides advanced learning opportunities through simulated practice of nursing care delivery. It includes participation in select patient scenarios across the lifespan in a simulation lab setting, using application of concepts in coordination with other courses in the program.

Prerequisite: NURS 201, NURS 226, NURS 256, NURS 294, and PHIL 202 with a minimum grade of *C*.

### NURS 228 Clinical Simulation VI (1)

This course provides culminating learning opportunities through simulated practice of nursing care delivery. It includes participation in select patient scenarios across the lifespan in a simulation lab setting, using application of concepts in coordination with other courses in the program.

Prerequisite: NURS 202, NURS 227, NURS 257, NURS 295, and SOCSC 205 with a minimum grade of C.

#### NURS 234 Transition to Practice: Seminar (1)

This course supports the student's Transition To Practice clinical experience in NURS 296. It provides the opportunity to reflect on clinical experiences with peers, and formulate problem-solving strategies that can be applied in the clinical setting.

Prerequisite: NURS 202, NURS 227, NURS 257, NURS 295, and SOCSC 205 with a minimum grade of C. Corequisite: NURS 296.

## NURS 244 Preparation for the Natl Council Licensing Exam (1)

This course is to prepare students through extensive assessment and review for the National Council of State Boards of Nursing's National Council Licensing Examination for Registered Nurses (NCLEX-RN). *Prerequisite: NURS 202, NURS 227, NURS 295, NURS 257 and SOCSC 205 with a minimum grade of C.* 

## NURS 256 Pharmacology IV (1)

This course continues with pharmacological concepts about the pharmacokinetics, routes of administration, dosage calculation, safe medication administration, therapeutic effects, side and adverse effects, interactions, and contraindications of specific medications for these areas across the lifespan: Oxygenation, Perfusion, and Neuroprotection. Prerequisite: NURS 103, NURS 124, NURS 193, NURS 155 and PHIL 201 with a minimum

grade of C; or NURS 117, NURS 125, NURS 156, NURS 177, and NURS 184 with a minimum grade of C.

## NURS 257 Pharmacology V (1)

This course continues with pharmacological concepts about the pharmacokinetics, routes of administration, dosage calculation, safe medication administration, therapeutic effects, side and adverse effects, interactions, and contraindications of specific medications or fluids for medications in these areas: immunity, fluid and electrolytes, infection, cellular regulation, comfort, cognition and mood and affect across the lifespan. *Prerequisite: NURS 201NURS 226, NURS 294, NURS 256 and PHIL 202 with a minimum grade of C.* 

### NURS 260 Nursing Focus VI: Advanced Intravenous Therapy Skills (1)

This course provides advanced content related to the care of clients receiving intravenous fluids. Concepts related to selecting solutions, managing common complications, legal/ ethical considerations, infection control, managing catheters and implanted port devices are discussed. Principles of the nursing process, growth and development, nutrition, pharmacology and health teaching are integrated.

Prerequisite: NURS 221, 222 and 242 or instructor permission.

## NURS 284 Professional Concepts IV (1)

This course introduces the student to intermediate knowledge, skills, and attitudes of nursing as a profession and includes the following concepts across the lifespan: Collaboration, Managing Care, and expands on Legal Issues.

Prerequisite: NURS 103, NURS 124, NURS 155, NURS 183 and NURS 193 with a minimum grade of C; or NURS 117, NURS 125, NURS 156, NURS 177 and NURS 184 with a minimum grade of C.

## NURS 285 Professional Concepts V (1)

This course introduces the student to advanced knowledge of nursing as a profession and includes the following concepts across the lifespan: Health Policy, Health Care Systems, Ethics, and Clinical Decision Making. *Prerequisite: NURS 201, NURS 226, NURS 256, NURS 284 and NURS 294 with a minimum grade of C.* 

## NURS 286 Professional Concepts VI (1)

This course introduces the student to advanced knowledge and attitudes of nursing as a profession and includes the concepts across the lifespan: Quality Improvement, Professional Behaviors, and Clinical Decision Making.

Prerequisite: NURS 202, NURS 227, NURS 257, NURS 295, and SOCSC 205 with a minimum grade of C.

# NURS 294 Clinical IV (3)

This course continues learning opportunities for students to apply concepts and skills in caring for patients with medical-surgical needs in the acute care or specialty care setting across the lifespan. Principles of communication, safety, and application of the nursing process, including accurate calculation, measurement, and administration of medications, will be included.

Prerequisite: NURS 124, NURS 155, NURS 193 or NURS 103, and PHIL 201 with a minimum grade of C; or NURS 117, NURS 125, NURS 156, NURS 177, and NURS 184 with a minimum grade of C.

# NURS 295 Clinical V (3)

This course advances learning opportunities for students to apply concepts and skills in caring for patients with complex medicalsurgical needs in the acute care or specialty care setting across the lifespan. Principles of communication, safety, and application of the nursing process, including accurate calculation, measurement, and administration of medications, will be included. *Prerequisite: NURS 201, NURS 226, NURS 256, NURS 294 and PHIL 202 with a minimum* grade of *C*.

## NURS 296 Transition to Practice: Clinical (6)

This course is the student's culminating clinical experience and provides immersion into clinical nursing practice. All previously acquired knowledge, skills and attitudes are reinforced and applied to patient/client care under the supervision of an experienced registered nurse in community partners' health care facilities. *Prerequisite: NURS 202, NURS 227, NURS 257, NURS 295 and SOCSC 205 with a minimum grade of C.Co-Requisite: NURS 234.* 

# NURS 297 Independent Study Nursing Clinical (1-5)

Independent learning activity designed jointly by student and instructor to improve and/or increase the knowledge and skill of the learner. *Prerequisite: Instructor permission.* 

### NURS 298 Independent Study Nursing Lab and Simulation (1-5)

Independent lab and/or simulation learning activity designed jointly by student and instructor to improve and/or increase the knowledge and skill of the learner. *Prerequisite: Instructor permission.* 

## NURS 299 Individualized Studies in Nursing (1-5)

Independent learning activity designed jointly by student and instructor to improve and/ or increase the knowledge and skill of the learner.

Prerequisite: Instructor permission.

### Certified Nursing Assistant

### HT 110 Fundamentals of Patient Care (5)

This course will present the theoretical basics of bedside patient care under the guidelines of the federal and state requirements and will also consist of supervised practice of patient care skills. This course will focus on how to perform tasks under the supervision of nursing and/or medical staff such as helping patients eat, dress, and bathe; provide skin care to patients; take vital signs, i.e., temperature, pulse rate, respiration rate, pulse oximetry and blood pressure; and help patients get in and out of bed and walk. Participants who successfully complete this course, and the 3-credit clinical course will meet the criteria to sit for the state board certification exam.

### HT 120 Patient Care Clinical (3)

This course consists of supervised practice in actual patient care settings. Learning experiences are designed to allow development of competence in providing patient focused basic care skills to include but not limited to vital signs, cold/heat application, dressing changes-non-sterile, caring for patient with an IV, caring for a patient on oxygen, intake and output, bathing, am and pm care, toileting, dressing, feeding, positioning, range of motion, transfer techniques, ambulation and patient teaching related to implementation of skills.

### HT 198 Introduction to Health Careers (3)

This course, designed for new college students, will give an overview of the nature of the most common allied health careers and the academic requirements. It will also provide students the opportunity master CPR and learn about HIV/AIDS, both required of all health professionals, as well as service learning opportunities.

# Nutrition

### NUTR& 101 Human Nutrition (5)

A scientific study of human nutrition, with an emphasis on a chemical understanding of the major nutrients, a biologic understanding of the gastrointestinal tract and a practical understanding of dietary needs throughout life. This is not a lab course. Students may not receive credit for both NUTR 101 and NUTR&101.

Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent; and MATH 090 with a minimum grade of C or equivalent. Recommended Preparation: CHEM& 110, BIOL& 100 or BIOL& 160 with a minimum grade of C.

### NUTR 250 Nutrition in Healthcare I (3)

An introduction to the science of nutrition. Examines the foundational concepts of diet and nutrition in relation to health across the lifespan and in the context of healthcare professions. (Students may not get credit for both NUTR& 101 and NUTR 250.) *Prerequisite: BIOL& 175 or BIOL& 242 (may be taken concurrently) with a minimum grade of C.* 

# Oceanography

Students seeking courses for general interest or degree distribution requirements may consider OCEA& 101 and OCEA 179 for the Associate of Arts, General Studies and Applied Sciences degrees. Students intending to major in Oceanography at a baccalaureate institution should consult with the Earth Sciences advisor.

## OCEA& 101 Introduction to Oceanography (5)

(Formerly OCEAN-101) Focuses on topics such as the origin of ocean basins, seawater chemistry, atmospheric and oceanic circulation, waves, and marine ecosystems. The laboratory includes investigations of oceanographic phenomena and local field trips.

Prerequisite: ENGL/ 095 with a minimum grade of C; and either MATH 090 or MATH 093 with a minimum grade of C or equivalent assessment in these areas.

## OCEA 179 Special Topics in Oceanography (1-5)

These are seminars designed to provide Oceanography students with the opportunity to study selected oceanography topics and techniques. Topics and/or techniques covered will generally be determined by the instructor but may also reflect the expressed need or interest of students in the earth science program.

### OCEA 299 Independent Study in Oceanography (1)

Independent study of oceanographic topics. *Prerequisite: Instructor permission.* 

# Paralegal

### PLST 106 Legal Document Production (3)

A basic course teaching technical skills in Microsoft Office computer applications with an emphasis on Microsoft Word and Microsoft Outlook as applied in a law office setting. Students will work through a series of handson assignments specifically tailored to legal documents, calendaring and general case management.

