

---

## Courses of Instruction

Students should consult the curricular guides and the course equivalency guides located in the Academic Advising Center for specific transfer information.

Two digit numbers (11, 12) indicate courses found most frequently in the programs of students whose goals are self-improvement, job entry, and/or occupational upgrading. Students should consult the articulation agreements, curricular guides, and the course equivalency guides located in the Academic Advising Center to obtain transfer information.

### Course Description Sample

<b>BIOL 101 Biological Science</b>	<b>4 CR</b>
------------------------------------	-------------

A one-semester lecture and laboratory course which emphasizes the human organism as a representative living system. The course includes a study of the cell and energy flow; maintenance, coordination, and reproduction mechanisms of heredity and evolution; relationships of humans to their environment; and the impact new biological technologies may have on the future. (Does not count toward a biology major.) [48-32-80]	Lab Fee
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------

The specific amount of the lab fee will vary with current costs of materials and is published in each semester's schedule of classes.

The number at the end of the course description in brackets, e.g. [48-32-80] indicates the hours of instruction in the course. The actual number of hours of instruction and/or distribution may vary due to circumstances, but the typical pattern is shown in the following:

- In the example [48-32-80], the first figure, 48, designates the number of hours of teaching that are primarily lecture or directed group instruction.
- The second figure, 32, designates the number of hours of teaching that are primarily laboratory, clinic, or activity in nature.
- The third figure, 80, designates the total number of hours of teaching provided.

For a more comprehensive coverage of course content and requirements, students are invited to use the collection of course syllabi located in the respective departments' office area.

Certain course prerequisites can be overridden by the department chair or director responsible for the course.

### Placement Score Equivalencies

Course descriptions may show a prerequisite COMPASS placement score. If you have an ASSET or ACT score, you can find the COMPASS correlation in the chart on the next page. Please note the different test names and use the appropriate chart section to find your COMPASS score. The fourth column lists the appropriate course placement based on the skill level indicated by your test score.

## Placement Score Equivalencies Chart

<b>COMPASS SCORES</b>	<b>ACT SCORES</b>	<b>ASSET SCORES</b>	<b>COURSE PLACEMENT</b>
<b>Writing</b>	<b>English</b>	<b>Writing Skills</b>	
0-27	0-13	23-35	ENGL 97
28-37	14	36-37	ENGL 99
38-77	15-19	38-44	ENGL 120
72-77	18-19	42-44	Decision Zone
78-99	19-36	45-55	ENGL 151
93+	26+	51+	ENGL 151 H
<b>Reading</b>	<b>Reading</b>	<b>Reading Skills</b>	
0-45	5-10	23-31	Take COMPASS DX
46-60	11-13	32-35	STSK 98
61-69	14-15	36-37	STSK 99
70-72	16	38	NA
73+	17+	39+	NA
<b>Pre-Algebra</b>		<b>Numerical Skills</b>	
0-31	NA	23-36	MATH 97, 98
32-49	NA	37-41	MATH 99, 100
50-99	NA	42-55	MATH 101
<b>Algebra</b>		<b>Elementary Algebra</b>	
20-39	NA	31-45	MATH 101
40-70	NA	46-55	MATH 121, 111, 135
<b>Algebra</b>		<b>Intermediate Algebra</b>	
40-70	NA	38-47	MATH 121, 111, 135
71-99	NA	48-55	MATH 122, 124, 128
<b>College Algebra</b>		<b>College Algebra</b>	
43-59	NA	37-45	MATH 140
60-99	NA	46-55	MATH 141

---

## ACCOUNTING (ACCO)

### **ACCO 101 General Accounting 4 CR**

Prerequisite: an ASSET reading score (RE) of 36 or higher, or a COMPASS reading score of 65 or higher, or successful completion of STSK 99. An introductory course in accounting which includes the recording and reporting of business transactions, completing the accounting cycle, and preparation of financial statements. Through exercises and problems, the student gains an understanding of the accounting process and the steps that result in financial statements.

### **ACCO 102 General Accounting 4 CR**

Prerequisite: ACCO 101. A continuation of ACCO 101, including the accounting for partnerships and corporations. Topics include income taxes, long-term liabilities, budgeting, and manufacturing/cost accounting. The objective is to give students an overview of generally accepted accounting principles and their importance in business.