Prerequisite: CU 102 or CU 105 with a minimum grade of C or equivalent. Recommended preparation: CU 091 with a minimum grade of C or recommended ability to type 35 wpm.

# PLST 149 Writing Basics for Paralegals (3)

(Formerly ADLJ 149) This introductory paralegal course is designed to improve the students' writing through emphasis on word usage, grammar and punctuation in typical legal contexts. Students will improve their proofreading and editing skills as they review and draft legal documents with a focus on accuracy and attention to detail. *Prerequisite: Assessment at college-level English and reading* 

### PLST 150 Paralegal Fundamentals & Ethics (5)

(Formerly ADLJ 150) Students will be introduced to the varied and rewarding responsibilities of a paralegal. Topics will cover careers, paralegal organizations, ethics and professional responsibility, paralegal skills and attributes, sources of American law, the court system, specific areas of law, and preparation for the internship.

Prerequisite: Assessment at college-level English and reading.

## PLST 151 Legal Research and Writing I (5)

(Formerly ADLJ 151) An introduction to developing effective methods of legal research and writing: Students will participate in a series of exercises that include finding statutes and case decisions in books and through computer-assisted legal research. Students will focus on identifying legal issues and validating cases and statutes while drafting letters, case briefs, and an objective memorandum. This is the first of two required legal research and writing courses. *Prerequisite: Assessment at college-level English and reading.* 

## PLST 152 Introduction to Civil Law (5)

(Formerly ADLJ 152) This course is designed to introduce the student to the foundations of civil law, including substantive issues; contracts; domestic relationships; wills, estates, and probate; torts and personal injury; and the legal profession. Classroom activities will include: case analysis; the drafting, examination and assessment of legal documents; application of general principles related to torts, contracts, family law, and wills; and relevant class projects pertaining to these areas. Activities outside the classroom will include online research and discussion board assignments.

Prerequisite: Assessment at college-level English and reading.

# PLST 153 Civil Procedure I (5)

(Formerly ADLJ 153) Students will be introduced to the procedural requirements in the civil litigation process with an emphasis on the requisite skills and knowledge essential to practicing paralegals. Statutes, case law and court rules (state and federal) will be examined, and the drafting of legal pleadings and other civil case documents will be assigned. Using simulated fact and legal scenarios, students will track and analyze the procedural aspects of a civil lawsuit from inception to verdict covering the stages of pleadings, discovery, motions practice, negotiations and pretrial settlement. Prerequisite: Recommended: PLST 149 with a minimum grade of C.

## PLST 154 Computer Applications in the Law (3)

(Formerly ADLJ 154) This course is an introduction to computer technology and its applications within a law firm. Students will have the opportunity to apply hands-on training with Microsoft Office Suite (Word, Excel, Access and Outlook); timekeeping software; docket control/case management software; litigation support software; and evidence display software. Resources and techniques for the efficient application of software typically found in the law office are provided in addition to hands-on work with industry-specific software applications. *Prerequisite: ENGL/ 095; and CU 105 or equivalent; and PLST 106 or equivalent.* 

# Paralegal

### PLST 155 Health/Dealing With Stress (1)

(Formerly ADLJ 155) The paralegal field can challenge a professional's health and wellbeing. This online course helps the student recognize cues that may be barriers to optimal health and well-being, and offers tools and practicum for dealing with stress and achieving a healthy balance in various areas of life, including school, work, and family. *Prerequisite: Assessment of college-level English and reading.* 

### PLST 156 Criminal Procedure for Paralegals (5)

(Formerly ADLJ 156) This course is designed to teach students the basic concepts of substantive criminal law emphasizing Washington statutes and criminal procedure with a focus on individual rights under the United States Constitution. Students will prepare documents typically drafted by paralegals in a law office or agency in the field of criminal law defense or prosecution. *Prerequisite: Assessment at college-level English and reading or completion of ENGL* 095 and READ 095 or ENGL/ 095.

### PLST 221 Family Law (3)

(Formerly ADLJ 221) This course will introduce students to the legal authorities and procedures involved in family law cases. Topics covered will include marriage, divorce, adoption, legal separation, paternity and child support, parenting plans, and other topics. Students will learn to identify and resolve various family law issues, as well as to draft common family law documents such as child support worksheets.

Prerequisite: Assessment at college-level English and reading.

#### PLST 222 Probate/Estate Planning (3)

(Formerly ADLJ 222) Estate planning involves the financial and healthcare arrangements that are made during a person's lifetime as well as the preparation for transfer of that person's assets at death. Probate is the process of proving the validity of a will and ensuring that the instructions in a valid will are carried out. Students will develop knowledge and skills for the drafting of wills and trusts and for the procedural requirements of the probate process. *Prerequisite: Assessment at college-level English and reading.* 

## PLST 223 Alternative Dispute Resolution (3)

(Formerly ADLJ 223) Alternative Dispute Resolution is a method of resolving disputes before they go to trial. Negotiation, mediation and arbitration are forms of ADR. Paralegals may qualify as mediators and directly assist parties in reaching an agreement. Other paralegals will assist attorneys in this fast growing method of settling disputes. Students will become familiar with the ADR laws in Washington State. *Prerequisite: ENGL/ 095 with a minimum* grade of C or equivalent.

#### PLST 224 Real Estate Law (3)

(Formerly ADLJ 224) An introduction to law and legal systems as related to real estate transactions. Major topics include forms of ownership; title, transfers and insurance; fraud, deceit and misrepresentation; contract law and documents; real estate security documents; and duties and liabilities of licensees.

Prerequisite: Assessment at college-level English and reading or ENGL 095 and READ 095 or ENGL/ 095.

### PLST 225 Bankruptcy Law (3)

(Formerly ADLJ 225) Bankruptcy law is federal law with the proceedings taking place in the federal court system. Students will learn about the various types of relief for both individuals and businesses. They will gain knowledge and skills necessary for interviewing the debtor, reviewing creditors' claims, and preparing the documents for submission to the bankruptcy court.

Prerequisite: Assessment at college-level English and reading or completion of ENGL 095 and READ 095 or ENGL/095.

#### PLST 226 Administrative Law (3)

(Formerly ADLJ 226) This course will introduce students to the legal authorities and procedures involved in administrative law cases. Students will learn the state and federal legal authority that creates and empowers administrative agencies and the different areas in which administrative agencies are legally authorized to act. Students will also become familiar with the legal procedures used in administrative law cases, as well as the legal tribunals created to hear and decide administrative law cases. *Prerequisite: Assessment at college-level* 

### PLST 228 Employment and Labor Law (3)

English and reading.

(Formerly ADLJ 228) Employment and labor law includes laws governing health and safety in the workplace, labor unions and union-management relations, employment discrimination, wrongful employment termination, pension plans, retirement and disability income (Social Security), employee privacy rights, the minimum wage, and overtime wages. Students will research Washington State workers' compensation statutes and learn about agencies where paralegals may represent clients during agency hearings.

Prerequisite: Assessment at college-level English and reading.

#### PLST 230 Business Organization/Corporations (3)

(Formerly ADLJ 230) Today's business owners may choose among a variety of business entities for business formation. Besides the traditional sole proprietorship, partnership, and corporation, owners may form limited liability companies and limited liability partnerships. Students will learn about the different relationships, rights, obligations, and regulatory schemes of the various entities. In corporate law, students will develop knowledge and skill in preparing articles of incorporation, drafting corporate bylaws, preparing minutes of corporate meetings, drafting shareholder proposals, reviewing documents relating to the sale of corporate securities, assisting with corporate mergers and acquisitions, and filing papers necessary to terminate a corporation. Prerequisite: ENGL/ 095 with a minimum

grade of C or equivalent.

# Paralegal

### PLST 231 Contracts/Commercial Transactions (3)

(Formerly ADLJ 231) This course provides students with a working overview of the applied contract process. Following traditional instruction methodology as supplemented with practical law office skill development, the course outlines prerequisites of contracting parties and applicable law(s), contract formation, contract performance, breach of contract and available remedies. The course introduces the students to commercial transactions including application and analysis under Article 2 of the Uniform Commercial Code (Washington State adopted version under Revised Code of Washington, Chapter 62A). Contracts and Commercial Law also includes a practicum element in basic contract drafting utilizing both goods and services components with attendant sources of law reflective of primary and secondary legal sources.

Prerequisite: Assessment at college-level English and reading.

### PLST 232 Interviewing and Investigations (5)

(Formerly ADLJ 232) Students are introduced to the legal contexts in which interviewing and investigating skills are utilized. Great emphasis is placed on the development of communication skills for interviewing and the use of resources available for investigating, particularly Internet resources. Students will walk step by step through an investigation by learning how to plan an investigation; handle evidence; identify and locate witnesses; conduct interviews; and locate, evaluate and work with expert witnesses. *Prerequisite: Completion of ENGL /095 or both ENGL 095 & READ 095 or assessment* 

at college-level English and reading.

### PLST 233 Internship I - Paralegal (5)

(Formerly ADLJ 233) The Internship I course provides paralegal majors with the opportunity to apply their classroom learning to worksite responsibilities. The internship offers paralegal students practical work experience under the supervision of an attorney and often a skilled paralegal in day-to-day legal work. Weekly seminar discussions focus on professionalism. PLST 233 is a required course for all paralegal students.

Prerequisite: PLST 106; and CU 105 or equivalent; and PLST 150, PLST 151, PLST 152, PLST 153, and PLST 154; and PLST 156 or equivalent with a minimum grade of C; and permission by faculty internship supervisor.

### PLST 234 Internship II - Paralegal (5)

(Formerly ADLJ 234) The elective Internship II course provides paralegal majors with additional opportunities to apply their classroom learning to worksite responsibilities. Weekly seminar discussions will focus on career advancement.

Prerequisite: PLST 233 and instructor permission.

## PLST 235 Evidence and e-Discovery (3)

This course is a survey in evidence and e-Discovery. Following the groundwork and review of evidence law and discovery rules, the course will shift focus to the concepts, issues, and solutions presented by ESI (electronically stored information) and e-Discovery. Students will examine "white papers" written by both legal commentators and technical experts. Students should have an interest in current civil litigation procedures. *Prerequisite: PLST 153 with a minimum grade* of *C*.

### PLST 239 Transition Planning (1)

(Formerly ADLJ 239) Students take this course shortly before they complete the Paralegal program. Students will build paralegal skills, critique and hone their understanding of professionalism and ethics, research the current job market and networking opportunities, learn to manage work/family balance, update their portfolios, and evaluate the program.

Prerequisite: PLST 150, PLST 152, PLST 153, PLST 106 and instructor permission.

### PLST 251 Legal Research And Writing II (3)

(Formerly ADLJ 251) Building on the research and writing skills acquired in ADLJ 151, students prepare a variety of documents including a motion with persuasive brief. Emphasis is placed on in-depth research of primary and secondary authorities, validation of research, appropriate formatting, citation of legal sources, and strategies for effective writing.

Prerequisite: PLST 151 with a minimum grade of C.

#### PLST 253 Civil Procedure II (3)

(Formerly ADLJ 253) This course is a continuation of the concepts and legal applications learned in Civil Procedure I, to include further analysis of the various issues confronted in civil litigation. Students will learn to interpret and apply state and federal statues and court rules to solve real legal problems. Students will draft various types of legal documents intended to be presented in court and will be able to formulate arguments for and against various legal positions that arise during a civil lawsuit. *Prerequisite: PLST 153.* 

# Philosophy

### PHIL& 101 Introduction to Philosophy (5)

(Formerly PHIL 100) This course will provide a survey of the human quest for greater understanding; connections among efforts to understand the universe; the nature of knowledge; reflections on language and other perennial questions concerning human nature and values. This course will provide an introduction to philosophical thought and issues, the intellectual systems and non-systems and writings of the great philosophers of the Western tradition. (writing intensive)

Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.

### PHIL 201 Ethics and Policy in Health Care I (3)

This course introduces the student to ethics and policy issues related to nursing as a profession. Concepts include Legal Practice, Health Care Systems, Informatics, Evidencebased Practice, Safety, Teaching and Learning and Ethical Practice.

Prerequisite: NURS 102, NURS 116, NURS 154 and NURS 192 with a minimum grade of C.

## PHIL 202 Ethics and Policy in Health Care II (2)

This course introduces the student to ethics and policy issues related to nursing as a profession. Concepts include Advocacy, Managing Care, Health Policy, Ethical Practice and Accountability.

Prerequisite: NURS 201, NURS 226, NURS 256 and NURS 294 with a minimum grade of *C*.

### PHIL 320 Ethical Decision Making (5)

This course covers the complexities of making ethical decisions. Students will encounter major philosophical concepts and theories from the field of ethics. Students will explore the tools, and techniques to make ethical decisions. Students will cultivate their capacity for ethical perception, learn to distinguish tough choices from genuine ethical dilemmas, and gain practice deliberating effectively about a variety of ethical issues drawn from professional contexts. Students will explore the many aspects of what it means to show leadership and how ethical decision making plays a role in leadership at all levels. Students will investigate the mission, vision, and values of their profession to identify ethical standards of practice.

Prerequisite: Acceptance to the AM BAS program and LS 301 with a minimum grade of C or instructor permission.

### PHIL 401 Biomedical Ethics (5)

This course covers diverse issues in healthcare, the ethical and moral decisions that surround those issues, as well as the policies of facilities, legislation, and standards of practice that address those issues. Students will gain knowledge of leadership styles and discuss skills that will address the mission, vision, and values of their profession. *Prerequisite: ENGL 301 with a minimum grade of C and LS 301 with a minimum grade of C. Recommended: PHIL& 101 with a minimum grade of C.* 

# **Physical Education**

In order to receive the Associate of Arts (DTA) or Associate in General Studies degrees, it is necessary to obtain three physical education activity credits. These credits can be included in the 90 credits needed for the degrees. (Students planning to transfer to other institutions should check their requirements.)

Beginning courses are prerequisites to intermediate courses, and intermediate courses are prerequisites to advanced courses. Advanced placement may be made by the instructor. An activity at the same level may not be repeated for credit. Most activities require extra fees.

The physical education requirements may be waived only with approval of the physical education department chairman. Students may request waivers only if there is a medical problem or a student has previous military service.

## PE 100 Total Fitness (2)

An up-to-date approach to physical fitness for better living. Combination lecture and lab, stressing the importance of life-long fitness. Increasing the awareness and establishing the values, benefits and necessity of regular physical activity related to health. Will include individual evaluation, prescription and program implementation.

## PE 106 Tai Chi (1)

Tai Chi is an ancient Chinese system of health giving exercise. Students will build concentration, increase flexibility, and improve physical fitness by learning and practicing basic Tai Chi forms and movements.

### PE 108 Beginning Weight Training (1)

A course designed to introduce the student to the benefits of a regular weight training routine. The student will be taught various exercises in isotonic, isometric and isokinetic lifting. Safety precautions and guidelines will be stressed.

# Physical Education

# PE 109 Toning (1)

An upbeat, high energy course that combines aerobic movements with muscle toning strength movements. Emphasis on total body conditioning. Instruction will include the safe and effective use of fitness apparatus including physio balls and hand weights.

# PE 111 Walking for Wellness (1)

This course is designed to introduce the student to walking and its contributions to wellness. Content includes benefits of walking, development of safe and effective walking skills, nutrition and equipment to enhance walking, and essential components of a walking program.

# PE 122 Beginning Bowling (1)

A course designed to acquaint the student with the game of Bowling. Emphasis is placed on basic fundamentals, mechanics, faults and rules of bowling.

# PE 126 Beginning Badminton & Pickleball (1)

A course designed to allow the student to develop the necessary skills, fundamentals, strategies and knowledge of rules to participate in recreational badminton and pickelball.

# PE 134 Softball (1)

A course designed to introduce the student to the game of softball as a recreational and physical fitness activity. Emphasis is placed on basic individual and team fundamentals.

# PE 135 Beginning Soccer (1)

A course designed to introduce the student to soccer. Emphasis will be placed on basic fundamentals, strategies, and rules of the game.

# PE 136 Volleyball (1)

A course designed to introduce the student to the game of volleyball. Emphasis will be placed on basic skills, i.e., serve, set, pass, block, spike, team strategy and rules of play.

# PE 140 Cardio Fitness (1)

This course is designed to give student information and practical experience on how to maintain a healthy cardiovascular system. Physical activities, nutritional guidelines, and unhealthy behaviors pertaining to cardiovascular health will be covered.

# PE 142 Introduction to Yoga (1)

This course is designed to introduce students to the benefits of yoga as a way to understand the mind/body relationship in exercise and fitness. Basic yoga techniques will be taught as a way to develop balance, core strength, flexibility, and joint stability.

# PE 155 Fast Fitness (1)

Comprehensive physical education course designed to develop strength, flexibility, muscular endurance and cardiovascular efficiency in an effective and timely manner through the use of circuit training.

# PE 170 Independent Fitness Lab I (1)

Self-paced conditioning for the motivated student. This course is designed to give students the opportunity to assess current physical fitness level, establish personal fitness goals, develop and follow an individualized self-paced fitness program. *Prerequisite: PE 100 with a minimum grade of C or PE 108 with a minimum grade of C or PE 140 with a minimum grade of C.* 

# PE 171 Independent Fitness Lab II (1)

Self-paced conditioning for the motivated student. This course is designed to give students the opportunity to assess current fitness goals, as well as develop and follow an individualized self-paced fitness plan. *Prerequisite: PE-170.* 

## PE 175 Hiking (1)

This course is designed to introduce the student to basic techniques and skills necessary to enjoy minimum-impact hiking. Includes information on hiking essentials, trip planning, route finding, equipment, basic wilderness survival, and wilderness first aid. This course also includes several hiking trips throughout the quarter.

## PE 190 Health and Wellness (3)

A course for students to learn how to take control of their personal health and lifestyle habits so they can make a constant and deliberate effort to stay healthy and achieve the highest potential for well-being. Encompasses a total wellness concept of one's physical, mental, emotional and social well being. Students will examine major health issues of contemporary society, with emphasis on identifying risk factors. (This course is a NOT a PE activity course.)

## PE 191 Contemporary Health and Wellness (5)

Emphasis is placed on the relationship between course content and lifestyle choices to foster a better understanding of health issues today. Current issues include, but are not limited to, physical fitness and nutrition; weight management; stress and emotional health; chemical use and abuse; issues in contemporary human sexuality; communicable and noncommunicable disease; health-smart consumerism; the contemporary healthcare system; aging and dying; and environmental health issues. (This course is a NOT a PE activity course.)

# PE 200 Advanced Total Fitness (2)

An advanced approach to physical fitness for more effective living. Combination of lecture and lab stressing the importance of developing positive life-long fitness activities. Course will include evaluation, prescription, program implementation, and goal setting. *Prerequisite: PE-100 or instructor permission.* 

# PE 201 Sport Specific Conditioning (2)

This course is designed to give advanced instruction for the physically active student. Consideration of sport specific and individual fitness goals will be given. Cardio conditioning; strength training; flexibility training, as well as the nutritional aspects of physical performance will be taught.