### **ACCO 205 Computerized Accounting 4 CR**

Prerequisite: ACCO 101. An accounting course designed to give the student a hands-on experience processing financial records using a general ledger software package. Through the use of business projects, the student will become proficient in the use of accounts receivable, accounts payable, inventory, payroll, fixed assets, and general ledger. All projects will be completed using a Windows driven software package. Lab Fee

### **ACCO 211 Intermediate Accounting 4 CR**

Prerequisite: ACCO 102. A course designed to follow and expand upon the material learned in the accounting principles series. The course includes the study of cash, inventory, receivables, investments, property and equipment, current and long-term liabilities, and equity. The student will become proficient in using commercial accounting software on a microcomputer to maintain a general ledger and to prepare computerized financial statements. Lab Fee

### **ACCO 251 Cost Accounting 4 CR**

Prerequisite: ACCO 102. Cost accounting is the branch of accounting that deals with the planning, measurement, and control of costs. While all types of businesses (service, merchandising, and manufacturing) must have accurate and reliable cost information, the traditional focus of cost accounting has been on manufacturing costs and activities. Manufacturing is the transforming of raw materials into finished products by incurring factory costs. To reinforce the principles of cost accounting, the student will complete a practice set for a manufacturing company.

Lab Fee

### **ACCO 252 Income Taxation 4 CR**

A comprehensive introductory course in tax return preparation. Emphasis will be placed on tax issues and return preparation for individuals and unincorporated businesses. Primary focus is on the development of working familiarity with tax forms, documentation, and solution of tax problems affecting individuals. Federal taxation emphasized.

Lab Fee

## ANIMATION (ANIM)

*Courses designated "E" are for enrichment only. These courses are for zero credit and are not transferable to any institution. Fees for "E" courses include instructor costs and fees.*

### **ANIM 103 Introduction to Video Art 3 CR**

In this film video art course, students will learn basic video operation, cinematography, and non-linear editing with Apple Macintosh computers and software programs such as iMovie, iDVD, and Final Cut. Emphasis will be on comprehensive understanding in the art of the movie image. Students will be challenged to develop their own ideas and showcase skills and techniques. [48-48-96]

Lab Fee

### **ANIM 104 Introduction to Sound, Recording, and Editing 3 CR**

This sound, recording, and editing class will teach basic studio sound recording, on-site sound recording, composing sound, and digital sound editing. Lab Fee

---

**ANIM 233 Introduction to  
2-D Animation Techniques 3 CR**

Students will study the basic principles of animation with an emphasis on the analysis of motion. An overview of the evolution of animation techniques will provide the student with examples of independent film work from early productions to the present day. Students will develop an understanding of basic animation terminology and will complete several individual animation exercises, as well as work on a group project. Appropriate software will be discussed and introduced within the context of each exercise. [48-48-96] Lab Fee

**ANIM 233E Introduction to  
2-D Animation Techniques 0 CR**

Same description as ANIM 233. [48-48-96] Lab Fee

**ANIM 234 Introduction to  
3-D Animation Techniques 3 CR**

This course will explore the foundations of 3-D animation environments, as well as animation techniques unique to digital imagery. Students will develop a series of projects using software designed for the Internet, as well as other 3-D computer-based platforms. Projects will explore a variety of possibilities for 3-D interactive design. Special regard will be given to portfolio development. [48-48-96] Lab Fee

**ANIM 234E Introduction to  
3-D Animation Techniques 3 CR**

Same description as ANIM 234. [48-48-96] Lab Fee

**ANIM 235 Intermediate Animation 3 CR**

Prerequisite: ANIM 234. Character development in a variety of methods will be explored by students in this course in order to enhance students' understanding and appreciation for the effect of strong visual techniques. Further depth in the concepts of storyboards and production design will be explored. Students will learn layout scenes around character action, work with camera fields, deal with issues of composition, and create mood.

While advance instruction on the principles and concepts of character development will be used, students are encouraged to develop their own aesthetic. [48-48-96] Lab Fee

**ANIM 235E Intermediate Animation 0 CR**

Prerequisite: ANIM 234 or 234E. Same description as ANIM 235. [48-48-96]

Lab Fee

**ANIM 236 Advanced Animation 3 CR**

Prerequisite: ANIM 235 or 235E with a grade of "C" or higher. Using the techniques developed in the first three animation courses, the student will complete an animated project demonstrating knowledge of both 2-D and 3-D animation techniques, through motion studies, storyboard composition, character development, refinement of timing, use of exposure sheets, and basic lip-synch techniques. Final projects will be retained electronically for portfolio development. Other current technology will be introduced to direct the shooting, digitization, and efficient inclusion of the project into interactive formats. [48-48-96] Lab Fee

**ANIM 236E Advanced Animation 3 CR**

Prerequisite: ANIM 235 or 235E with a grade of "C" or higher. Same description as ANIM 236. [48-48-96] Lab Fee

## **ANTHROPOLOGY (ANTH)**

**ANTH 200 Introduction to  
Anthropology 3 CR**

Prerequisite: COMPASS reading score of 70, or a "C" in STSK 98 or 99. Adapting to varied and changing environments is examined through the cross-cultural study of social institutions, technologies, and ideologies. The implications of different ways of life for the understanding of human behavior worldwide are also considered. It is recommended that the student's reading score on the COMPASS test fall within the 72-100 range.

---

## ARABIC (ARAB)

### **ARAB 101 Elementary Arabic 4 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. Introduction to the phonology and script of Modern Standard Arabic and its basic vocabulary and fundamental structure. Lab Fee

### **ARAB 102 Elementary Arabic II 4 CR**

Prerequisite: ARAB 101 or permission of Arts and Communication department chair. Review of elements of basic and advanced grammar, conversation, and comprehension practices. Reporting on cultural aspects and simple short stories in the language for individual credit. Lab Fee

## ART (ART)

*Courses designated "E" are for enrichment only. These courses are for zero credit and are not transferable to any institution. Fees for "E" courses include instructor costs and fees.*

### **ART 103 Two-Dimension Design 3 CR**

This course focuses on two-dimensional problem solving, conceptualization, and implementation through exposure to a variety of media and techniques. An emphasis will be placed on critical thinking to achieve communication of content, visual expression, and aesthetic value. [48-48-96]

Lab Fee

### **ART 103E Two-Dimension Design 0 CR**

Same description as ART 103. [48-48-96]

Lab Fee

### **ART 105 Contemporary Art Survey 2 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. Concepts, trends, and ideas as expressed in contemporary visual arts, including architecture, fine arts, and the arts of commerce. Humanities credit.

### **ART 110 Drawing I 3 CR**

An introduction to basic drawing techniques. Assignments cover line and form concepts including contour, perspective, defining and organizing shape, and value patterns. [48-48-96]

Lab Fee

### **ART 110E Drawing I 0 CR**

Same description as ART 110. [48-48-96]

Lab Fee

### **ART 141 Art for Elementary Teachers 3 CR**

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. [32-32-64]

Lab Fee

### **ART 160 Painting and Illustration I 2 CR**

Study of the fundamentals of painting expression. A variety of styles and techniques are explored with emphasis on oil or acrylic paint media. [16-48-64]

Lab Fee

### **ART 160E Painting and Illustration I 0 CR**

Same description as ART 160. [16-48-64]

Lab Fee

### **ART 201 Painting and Illustration II 2 CR**

Prerequisite: ART 160. Development of painting techniques, concepts, and skills through a variety of painting problems. [16-48-64]

Lab Fee

### **ART 201E Painting and Illustration II 0 CR**

Prerequisite: ART 160. Same description as ART 201. [16-48-64]

Lab Fee

### **ART 204 Three-Dimension Art 3 CR**

This course focuses on three-dimensional problem solving, conceptualization, and implementation through exposure to a variety of media and basis-building techniques. An emphasis will be placed on critical thinking to achieve communication of content, visual expression, and aesthetic value. [48-48-96]

Lab Fee

### **ART 204E Three-Dimension Art 0 CR**

Same description as ART 204. Lab Fee

Lab Fee

### **ART 210 History of Photography and Film 3 CR**

This course will explore photography and film from its early years to its present with emphasis on its esthetic, historical, technical, and social contexts.