# Physical Education

### PE 208 Intermediate Weight Training (1)

This course is designed to develop cognitive knowledge pertaining to a higher level of strength training and applying this knowledge in a daily weight lifting program. Students will experience the benefits of weight lifting and will learn how to develop a weight training program designed to meet their personal weight training goals.

Prerequisite: PE-108 or instructor permission.

### PE 222 Intermediate Bowling (1)

A course designed to allow the student to improrve his/her bowling skills. Emphasis on spot, pin, and line bowling. Delivery and form and playing a hookball will be emphasized. *Prerequisite: PE 122 or instructor permission.* 

### PE 226 Intermediate Badminton/Pickleball (1)

Instruction dealing with the techniques of Badminton/Pickleball. This is an intermediate level class dealing with playing strategies, tournaments, and individual playing styles. *Prerequisite: PE 126.* 

### PE 233 Advanced Basketball (1)

A course designed for the advanced basketball player who has competed at a high skill level. Special emphasis will be placed on advanced individual and team concepts.

## PE 236 Intermediate Volleyball (2)

This course is designed to allow the student to improve upon his/her basic skills of playing volleyball. To be able to compete and enjoy the sport on a recreational level.

Prerequisite: PE 136 or instructor permission.

### PE 237 Advanced Volleyball (1)

This course is designed to give students the opportunity to improve their volleball skills to an advanced level of play. Emphasis will be placed on skills and techniques used as a competitive as well as recreational level. *Prerequisite: PE 136.* 

### PE 241 Baseball Techniques (1)

A course in the fundamentals of baseball. Course content includes conditioning, basic skills, strategies, team-play concepts and rules of the game.

Prerequisite: Experience in organized baseballeither high school or college.

## PE 285 Coaching Theory (2)

Provides the novice and experienced coach with the basic teaching and coaching skills, techniques and strategies for coaching all sports and all ages. Includes lectures, group discussions, guest speakers, and actual performance of skills and techniques by individual class members. (This course is NOT a PE activity course.)

### PE 292 Advanced First Aid (5)

The student will satisfy the requirements for advanced American Red Cross first aid and cardiopulmonary resuscitation certification (CPR). (This course is a NOT a PE activity course.)

### PE 299 Individual Study in Physical Education (1)

An independent learning activity, designed jointly by the student and the instructor to improve and/or increase the knowledge and skill of the learner.

Prerequisite: Instructor permission.

# Physics

An advisor should be consulted to determine the appropriate level of physics course for your degree goal. Students intending to major in Physics at a baccalaureate institution should work toward an Associate of Science degree with a Physics Specialization.

## PHYS& 114 General Physics I (6)

Algebra-based physics for liberal arts students and certain professions. Study of basic mechanics including position, velocity, acceleration, forces, momentum, and energy. Laboratory included.

Prerequisite: MATH 095 with a minimum grade of C or higher (but not MATH 136). Recommended Preparation: MATH& 141 with a minimum grade of C.

## PHYS& 115 General Physics II (6)

Algebra-based physics for liberal arts students and certain professions. Study of thermodynamics, oscillations, waves, capacitance, and electric forces/fields/ potential/potential energy. Laboratory included.

Prerequisite: PHYS& 114 with a minimum grade of C or MATH 095 with a minimum grade of C or higher (but not MATH 136). Recommended Preparation: MATH& 141 with a minimum grade of C.

### PHYS& 116 General Physics III (6)

Algebra-based physics for liberal arts students and certain professions. Study of DC circuits, magnetism, geometrical optics, wave optics, and modern physics. Laboratory included. *Prerequisite: PHYS& 114 with a minimum* grade of C or MATH 095 with a minimum grade of C or higher (but not MATH 136). *Recommended Preparation: MATH& 141* with a minimum grade of C.

# Physics

# PHYS& 221 Engineering Physics - Mechanics (6)

(Formerly PHYS 121) Calculus based physics for engineering or those majoring in certain sciences. Introduces problem solving techniques and applications to real world situations. Topics include motions and causes of motion; conservation of energy, momentum and angular momentum; gravitation, center of mass, and torque. Laboratory included. *Prerequisite: MATH& 151 with a minimum grade of C or equivalent.* 

## PHYS& 222 Engineering Physics - Electricity and Magnetism (6)

(Formerly PHYS 122) Calculus based physics for engineering or those majoring in certain sciences. Introduces problem solving techniques and applications to real world situations. Topics include Coulomb's Law, Gauss' Laws, circuits and circuit theory, electrical devices, Ampere's Law, electric and magnetic flux, and induction. Laboratory included.

Prerequisite: PHYS& 221 with a minimum grade of C and MATH& 152 with a minimum grade of C or equivalent.

## PHYS& 223 Engineering Physics - Waves, Optics, and Thermodynamics (6)

(Formerly PHYS 123) Calculus based physics for engineering or those majoring in certain sciences. Introduces problem solving techniques and applications to real world situations. Topics include oscillations, damping, waves, interference, refraction, reflection, optical systems, fluids, specific heat, temperature, ideal gasses, and states of matter. Laboratory included. *Prerequisite: PHYS& 221 with a minimum arade of C.* 

## PHYS 299 Independent Study (1-5)

Independent observation, analysis, and reporting of a physics-related topic. *Prerequisite: Instructor permission.* 

# **Political Science**

## POLS& 101 Introduction to Political Science (5)

(Formerly POLSC 101) This course is intended to serve as a comparative introduction to the concepts, methods, and subject areas of the discipline of political science. Students will explore various forms of political beliefs, behaviors, institutions, and processes at the individual, group, national, and international levels. Strongly recommended for those students with no prior coursework in political science.

Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.

### POLS& 201 Introduction to Political Theory (5)

This course provides a survey of the underlying philosophical ideas and ideologies in the subfield of political science known as political theory. Some of the topics to be considered include essentially contested concepts like democracy, freedom, community, rights, citizenship, and justice which provide the philosophical foundation for various competing political ideologies like classical and welfare liberalism, conservatism, and socialism as well as contemporary debates on issues such as political extremism, environmentalism, feminism, human rights, and multiculturalism.

Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.

### POLS& 202 American Government (5)

(Formerly POLSC 202) This course is intended to provide a basic understanding of the American political system. We will examine the structural foundations of American politics, including our constitutional framework, political culture, and political economy. We will then explore the various political institutions which serve as a link between citizens and government, including public opinion, the mass media, interest groups, social movements, political parties, and elections. Following this, we will turn our attention to the branches of the federal government, including Congress, the Presidency, the federal bureaucracy, and the Supreme Court. Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.

## POLS& 203 International Relations (5)

(Formerly POLSC 203) This course is intended to serve as an introduction to the concepts, methods, and subject areas of the field of international relations within the discipline of political science. Students will explore various forms of political beliefs, behaviors, institutions, and processes shaping the relationships between states and other non-governmental actors in the international system.

Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.

# POLS 231 Politics and Film (5)

(Formerly POLSC 231) This course will examine a variety of political and legal issues through their portrayal in contemporary cinema. Students will read relevant Political Science literature as a background for an analysis of the films viewed in the course. Rotating themes include: elections and the presidency, law and justice, science fiction, organized labor, and American foreign policy. *Prerequisite: ENGL& 101 with a minimum* grade of C or concurrent enrollment.

## POLS 240 Environmental Politics and Sustainability (5)

This class examines the study of politics and policies surrounding sustainability including definitions of sustainability; individual, local, state, national, and international solutions to environmental problems; economics; environmental justice; and business practices. *Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.* 

## POLS 298 Political Internship (1)

Variable credit (1-5). Students will participate in internships with either a political party, interest group, or an elected official and will meet periodically with the instructor to discuss assigned readings and a research paper based on the internship experience. *Prerequisite: Instructor permission.* 

# Psychology

### PSYC& 100 General Psychology (5)

(Formerly PSYCH-100) Introduction to psychology as an academic discipline, including research methods, the nervous system, heredity and development, social behavior, motivation, emotion, learning and memory, cognition, personality, and psychological disorders.

Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.

### PSYC& 180 Human Sexuality (5)

(Formerly PSYCH 165) ) A scientific approach to the study of human sexuality and sexual behavior, including physiological and psychological components. Considers sexuality across the lifespan, sexual dysfunction and therapy, STDs and safer sex, LGBT issues, pregnancy and contraception, communication and relationships. *Prerequisite: ENGL/ 095 with a minimum* grade of C or equivalent.

### PSYC& 200 Lifespan Psychology (5)

(Formerly PSYCH 206) An examination of the physical, social, emotional, and intellectual development of the human from conception to death across cultures. (multicultural content)

Prerequisite: PSYC& 100 with a minimum grade of C and ENGL& 101 with a minimum grade of C or concurrent enrollment.

### PSYC 202 Biopsychology (5)

Biopsychology examines the biological basis of behavior, the nervous system, how it works to control behavior and sense the world, and what happens when it malfunctions. Topics include learning and memory, development, sex, drugs, sleep, the sense, emotions, and mental disorders. Course is intended for Psychology majors intending to transfer. *Prerequisite: PSYC& 100 and ENGL& 101 with a minimum grade of C or concurrent enrollment.* 

Recommended Preparation: BIOL& 175 or concurrent enrollment.