---

**ART 211 Art Appreciation 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. A survey of contemporary and traditional visual art themes. Emphasis is on current problems in communication through painting, sculpture, photography, film, and architecture. Recommended for Art majors prior to enrollment in Art 212 or 213. Humanities credit.

**ART 212 Art History 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. Historical survey of art from prehistoric ages to the Renaissance. Humanities credit.

**ART 213 Art History 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. Historical survey of art from the Renaissance to the present day. Humanities credit.

**ART 215 Art Seminar I 3 CR**

This studio art course will help students find personal voice through independent projects and research assignments. The course will be topically responsive to current issues and to the interests of students who will explore techniques relevant to individual assignments, different types of image-making processes, and their potential for meaning. Students will progress through further work in specific areas of studio arts. [48-48-96]

Lab Fee

**ART 215E Art Seminar I 0 CR**

Same description as ART 215. [48-48-96]

Lab Fee

**ART 216 4-D Studio Art Seminar II 3 CR**

Prerequisite: ART 215 or departmental approval. With basic understandings of visual literacy, this advanced studio art course will further refine and establish personal voice in art through independent and/or group studio projects (such as time-based art, sound art, film/video art, multimedia art, and research assignments). Students will meet with the instructor as a group and individually. The course will be topically responsive to current issues and to the particular interests

of individual students. Students will explore advanced techniques relevant to each personal assignment. [48-48-96] Lab Fee

**ART 216E 4-D Studio Art Seminar II 0 CR**

Prerequisite: ART 215 or departmental approval. Same description as ART 216. [48-48-96] Lab Fee

**ART 221 Photography Basics 2 CR**

This is an introduction to the basics of photography. The student will learn basic camera operation, black and white film processing, darkroom printing, print matting, and basics of compositional design. [32-32-64] Lab Fee

**ART 221E Photography Basics 0 CR**

Same description as ART 221. [32-32-64] Lab Fee

**ART 222 Introduction to Photography 2-3 CR**

This course will instruct the student in fundamental concepts and techniques of photography, including aesthetics and technical aspects as a basis for creating a photographic image. The student will learn to use the 35 mm camera, process film, composition, print finishing, and basic printing. Instruction on traditional printing practice and digital technologies will be included. The student will be challenged to investigate photographic medium and consider its application to the making of art.

[32-32-64/48-48-96] Lab Fee

**ART 222E Introduction to Photography 0 CR**

Same description as ART 222. [32-32-64/48-48-96] Lab Fee

**ART 223 Intermediate Photography 3 CR**

Prerequisite: ART 222. This course will refine techniques, analysis, and production of photographs using both traditional darkroom and digital technology. The student will be challenged to investigate and explore his or her own creative direction. Students are expected to complete this course with technical proficiency and to have a fuller understanding of photography's critical context in contemporary art. [48-48-96] Lab Fee

---

**ART 223E Intermediate****Photography 0 CR**

Prerequisite: ART 222. Same description as ART 223. [48-48-96] Lab Fee

**ART 224 Advanced Photography 3 CR**

Prerequisite: ART 223. This advanced photography course is for students who want to fine-tune their traditional and digital photography skills. Emphasis will be on furthering explorations in the study of personal expression and development of creative style. Large and medium camera formats will be introduced. Lectures on the history of photography and zone system will be essential to student development. [48-48-96] Lab Fee

**ART 224E Advanced Photography 0 CR**

Prerequisite: ART 223. Same description as ART 224. [48-48-96] Lab Fee

**ART 225 Landscape Photography 2 CR**

Prerequisite: ART 222. A six- to eight-week photographic experience built around an extended field trip. Six one-hour lectures prior to the trip will deal specifically with the techniques of landscape photography. Participants will be able to use the campus photographic library and laboratory to print and develop their work. This class may be combined with another course, such as PEC 122. [16-16-32] Lab Fee

**ART 227 Digital Color Photography 3 CR**

This course is intended to develop an understanding of technical and aesthetic foundation in color photography through the latest digital technology. Students will explore basic color photography with the use of film and digital photographic equipment: image scanning, color digital printing, digital camera, and Adobe Photoshop. [48-48-96] Lab Fee

**ART 229 Studio Photography 3 CR**

Prerequisite: ART 222 or ART 221 with a “C” or better. This advanced photography course will instruct the student in fundamental concepts and techniques of studio photography, including aesthetics and technical aspects as a basis for creating a photographic image using professional studio lighting for both commercial

illustration and personal artistic explorations. Demonstrations include location lighting, portraiture, fashion, and product photography using multiple-light strobe, digital capture workflow, discontinuous lighting techniques and light modification equipment, as well as presentations on historical and contemporary photographic work. [48-48-96] Lab Fee

**ART 230 Digital Color Photography II 3 CR**

Prerequisite: ART 227 with a “C” or better. This advanced course is intended to further refine the technical and aesthetic foundations in color photography through explorations of digital technology. Emphasis will be given to fields of photographic study including fine art and professional practices such as commercial illustration, documentary, portraiture, and photojournalism. Students will take their own digital photographs and then utilize various photographic techniques including digital capture workflow, large-scale color digital printing, and advanced image editing software. [48-48-96] Lab Fee

**ART 231 Watercolor and Illustration I 1-2 CR**

A course designed to introduce the student to various techniques and approaches to watercolor painting. A course with pictorial and non-representational composition, color value, and basic skills for successful watercolor renderings. [16-16-32/16-48-64] Lab Fee

**ART 231E Watercolor and Illustration I 0 CR**

Same description as ART 231. [16-16-32/16-48-64] Lab Fee

**ART 232 Watercolor and Illustration II 2 CR**

Prerequisite: ART 231. A continuation of ART 231 with emphasis on intermediate-level painting problems. [16-48-64] Lab Fee

**ART 232E Watercolor and Illustration II 0 CR**

Prerequisite: ART 231. Same description as ART 232. [16-48-64] Lab Fee

---

**ART 245 Introduction to Ceramics 2 CR**

An introduction to the materials, construction, design processes, glazing, and firing of ceramics. Emphasis is on clay sculpture projects and hand-built pottery with a brief introduction to the potter's wheel. [16-48-64]

Lab Fee

**ART 245E Introduction to Ceramics 0 CR**

Same description as ART 245. [16-48-64]

Lab Fee

**ART 246 Intermediate Ceramics 2 CR**

Prerequisite: ART 245. A course for those who wish to concentrate mainly on throwing techniques in the development of functional and creative problems. Experimental problems in glazing and clay decoration are developed. [16-48-64]

Lab Fee

**ART 246E Intermediate Ceramics 0 CR**

Prerequisite: ART 245. Same description as ART 246. [16-48-64]

Lab Fee

**ART 295 Photography and  
Multimedia Special Topics 3 CR**

This course will instruct the student in fundamental concepts and techniques of digital photography, including aesthetics and technical aspects as a basis for creating a photographic image. The student will learn to use the digital camera and digital darkroom using the Macintosh platform. The student will be challenged to investigate photographic medium and consider its application to the making of art. [48-48-96]

**ART 296 Internship and  
Career Development 3 CR**

This course provides supervision within a seminar setting for the Photography and Multimedia Internship and Career Development student. Activities may include reports on assigned readings, peer discussions of internship experiences, self-assessment activities, guest lectures, field trips, professional portfolio, art business analysis, and promotional materials (resume, business card, postcard, etc.) development. This course is meant to provide a supportive environment in which to examine issues, address concerns, develop skills, and receive the

necessary guidance pertinent to the internship experience and process. Participation in all classes is mandatory. It is recommended that students take this course in their last semester of study. [48-48-96]

Lab Fee

**ART 297 Art Special Topics 1-3 CR**

This course is designed to allow the student to explore focus areas in art, such as cartoon drawing and illustration, portrait painting and drawing, 3-D design and sculpture, and printmaking. Since topics change this course may be repeated for credit toward graduation up to six credits. [16-16-32/16-32-48/16-48-64]

Lab Fee

**ART 297E Art Special Topics 0 CR**

Same description as ART 297. [16-16-32/16-32-48/16-48-64]

Lab Fee

**ART 298 Independent Study 1-4 CR**

Prerequisite: departmental approval. An opportunity for the interested student to pursue independently the study of some subject under the direction of a member(s) of the professional staff. Problems are designed and arrangements made to suit the needs of individual students.