# PSYC 205 Introduction to Personality (5)

(Formerly PSYCH 205) ) Introduction to development and dynamics of personality, the causes of individual differences, personality change and techniques of measuring personality. A broad range of perspectives will be covered, including psychodynamic, biological, and cognitive. This is especially useful for those with interests in counseling and clinical psychology.

Prerequisite: PSYC& 100 and ENGL& 101 with a minimum grade of C.

### PSYC 209 Fundamentals of Psychological Research (5)

This course covers the key themes and concepts of psychological research and is a foundation course for students planning to take additional courses in psychology. Topics include hypothesis testing, experimental design, research strategies and techniques, fundamentals of scientific writing, search and evaluation of research literature in psychology, and ethical issues in psychological research. (writing intensive)

Prerequisite: PSYC& 100 and ENGL& 101 with a minimum grade of C; and either MATH 136 or MATH& 146 with a minimum grade of C (may be taken concurrently).

### PSYC& 220 Abnormal Psychology (5)

(Formerly PSYCH 204) ) A study of the development and symptoms of mental health disorders. Topics covered include schizophrenia, mood disorders, anxiety disorders, personality disorders, psychosomatic disorders, sexual disorders, organic disorders, and the process of adjustment to stress. Attention is given to biosocial, cognitive, and cultural factors and their role in mental health. Strongly recommended for students pursuing clinical or counseling psychology or any mental health related field.

Prerequisite: PSYC& 100 with a minimum grade of C and ENGL& 101 with a minimum grade of C or concurrent enrollment.

### PSYC 240 Social Psychology (5)

(Formerly SOC 240) An introduction to the study of the basic principles underlying the field of social psychology. Topics covered will include social beliefs and attitudes, prejudice, aggression, attraction and intimacy, conformity and persuasion.

Prerequisite: PSYC& 100 with a minimum grade of C and ENGL& 101 with a minimum grade of C or concurrent enrollment.

#### PSYC 299 Individual Study in Psychology (1-5)

(Formerly PSYCH 299) A variable credit (1-3) course based on independent study contracted between an instructor and a student. The emphasis will be a research related project which will provide an opportunity for students to pursue in-depth in an area previously or concurrently covered in a college-level course.

Prerequisite: PSYC& 100 with a minimum grade of B+ and instructor permission.

### PSYC 301 Fundamentals of Research for Healthcare (5)

This course will provide the student with an introduction to research methods as well as analysis and presentation of data. Topics will include a statistical analysis of healthcare data, descriptive, inferential, and vital statistics, data reporting and presentation techniques, research design and methods, and the use of Institutional Review Boards. Prerequisite: Acceptance into the HIM BAS program; Instructor permission only; and either MATH& 146 or MATH 136 with a minimum grade of C. Recommended preparation: PSYC& 100 with a minimum grade of C.

#### PSYC 360 Health Psychology (5)

Health Psychology is the scientific study of how the mind, body, and behavior interact to affect physical health and disease. A major theme that runs throughout the course includes the interrelationship between the social, cultural and systemic factors related to health and well-being. The 4 broad topics emphasized in this course include (but are not limited to): Factors underlying health habits and lifestyles; Methods used to enhance health behaviors and prevent illness and stress and stress management and finally, The services provided by the health care system and how the related patient interactions with respect to system access and utilization. Prerequisite: MATH 136 and MATH& 146 with a minimum grade of C; and Admission to the BAS program or Instructor permission.

# Radiologic Science

## RS 100 Radiologic Science Orientation (3)

This course introduces students to the Radiologic Science program. Students learn of the program's mission and goals, professional requirements, and commitment necessary for success, as well as learning of the oncampus student support services available to them. Additionally, students will become CPR certified and initiate the process of the Washington State requirement/s for X-ray licensing.

Prerequisite: Acceptance into the Radiologic Science program.

#### RS 101 Fundamentals of Radiologic Science and Health Care (4)

Content is designed to provide a foundation of the principles, practices and policies in healthcare and particularly radiology. The student will be introduced to the history of radiology, medicolegal ethics and professional associations. Radiation protection and safety, basic equipment operation, and principles of radiographic exposure will also be covered. *Prerequisite: Acceptance into the Radiologic Science program, or instructor permission.* 

## RS 108 Radiation Physics I (4)

This course introdues the concepts of electromagnetic radiation, its production, control and interactions. The concepts of electricity, electromagnetism, and electrical circuits relating to imaging equipment operation are presented.

Prerequisite: RS 101 with a minimum grade of C or instructor permission.

## RS 109 Radiation Physics II (4)

A continuation of Radiation Physics I. The correct and safe operation of various types of imaging equipment will be discussed. Information on radiation biology will be presented to correlate the hazards of ionizing radiation production and its interaction on human tissue.

Prerequisite: RS 108 with a minimum grade of C or instructor permission.

## RS 120 Clinical Education I (5)

Initial course in competency based radiography clinical education. Students orient to an assigned clinical education center and by instruction, observation, and experience, acquire the necessary basic skills to successfully image patients utilizing ionizing radiation.

Prerequisite: RS 101 and RS 140 and required immunizations, drug screening as required, background check, proof of medical insurance, proof of automobile insurance and current CPR card, and instructor permission.

## RS 121 Clinical Education II (5)

This is a continuation of a series of competency based clinical education classes. Students attend an assigned clinical education center and by instruction, observation, and experience, acquire the necessary skills to successfully image patients utilizing ionizing radiation.

Prerequisite: RS 120 with a minimum grade of C and required immunizations, drug screening as required, background check, proof of medical insurance, proof of automobile insurance, current CPR card, and instructor permission.

## RS 122 Clinical Education III (10)

This is a continuation of a series of competency based clinical education classes. Students attend an assigned clinical education center and by instruction, observation, and experience, acquire the necessary skills to successfully image patients utilizing X-ray ionizing radiation.

Prerequisite: RS 121 with a minimum grade of C and required immunizations, drug screening as required, background check, proof of medical insurance, proof of automobile insurance, current CPR card and instructor permission.

## RS 140 Radiographic Positioning I (5)

This class studies basic positioning principles and terminology. It includes demonstration and lab experience in positioning and identifying related anatomy of the chest, abdomen, upper and lower extremities. *Prerequisite: Acceptance into Radiologic Science Program.* 

### RS 141 Radiographic Positioning II (5)

This class studies basic positioning principles and terminology. It includes demonstration and lab experience in positioning and identifying related anatomy of the spine, hip and pelvis, and bony thorax. Common contrast media exams will also be covered. *Prerequisite: RS 140 or instructor permission.* 

# RS 142 Radiographic Positioning III (5)

This class emphasizes basic positioning principles and terminology regarding the skull and facial structures. General principles of mammography, bone densitometry, geriatric imaging, & contrast media exams of the biliary,central nervous, and reproductive systems are also covered.

Prerequisite: RS 141 or instructor permission.

## RS 150 Principles of Image Formation (1)

This class discusses the factors that are involved in radiographic image formation. Exposure factors and geometric factors that are involved in this process are covered. *Prerequisite: Acceptance into Radologic Science Program or instructor permission.* 

RS 153 Principles of Digital Radiography (1)

This class introduces principles of digital radiography. Basic principles of computer operation as well as its relevancy to image formation with computed radiography (CR) and digital radiography (DR) will be presented. *Prerequisite: RS 150 or instructor permission.* 

## RS 170 Introduction to Fundamentals of Patient Care (5)

Introduces patient care techniques commonly experienced in a radiology department such as venipuncture, proper body mechanics, sterile procedures, and medication & contrast media administration. Additionally, patient communication, HIPAA requirements and emergency CODE procedures are emphasized.

Prerequisite: Acceptance into Radiologic Science program or instructor permission.

# Radiologic Science

### RS 200 Cross Sectional Anatomy (3)

Anatomy of the human body will be studied in cross section. Anatomy of the brain, neck, thorax and heart, abdomen/pelvis and the musculoskeletal system will be presented in the transverse, sagittal, coronal, and oblique imaging planes using multiple diagnostic imaging modalities.

Prerequisite: BIOL& 241 with a minimum grade of C and BIOL& 242 with a minimum grade of C.

### RS 214 Imaging Pathology (3)

A basic review of pathology and pathologic processes as demonstrated on diagnostic images is presented. The images for review include radiographic, and cross sectional CT and MRI images.

Prerequisite: Instructor permission. RS 122 with a minimum grade of C.

### RS 216 Pharmacology and IV Therapy (3)

This class involves a study of drugs common to an imaging department. The general pharmacologic principles, drug categories, routes of administration, drug administration safety, and current practice standards will be discussed. A discussion of contrast agents and their associated reactions will also be presented.

Prerequisite: RS 170 with a minimum grade of C or instructor permission.

#### RS 225 Clinical Education IV (8)

Students entering their second year in clinical will continue to learn new radiographic examinations while maintaining proficiency on previous exams. The students incorporate critical thinking skills and correlate them with previous experiences to enhance their ability to function more independently. *Prerequisite: RS 122 with a minimum grade of C and required immunizations, drug screening as required, background check, proof of medical insurance, proof of automobile insurance, current CPR card and instructor permission.* 

### RS 226 Clinical Education V (7)

Students in the second year of competency based clinical instruction rotate to a new clinical education center and by instruction, observation, and experience, continue to acquire new skills while refining and maintaining proficiency in previously learned examinations. Students incorporate critical thinking skills and correlate it with previous experiences to enhance their ability to function more independently. Prerequisite: RS 225 with a minimum grade of C and required immunizations, drug screening as required, background check, proof of medical insurance, proof of automobile insurance, current CPR card and instructor permission.

#### RS 227 Clinical Education VI (7)

Students in the second year of competency based clinical instruction are assigned to a clinical education center and by instruction, observation, and experience, continue to acquire new skills while refining and maintaining proficiency in previously learned examinations. Students incorporate critical thinking skills and correlate it with previous experiences to enhance their ability to function more independently. Prerequisite: RS 226 with a minimum grade of C and required immunizations, drug screening as required, background check, proof of medical insurance, proof of automobile insurance, current CPR card and instructor permission.

#### RS 228 Clinical Education VII (10)

This is a capstone competency based clinical class in preparation for entry level clinical practice. Students in the second year of instruction are assigned to a clinical education center and continue to acquire new skills, while refining and maintaining proficiency in previously learned examinations. Students incorporate critical thinking skills and correlate it with previous experiences to enhance their ability to function more independently. Prerequisite: RS 227 with a minimum grade of C and required immunizations, drug screening as required, background check, proof of medical insurance, proof of automobile insurance, current CPR card and instructor permission.

### RS 233 Leadership and Management (1)

Studies leadership skills associated with patient care and management. Concepts discussed will include: supervision, delegation, conflict resolution, leadership styles, the work environment, responsibility, accountability, collaboration and résumé preparation. *Prerequisite: RS 225 with a minimum grade* of *C*.

#### RS 243 Radiographic Positioning IV (3)

Demonstration and lab experience of alternate and special positioning of the upper and lower extremities, thoracic cage, shoulder girdle, pelvis, and spinal column. This course also includes a review of basic head work and special positioning of the orbit and temporomandibular joint. Information will be included for performing pediatric and trauma projections. A review of imaging with emphasis on basic quality assurance and image evaluation.

Prerequisite: RS 142 with a minimum grade of C or instructor permission.

### RS 244 Radiographic Positioning V (3)

Advanced patient care procedures involving pediatric and/or severe trauma patient. Special emphasis on child and elder abuse. Includes information for the geriatric, pediatric and patient with disabilities to meet The Joint Commission requirements.

Prerequisite: RS 243 with a minimum grade of C or instructor permission.

#### RS 250 Advanced Healthcare Organization (3)

A closer look at the healthcare organization with emphasis on radiology. Radiology quality control and quality assurance factors will be presented. The five major content areas of diagnostic imaging will be correlated with quality patient care.

Prerequisite: RS 244 with a minimum grade of C and RS 101 with a minimum grade of C; or instructor permission.

# Radiologic Science

## RS 255 Advanced Imaging Modalities (2)

An overview of CT, MRI, U/S, NM and other advanced imaging modalities. The emphasis will be on the various energies used to generate images, the equipment and other dynamics of the imaging environment. *Prerequisite: RS 108 with a minimum grade* of *C* and *RS 109 with a minimum grade* of *C* and must be a second year Radiography Science student. Instructor permission.

## RS 280 Computed Tomography (2)

This course presents CT imaging basics and contrasts it with conventional X-ray imaging.

## RS 290 Radiography Registry Review (2)

This course prepares students to sit for the national registry exam administered by the American Registry of Radiologic Technologists (ARRT). Mock exams will be used to prepare students for the registry's content areas.

## RS 299 Independent Study (1)

Independent learning activity, designed jointly by the student and instructor, to improve and/or increase the knowledge and skill of the learner. *Prerequisite: Program chair permission.* 

# Respiratory Therapy

## RC 150 Fundamentals of Respiratory Care I (4)

Introduces the beginning respiratory care student to basic procedures and skills required in the field. Covers principles and practices of patient assessment, hospital safety, aerosol therapy, bronchial hygiene and hyperinflation therapies.

Prerequisite: Accepted into the Respiratory Care Program.

## RC 151 Fundamentals of Respiratory Care II (4)

Course will continue to build on the clinical skills and knowledge base acquired in RC 150. The Respiratory Care student will be introduced to the critical care environment this quarter. Emphasis is placed on airway management, diagnostic testing and non-Invasive ventilation.

Prerequisite: RC 150.

### RC 152 Introduction into Mechanical Ventilation (4)

Course will continue to build on the clinical skills and knowledge base acquired in RC 150 & 151. This course is to introduce the respiratory student to basic concepts in Mechanical Ventilation including initiation of mechanical ventilation, modes of ventilation, ventilator management and weaning. *Prerequisite: RC 151.* 

### RC 153 Alternative Procedures in Respiratory Care (3)

This course will provide students with knowledge regarding special procedures they will be assisting physicians in performing as well as introducing additional skills based upon Respiratory Care Scope of Practice. Information presented will build upon previously studied pathophysiologies as well as set-up, procedural skills and processing of specimens obtained when applicable. The course will be a combination of lecture and lab skills practice.

Prerequisite: RC 152 with a minimum grade of C.

## RC 160 Cardiopulmonary A & P and Pathophysiology (4)

Course is designed to provide students with information about the structure and function of the respiratory system. Knowledge of a structure is essential to the understanding of the function of the structures, therefore topics include: respiratory and cardiac anatomy and progress to major concepts and mechanisms of cardiopulmonary physiology. *Prerequisite: Accepted into the Respiratory Care Program.* 

## RC 161 Arterial Blood Gases (3)

Course is designed to provide students with additional information about the function of the respiratory system. The student will gain knowledge and interpretation skills regarding the function of gas exchange in the lungs as well as how normal blood gas values change in different disease states. Included will be a comprehensive overview of the subject matter in an organized, interesting manner in the form of lecture, small group discussion, or student presentations. *Prerequisite: RC 160.* 

### RC 162 Advanced RC Pathophysiology (3)

Course is designed to provide students with advanced information about disease processes. General pathophysiology provides a foundation of information for the student to apply in the specialty area of respiratory care. Included will be a comprehensive overview of the disease process in an organized, interesting manner in the form of lecture, small group discussion, or student presentations.

Prerequisite: RC 161 with a minimum grade of C.

# Respiratory Therapy

### RC 165 Evolving Roles in Respiratory Therapy (2)

This course introduces students to current and future trends in health care. Specifically, this course will cover traditional and new roles for respiratory therapists and will present possibilities and tactics for respiratory therapists to work across the range of patient care.

Prerequisite: Enrolled in the RC program.

## RC 171 Respiratory Therapy Equipment II (3)

Course is designed to provide first-year RC students with a background on the principles and technologies of emergency airway management, tracheostomy management, non-invasive patient monitoring, bedside pulmonary function assessment, true volume measuring devices vs. pneumotachometer devices, and RC home medical equipment including patient comfort and compliance issues.

Prerequisite: RC 175 with a minimum grade of C.

## RC 172 Respiratory Therapy Equipment III (4)

Course will provide the principles and technologies for the student to assimilate and interrelate technical and physiological criteria for treating patients on mechanical ventilation (CMV). Students learn logical thinking required to troubleshoot ventilator problems in the ICU and utilize different types of ventilators to gain confidence, proficiency, and appreciate the level of sophistication to which modern ventilators have risen. *Prerequisite: RC 171.* 

### RC 175 Respiratory Care Orientation (2)

Course will provide application of the basic skills required for patient care. The students will learn essential body mechanics to avoid injury; infection control principles; required confidentiality information; legal and ethical principles; and an introduction to vital signs. Students will also complete CPR certification, HIV/AIDS certification for healthcare providers, and receive their program student handbooks. *Prerequisite: Accepted into the Respiratory Care Program.* 

#### RC 180 Respiratory Therapy Clinical I (3)

Course is designed to prepare the beginning Respiratory Care student to perform basic respiratory therapeutic modalities in the hospital setting. Emphasis is placed on patient assessment techniques, oxygen therapy, and bronchial hygiene. This class consists of a lab/ clinical rotation.

Prerequisite: Accepted into the Respiratory Therapy Program.

## RC 181 Respiratory Therapy Clinical II (3)

Course will continue to build on the clinical skills and knowledge base acquired in first quarter. The Respiratory Care student will be introduced to the critical care environment this quarter. Emphasis is placed on airway management, ECG's, arterial blood gases, non-invasive ventilation and CPAP. This class consists of a lab/clinical rotation. *Prerequisite: RC 180 with a minimum grade of C.* 

### RC 182 Respiratory Therapy Clinical III (3)

Course is intended to prepare the third quarter Respiratory Care student to care for patients in the Intensive Care Unit. Topics covered will include the initiation and care of the patient receiving mechanical ventilation and special RC procedures. This class consists of a lab/ clinical rotation.

Prerequisite: RC 181 with a minimum grade of C.

### RC 183 Respiratory Therapy Clinical IV (4)

This is the final clinical course of the first year of the respiratory program. Students are expected to use this time at the clinical sites to polish their clinical skills, improve their time management skills and increase their comfort level and autonomy in the clinical setting in order to be prepared for the advanced clinical courses in the second program year. *Prerequisite: RC 182 with a minimum grade* of *C*.

### RC 192 Advanced Mechanical Ventilation (4)

Course content will emphasize advanced mechanical ventilator applications including non-conventional approaches to patient management in both adult and the pediatric/ neonatal settings.

Prerequisite: RC 152 with a minimum grade of C.

### RC 193 Respiratory Pharmacology I (1)

This is the first in a series of three courses in pharmacology. General pharmacological principles, drug classification, computations, routes of delivery and respiratory medication are emphasized.

Prerequisite: Accepted into the Respiratory Care program.

#### RC 194 Respiratory Pharmacology II (1)

This is the second in a series of three courses in pharmacology dealing with principles of mucolytics, antiasthmatics, antimicrobials, anti-inflammatory agents, surface-active and special applications.

Prerequisite: RC 193 with a minimum grade of C.