**ASTRONOMY (ASTR)****ASTR 104 Introductory Astronomy 4 CR**

Prerequisite: COMPASS reading score of 70, or a "C" in STSK 98 or 99. The course is structured to introduce the student to many of the celestial objects appearing in our night skies. Methods, equipment, observations, and planetary relationships are introduced in a laboratory situation. [48-32-80]

Lab Fee

**BIOLOGY (BIOL)****BIOL 99 Preparation for Biology 3 CR**

This course is designed for the student who does not possess an adequate chemistry and biology background to enroll in Biology 105, 111, or 201. This course will include selected inorganic chemical concepts, biological molecules and their reactions, cellular structure and function, and an overview of body systems. [32-32-64]

Lab Fee

---

**BIOL 101 Biological Science** **4 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. A lecture and laboratory course which emphasizes the human organism as a representative living system. The course includes a study of the cell and energy flow; maintenance, coordination, and reproduction mechanisms of heredity and evolution; relationship of humans to their environment; and the impact new biological technologies may have on the future. Does NOT count toward a biology major. [48-32-80] Lab Fee

**BIOL 105 Essentials of Human Anatomy and Physiology** **4 CR**

Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a “C” or better in one year of high school biology, BIOL 99, or other college-level biology course. An introduction to anatomy and physiology covering the basic structures and functions of the human body. This course is designed for students in the KCC Emergency Medical Services program. The course includes lecture and laboratory experiences. This course is not a substitute for BIOL 201. Other Allied Health students should take BIOL 201 and BIOL 202. [48-32-80] Lab Fee

**BIOL 109 Principles of Biology I** **4 CR**

Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This is the first semester of a two semester, eight credit, lecture and lab sequence designed to introduce the major concepts of biology with particular emphasis on evidence of evolution, diversity of life, developmental biology, plant structure and function, animal structure and function, control systems in plants and animals, ecology and ecosystems. [48-32-80] Lab Fee

**BIOL 110 Principles of Biology II** **4 CR**

Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a “C” in CHEM 100 or other college-level chemistry course; and a “C” in BIOL 109. A lecture and lab introduction to the major concepts of

biology with particular emphasis on cell structure and function. Includes cellular chemistry, cell ultra structure, energy transformation and flow, cellular reproductive mechanisms, Mendelian and molecular genetics, regulatory and development processes and cellular environments. [48-32-80] Lab Fee

**BIOL 111 Botany** **4 CR**

Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a “C” in BIOL 99, or other college level biology course, or other college-level biology course. A lecture and laboratory course which includes the study of structures, physiology, and natural history of plants. Provides a background for more advanced courses and should be elected by pre-medicine students, as well as prospective biology majors. [48-48-96] Lab Fee

**BIOL 112 Zoology** **4 CR**

Prerequisite: a “C” in BIOL 110. A lecture and laboratory course which surveys the major traditional animal groups. Topics included are classification methods, unique structural and functional characteristics of each group, representative life cycles (developmental and reproductive patterns) from each group, natural history adaptations of each group, and evolutionary trends between groups. [48-48-96] Lab Fee

**BIOL 116 Introduction to Ornithology** **4 CR**

A lecture-laboratory field course involving bird identification; song, courtship, nesting, and migration habits; anatomy and physiology; and the importance of birds to mankind. Open to all interested students. [16-48-64] Lab Fee

**BIOL 140 Life Science for Elementary Educators** **4 CR**

This is a laboratory-based course specifically designed for prospective elementary teachers. The objectives of the course are to aid students in developing meaningful and functional understanding of key biological concepts in anatomy and physiology, ecology, and evolution; to facilitate insight

in the nature of science as an intellectual activity; to explore alternative conceptions of scientific phenomena; to help students develop more positive attitudes about science; and increase their confidence in their ability to do science. [48-32-80] Lab Fee

**BIOL 200 Field Biology 4 CR**

This course emphasizes observation and identification of materials found in different habitats, as well as the interrelations of plants and animals. Instruction is given in techniques of collection and preservation of materials. [32-32-64] Lab Fee