#### RC 195 Respiratory Pharmacology III (1)

This is the third in a series of three courses in pharmacology dealing with principles in cold and cough agents, neonatal/ pediatric aerosolized drug therapy, diuretics, cardiovascular pharmacology and the drugs affecting the central nervous system. *Prerequisite: RC 194 with a a minimum grade* of *C*.

### RC 240 Advanced Assessment and Diagnosis (3)

Course will provide second year students with information necessary to care for the critically ill patient. Advanced assessment and diagnosis takes general knowledge learned in first year theory classes and further analyzes patient assessment values to help students make more informed decisions regarding interventions necessary to support the respiratory patient during stabilization and care.

Prerequisite: RC 153 with a minimum grade of C or equivalent.

# Respiratory Therapy

## RC 251 Respiratory Pathophysiology Case Presentations (2)

Course is designed to provide students with a introduction into problem based learning and evidenced based medicine using pathophysiology cases. Included will be a comprehensive overview of the various disease processes, surgical procedures, and new respiratory therapy technology. *Prerequisite: RC 162 with a minimum grade* of *C*.

## RC 261 Pediatric and Neonatal Respiratory Care (4)

Course will provide second year students with an overview of pediatric and neonatal diseases. The field of neonatology/pediatrics is highly dynamic and requires up to date knowledge of clinical and technical skills. A neonatal/pediatric RCP is expected to be able to perform as an integral part of the highly specialized health care team as well as develop critical thinking skills.

Prerequisite: RC 162 with a minimum grade of C.

## RC 262 Review of Applications of Respiratory Care (4)

Course will provide students with a review for the advanced level practitioner written and clinical simulation NBRC examinations. Included will be comprehensive overviews of all respiratory subject matter, including: Analysis of Date, Equipment, and Therapies. *Prerequisite: RC 152 and RC 261 with a minimum grade of C or equivalent; or instructor permission.* 

## RC 263 Pulmonary Functions (3)

Course will provide students with information necessary for understanding Pulmonary Function Testing, Exercise Testing, and their interpretations. Included will be a comprehensive overview of the subject matter in the form of lecture, small group discussion, or student presentations.

Prerequisite: Accepted into the Respiratory Therapy Program.

### RC 272 Pulmonary Rehabilitation, Home Care, and Assistance in Specialty Procedures (3)

Course will provide students with information about the alternate settings of pulmonary rehabilitation and home care. *Prerequisite: Accepted into the Respiratory Therapy Program.* 

RC 280 RC Specialty Clinical I (4)

Course will prepare the second year Respiratory Care student to perform advanced respiratory therapeutic modalities in a variety of settings. Emphasis is placed on advanced assessment techniques and patient education. This class consists of a clinical rotation only. Students will be assigned to Tuesday, Wednesday, or Thursday clinical days. *Prerequisite: RC 183 with a minimum grade* of *C*.

### RC 281 Advanced Critical Care Clinical Rotation (4)

Course will prepare the second year Respiratory Care student to perform advanced respiratory therapeutic modalities in a variety of settings. Emphasis is placed on advanced assessment techniques and patient education. This class consists of a clinical rotation only. Students will be assigned to Tuesday, Wednesday, or Thursday clinical days. *Prerequisite: RC 280 with a minimum grade of C.* 

## RC 282 Neonatal Clinical Rotation (2)

Course will prepare the second year Respiratory Care student to perform advanced respiratory therapeutic modalities in a neonatal intensive care setting. Emphasis is placed on patient assessment techniques. This class consists of a five-week clinical rotation. *Prerequisite: RC 281 with a minimum grade* of *C*.

## RC 283 Specialty Clinical Rotation II (2)

Course is designed to prepare the second year Respiratory Care student as an expert respiratory care practitioner. This five-week rotation is the last clinical rotation before graduation; therefore, students are encouraged to do their final rotation at their desired place of employment. This class consists of a clinical rotation only. *Prerequisite: RC 281 with a minimum grade of C.* 

## RC 290 Ethics and Professionalism in Respiratory Care (2)

While providing care and delivering therapies, RCP's must be continuously aware of the legal and ethical implications of the services they deliver and their actions while delivering them. This course will provide students with information necessary for understanding legal issues and for making ethical decisions in respiratory care.

Prerequisite: Enrolled into the RC program.

# RC 299 Individual Study in Respiratory Therapy (1)

Independent learning activity designed jointly by student and instructor to improve and/or increase the learner's knowledge and skill. *Prerequisite: Instructor permission.* 

# Science

## SCI 105 Introductory Topics in Natural Science (5)

Concepts from multiple scientific fields (including biology, chemistry, physics, and the earth and space sciences) will be investigated through the in-depth exploration of an applied interdisciplinary topic. This course will provide introductory-level science students with an expansive understanding of scientific principles, methods, and techniques. Laboratories and field work included. *Prerequisite: ENGL/ 095 with a minimum* grade of *C* or equivalent; and MATH 090 with a minimum grade of *C* (may be taken concurrently) or equivalent or MATH 093 with a minimum grade of *C* (may be taken concurrently) or equivalent.

# SCI 294 Undergraduate Research in Science (1-5)

Students will work as a part of a team for the quarter to conduct research in the Natural Sciences. The course will involve either laboratory or field study depending on the project, evaluation of primary research papers relevant to the project, and presentation of project results.

Prerequisite: Instructor permission only.

# Social Science

### SOCSC 204 Psychosocial Issues in Healthcare I (3)

This course examines concepts necessary for the effective provision of healthcare in the psychosocial domain. It addresses determinants of health and illness across the lifespan, including social, psychological, environmental, spiritual, and cultural dimensions. Concepts include communication, family, culture & diversity, spirituality, caring interventions, development, stress and coping, and self. *Prerequisite: Admission to the Nursing Program.* 

### SOCSC 205 Psychosocial Issues in Healthcare II (2)

This course examines concepts necessary for the effective provision of healthcare in the psychosocial domain. It addresses determinants of health and illness across the lifespan, including social, psychological, environmental, spiritual, and cultural dimensions. Concepts include cognition, violence, mood and affect, behavior, and stress and coping.

Prerequisite: NURS 103, NURS 124, NURS 155, NURS 193 and PHIL 201 with a minimum grade of C.

# Sociology

### SOC& 101 Introduction to Sociology (5)

(Formerly SOC 110) An introduction to the basic concepts and theories of sociology with an emphasis on the group aspects of human behavior. (multicultural content) *Prerequisite: ENGL/ 095 with a minimum grade of C or equivalent.* 

## SOC 120 Introduction to Women's Studies (5)

Introduction to the study of women, feminism, and theories of oppression and privilege, particularly with respect to gender, sexuality, race, class, and sexual orientation. Topics include systems of oppression, gender socialization, sexuality, violence, and social institutions such as family, health care, media, religion, legal systems, work and labor, and education. (multicultural content) *Prerequisite: ENGL/ 095 with a minimum* grade of C or equivalent.

### SOC 200 Introduction to Research Methods for Sociologists (5)

This course is an introduction to research methods in sociology, covering quantitative, qualitative, primary and secondary data and defining the basic types of research method including social surveys, experiments, interviews, focus groups, participant observation, ethnography and longitudinal studies. This course will also review general issues in the design and implementation of research projects, as well as specific issues that arise in conducting interviews and field observations, constructing and administering surveys, analyzing existing data, and planning program evaluations.

Prerequisite: SOC& 101 with a minimum grade of C; and ENGL& 101 (may be taken concurrently); and either MATH& 146 or MATH 136 (may be taken concurrently).

## SOC& 201 Social Problems (5)

(Formerly SOC 270) A macro-sociological approach to the study of social problems with special emphasis on the effects of institutional change in the economic, educational, family, political, religious, and other systems of contemporary human societies. (multicultural content)

Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.

# Sociology

## SOC 205 Sociology of African Americans (5)

This course explores the socio-historical experiences of African Americans. We will investigate the social history of African Americans in the United States, oppression and the perpetuation of social inequality, current demographic trends, issues of race, class, gender, and family, and contemporary sociological issues of African Americans. We will also debate solutions to various social problems that are of particular concern to the black community. (multicultural course) *Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.* 

## SOC 222 Sociology of Sport (5)

Introduction to the sociological analysis of sport. There will be a particular emphasis on: race, class, gender, and sexuality issues within sport; socialization and interactions within sport; sport and education; deviance, crime, and violence in sport; the business and economics of sport. (multicultural course) *Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.* 

## SOC 238 Sociology of Latinx Americans (5)

This course provides students with a critical overview of some of the central themes and issues that have shaped the experiences of Latinx populations in the U.S. Topics this course will cover include: the history of the "Hispanic" and "Latinx" ethnic labels; U.S.-Latin American relations; different issues faced by various ethnic communities; and the politics of language and bilingualism. Course materials will draw primarily from articles, books, and documentaries to discuss the ways in which Latin Americans influence U.S. society and culture. (multicultural course) *Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.* 

## SOC 255 Sociology of Military and Society (5)

This course examines the military as a social institution with emphasis on the United States. As an institution, the military intersects with other social institutions, such as labor and credit markets, education, and the family. We will investigate the internal organization, practices, and social history of the U.S. military and how it impacts outcomes for race, class, sex, citizen and education status, sexual orientation, and ability. (Multicultural course) Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.

### SOC 262 Race and Ethnic Relations (5)

Builds upon and expands the students' understanding of race and ethnic relations in American contemporary society. Focuses on how immigrant groups adapt to a new country, manifestations of racism and discrimination, as well as the economic and social progress of different ethnic groups. Explores how to alter patterns of racial and ethnic inequality through social movements and social policy. (multicultural course) *Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.* 

## SOC 265 Sociology of Asian Americans (5)

This course explores the socio-historical experiences of Asian American groups. We will investigate the history of Asian immigration to the United States, discriminatory and anti-Asian legislation, factors influencing social inequality amongst Asian American ethnic groups, current demographic trends, issues of race, class, gender, and family, and contemporary sociological issues of Asian Americans. (multicultural course)

Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.

### SOC 271 Introduction to the Sociology of Deviance and Social Control (5)

Analysis of deviant behavior from the perspective of sociological theory and research. Emphasis is on developing a sociological understanding and critical analysis of social theory relating to deviant, criminal, and violent behavior in various societies. *Prerequisite: ENGL& 101 with a minimum grade of C or concurrent enrollment.* 

## SOC 299 Individual Study (1-5)

A variable credit (1-5) course based on independent study contracted between an instructor and a student. The emphasis will be a research related project which will provide an opportunity for students to pursue in-depth in an area previously or concurrently covered in a college-level course. *Prerequisite: SOC& 101 with a minimum* 

grade of B+ and instructor permission.

# Spanish

The basic tenets of communications including reading, writing, speaking, and listening are developed in a dynamic second language acquisition environment enhanced by technology. Grammar is used as a communication tool to express meaning as students take part in small group discussions, cultural investigation, and presentation. Authentic materials will be focused on in the class as well as assessment. Students should expect to be immersed in the language. English will be used at a minimum.

# SPAN& 121 Spanish I (5)

(Formerly SPAN-101) The first year of the beginning Spanish language sequence consists of 121, 122, and 123. SPAN&-121 is the first quarter of the sequence. The basic tenets of communications including reading, writing, speaking, and listening are developed in a dynamic second language acquisition environment enhanced by technology. Grammar is used as a communication tool to express meaning as students take part in small group discussions, cultural investigation, and presentation. Authentic materials will be focused on in the class as well as assessment. Students should expect to be immersed in the language. English will be used at a minimum. (Multicultural Course) Prerequisite: ENGL/095 with a minimum grade of C or equivalent or instructor permission.

# Spanish

### SPAN& 122 Spanish II (5)

(Formerly SPAN-102) SPAN&-122 is the second quarter of the first-year language sequence and continues to build on the skills acquired in SPAN&-121. The basic tenets of communications including reading, writing, speaking, and listening are developed in a dynamic second language acquisition environment enhanced by technology. Grammar is used as a communication tool to express meaning as students take part in small group discussions, cultural investigation, and presentation. Authentic materials will be focused on in the class as well as assessment. Students should expect to be immersed in the language. English will be used at a minimum. (Multicultural Course) Prerequisite: SPAN& 121 with a minimum grade of C or instructor permission.

### SPAN& 123 Spanish III (5)

(Formerly SPAN-103) SPAN&-123 is the third quarter of the first-year language sequence and continues to build on the skills acquired in SPAN&-122. The basic tenets of communications including reading, writing, speaking, and listening are developed in a dynamic second language acquisition environment enhanced by technology. Grammar is used as a communication tool to express meaning as students take part in small group discussions, cultural investigation, and presentation. Authentic materials will be focused on in the class as well as assessment. Students should expect to be immersed in the language. English will be used at a minimum. (Multicultural Course) Prerequisite: SPAN& 122 with a minimum grade of C or instructor permission.

#### SPAN& 221 Intermediate Spanish I (5)

The second year intermediate level Spanish language sequence consists of 221, 222 and 223. SPAN& 221 is the first quarter of the sequence. Classes will focus on the use of listening, speaking, reading and writing skills in the Spanish language in order to analyze, examine and explore oral and written communication using a variety of topics through authentic materials, in all major time frames, reinforcing knowledge from other disciplines through Spanish. (multicultural content) Prerequisite: SPAN& 123 with a minimum grade of *C* or equivalent; or instructor permission.

### SPAN& 222 Intermediate Spanish II (5)

SPAN& 222 is the second quarter of the sequence. Classes will focus on the use of listening, speaking, reading and writing skills in the Spanish language in order to analyze, examine and explore oral and written communication using a variety of topics through authentic materials, in all major time frames, reinforcing knowledge from other disciplines through Spanish. (multicultural content)

Prerequisite: SPAN& 221 with a minimum grade of C or equivalent; or instructor permission.

## SPAN& 223 Intermediate Spanish III (5)

SPAN& 223 is the third quarter of the sequence. Classes will focus on the use of listening, speaking, reading and writing skills in the Spanish language in order to analyze, examine and explore oral and written communication using a variety of topics through authentic materials, in all major time frames, reinforcing knowledge from other disciplines through Spanish. (multicultural content)

Prerequitie: SPAN& 222 with a minimum grade of C or equivalent; or instructor permission.

#### SPAN 299 Independent Study in Spanish (1-5)

A course where students can study more in-depth topics involving Spanish language. Often including readings in Spanish and Latin American literature. Topics will be selected by students, with instructor's approval. *Prerequisite: SPAN& 123 or equivalent class and instructor permission.* 

# Supervision & Mgmnt.

Please contact Invista Performance Solutions at 253-583-8867 for details.

#### SMG 101 Effective Supervision (5)

This course will provide participants with an overview of critical management and supervisory behaviors and strategies. Course content will include a review of the traditional approaches to managing people and the more current methodology of shared governance or participatory management. The intent is to enhance supervisory skills, to improve supervisory effectiveness, strengthen interpersonal workplace relationships, and improve organizational climate and productivity. This course will also review the various roles, responsibilities, and challenges facing first-line supervisors in today's changing workplace environment.

Prerequisite: Instructor permission.

### SMG 120 Supervising the Problem Employee (0)

This course provides various strategies for supervising or managing a problem employee. Course content emphasizes the importance of coaching, counseling, providing "performancebased feedback", and implementing progressive discipline techniques to change behavior and improve performance. Participants will learn intervention techniques, and will use workplace employee problem scenarios to practice new skills. *Prerequisite: Instructor permission.* 

#### SMG 201 Management Communications (3)

Supervisors will learn to communicate more effectively to improve employee satisfaction and heighten employee retention. Course content includes analyzing and practicing basic communication principles and techniques, and will provide methods for overcoming obstacles to effective communication. Participants will also be introduced to effective listening techniques. Emphasis is on practical workplace application.

Prerequisite: Instructor permission.

# Supervision & Mgmnt.

# SMG 261 Dynamics of Leadership (3)

This course compares and contrasts the role of leaders, managers, and front-line supervisors in an organization. Participants will examine the traits, qualities, skills, and workplace actions of effective supervisors and managers. Participants will self-assess their own leadership style, and evaluate their effectiveness after reviewing individual strengths and weaknesses.

Prerequisite: Instructor permission.

## SMG 264 Motivation and Productivity (3)

This course examines methodologies used in the workplace to obtain sustained peak performance from employees. Course content will review effective supervisory techniques and communication strategies. Participants will examine alternatives to "command-andcontrol" and "management-by-compliance" management approaches. The concepts of feedback and intrinsic (as opposed to entrinsic) rewards are emphasized as the foundation for a highly motivational work environment. Emphasis is on the role of the supervisor and the interaction between supervisor and the mployee in building ahighly motivational workforce.

Prerequisite: Instructor permission.

# Writing Center

## WRITE 095 Tools for Reading and Writing (2)

An optional course designed to strengthen both reading and writing skills, and to increase success in ENGL-101 ALP. Students will work in small groups with coaching from an instructor.

Prerequisite: Assessment at or above ENGL 095 and READ 095 or ENGL/095, or completion of ENGL 085 and READ 085 with a minimum grade of C or ENGL/085 with a minimum grade of C or EAP 155 and EAP 159 with a minimum grade of C

## WRITE 096 Writing Center Tutorials (1)

This is a laboratory course that offers students one-to-one tutorial help with assignments for classes where writing is required. No prerequisites, no outside work required. At least nine 50-minute tutorial sessions per quarter, or seven during summer quarter, must be completed for credit. If there is space in the course, it can be added up to midterm with instructor permission. May be taken a total of four times and is graded as Satisfactory/Unsatisfactory.

## WRITE 140 Writing Center Tutor Practicum I (2)

Provides qualified students with training in assisting students in one-on-one tutorial sessions at the Writing & Tutoring center. Topics of study include writing and writing center theories, tutoring strategies, and responding to writing. Course includes regular tutor discussion group meetings and activities in Canvas. Students may have the opportunity to apply tutoring skills in actual sessions and to earn the first level of International Tutoring Program Certification (ITTPC). *Prerequisite: ENGL 095 or ENGL/ 095 and* 

instructor permission.

## WRITE 141 Writing Center Tutor Practicum II (2)

Provides qualified students with training and experience in assisting students in one-onone tutorial sessions at the Writing & Tutoring Center. Course study includes advanced tutoring topics such as working with at-risk students. Course includes regular tutor discussion group meetings and activities in Canvas. Students will apply tutoring skills in actual sessions and have the opportunity to earn the second level of International Tutoring Program Certification (ITTPC). *Prerequisite: WRITE 140*.

## WRITE 142 Writing Center Tutor Practicum III (2)

Provides qualified students with training and experience in assisting students in one-onone and group tutorial sessions at the Writing & Tutoring Center. Includes the opportunity to hold a tutoring leadership role. Course includes regular tutor discussion group meetings and activities in Canvas. Students will apply tutoring skills in actual sessions and have the opportunity to earn the third level of International Tutoring Program Certification (ITTPC).

Prerequisite: WRITE 141.