**BIOL 201 Human Anatomy 4 CR**

Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a of “C” or better in one year of high school biology, or BIOL 99, or other college-level biology course. This course is a lecture and laboratory course which provides a detailed study of all human body systems. The primary emphasis is on anatomic structures with a fundamental understanding of physiology. It is strongly recommended that the student have successfully completed one year of high school chemistry or CHEM 100 prior to enrollment. [48-32-80] Lab Fee

**BIOL 202 Human Physiology 4 CR**

Prerequisite: a “C” in BIOL 201. This course is a lecture and laboratory course that provides an introduction to the major concepts and homeostatic mechanisms necessary for a fundamental understanding of normal human physiology. General principles covered are cellular membrane function, electrophysiology, feedback mechanisms, and metabolism. Also included is an analysis of the properties and interrelationships of major organ systems and a brief introduction to selected disease processes. Strongly recommended is a grade of “C” or better in BIOL 99, or BIOL 110, or CHEM 100. [48-32-80] Lab Fee

**BIOL 205 Microbiology 4 CR**

An introductory course which includes the morphology, physiology, and pathology of microscopic organisms. Laboratory exercises

emphasize the culturing, identification, and control of microorganisms. Successful completion of CHEM 100 or concurrent enrollment in CHEM 100 is highly recommended. [48-32-80] Lab Fee

**BUSINESS ADMINISTRATION (BUAD)**

**BUAD 100 Employability—**

**Interpersonal Skills Development 2 CR**

This course is designed to help students enhance their interpersonal skills for career, job, and life success. The main focus is to present opportunities for students to practice developing job-related emotional intelligence and impression management skills.

**BUAD 101 Introduction to Business 3 CR**

A survey course analyzing business organization and management in the areas of marketing, finance, human resources, electronic commerce, and operations management. Emphasis is placed upon developing a vocabulary of business terminology and acquainting the student with careers and opportunities in business. Cases and current events related to business practices are utilized. Lab Fee

**BUAD 104 Business**

**Correspondence 3 CR**

Prerequisite: ENGL 120 or 151. Designed to give students a review of the mechanics of English applicable to business. A review of functional grammar, spelling, and letter layout is included. The primary emphasis is on business letter and report writing both for content and format. Lab Fee

**BUAD 112 Business Statistics 3 CR**

A basic principles course emphasizing statistical techniques, particularly their application to business and economics. The study of descriptive statistics leads to an understanding of measures of dispersion and central tendency. With this background the student progresses to sampling and probability theory leading to inferential statistics. Various tests of significance are studied including chi-square, analysis of variance, and

---

the binomial distribution using real world examples. Finally, the relationship between data is studied using regression and correlation analyses. The use of the computer for statistical analysis will be introduced throughout the course. Recommended for students who have completed Beginning Algebra (MATH 101) and Applications Software (OIT 160) or their equivalents.

**BUAD 115 Global Business 3 CR**

This course consists of an overview of global business today. It is designed to provide the student with the basic concepts and theories pertaining to global business. Included are import and export strategies, global trade, global electronic commerce, economic and political trade issues, cultural aspects, and developing and developed countries. The basic function of global business, including managing, marketing, financing, producing, electronic commerce, and transporting will be discussed on a limited basis.

**BUAD 121 Principles of Advertising 3 CR**

An analysis of advertising's role in modern marketing and how it helps sell goods, services, and ideas. The principles of layout design, copy, media structure, media analysis and selection, budgeting, and campaign strategies are covered. These are applied through numerous projects which emphasize advertising practice in addition to theory. A study is made of the behavioral sciences and their relationship to effective advertising practice.

**BUAD 131 Principles of Management 1-3 CR**

An analysis and application of the basic principles of management. Subjects will include management by objectives, supervisory leadership styles, current managerial problems, motivational techniques, organizational problems, communications, planning techniques, and management control systems. Emphasis will be placed on individual and group involvement through case problems, group discussions, role playing, and other individual involvement methods. Lab Fee

**BUAD 132 Human Resources Management 3 CR**

An analysis of the management of personnel from the viewpoint of the individual supervisor and the personnel department. Subject content will include corrective discipline, grievance procedure, collective bargaining, job analysis, interviewing and placement techniques, performance evaluation, psychological testing of employees, and supervisory development and motivation. These subjects are presented through individual and group involvement techniques, such as case studies, discussions of current problems, and role playing. Lab Fee

**BUAD 200A Cooperative Education I 2-5 CR**

Prerequisite: co-op coordinator approval. This cooperative education experience is for students in the Accounting, Business Administration, and Business Management Programs. The course is designed to provide each candidate with the necessary analytical, problem-solving, decision-making, supervisory and/or communication skills to be successful in a business environment. Students will practice the accounting, administrative, and/or supervisory duties in the existing marketplace. Students will meet as a class one hour per week. Topics in the workplace (including career selection and marketing, investing and retirement planning, professionalism and ethical practices) will be the focus of the weekly co-op series.

**BUAD 200B Cooperative Education II 2-5 CR**

Prerequisite: co-op coordinator approval. This course is a continuation of BUAD 200A. This is a coordinated work experience for students taking accounting- or business-related programs. To be enrolled in this course, students must be in an accounting- or business-related position providing new career-related experiences in the workplace. Students will meet as a class one hour per week.

---

**BUAD 200C Cooperative****Education III****2-5 CR**

Prerequisite: co-op coordinator approval. This course is a continuation of the experiences of BUAD 200A and BUAD 200B. This is a coordinated work experience for students taking accounting- or business-related programs. To be enrolled in this course, students must be in an accounting- or business-related position providing new career-related experiences in the workplace. Students will meet as a class one hour per week.

**BUAD 201 Business Law****3 CR**

General overview of the U.S. legal system covering laws, court procedure, and selected current significant legal rulings. An analysis and application (through the case study approach) of the concepts and rules of law with particular emphasis on the "Uniform Commercial Code." Contracts, torts, commercial papers, and electronic commerce will be covered.

**BUAD 202 Business Law****3 CR**

Secured transactions, business organizations, partnerships, corporations, electronic commerce, bankruptcy, trusts, bailments, estates, wills, property, leases and mortgages, and insurance will be covered. The case method will be employed, and selected current significant legal rulings will be discussed.

**BUAD 212 Personal Finance****3CR**

This course discusses the techniques that can be applied to personal financial management. Key components of this course include concepts and strategies associated with money management, taxation, savings and retirement planning, consumer credit and financing, insurance (auto, home, life, and liability), and investment strategies. Lab Fee

**BUAD 226 E-Commerce****Management****3CR**

Prerequisite: The Business Department strongly recommends that BUAD 101 or ACCO 101 be taken prior to or concurrently with this course. This course covers the design of Internet-based business models (i.e., e-commerce) in organizations.

Topics include e-commerce management principles, management of different types of organizations, integration of human and information technology resources, training and development and use of information systems. Investigation also covers knowledge management strategies; the management of business units to implement technological marketing (or e-marketing); the creation of new roles and responsibilities for managers in the e-commerce environment of organizations; relationships among the Internet, government, and society; and future prospects of e-commerce. The successful student will develop the managerial fundamentals for creating a successful online business. The course is suited for someone interested in learning how to take an existing "brick and mortar" business online or for starting a business from scratch, as a "Netpreneur". This course will examine the technologies of Electronic Commerce. The student will experience the setup process of a Web site for an E-business, becoming acquainted with Internet law and ethical business practices, reviewing the selection of Internet Service Providers (ISP) to host a website, marketing on the World Wide Web and addressing security issues. [32-16-48] Lab Fee

**BUAD 251 Principles of Marketing 3 CR**

The functions of the marketing mix are analyzed as to how they interact with each other, with other business functions through electronic commerce, and with several components of the business environment. Understanding of these marketing functions is developed through a study of a variety of applied marketing problems, exercises, Internet searches, and business case histories.

**BUAD 271 Consumer Behavior 3 CR**

Prerequisite: BUAD 251. A treatment of the processes of consumer motivation, perception and learning, the nature and influence of individual predispositions in relation to the buying processes, exogenous influence, consumer decision-making, and aggregate behavior. Emphasis will be placed on behavior models and quantification methods.

---

**BUAD 272 Marketing Management 3 CR**

Prerequisites: BUAD 251 and 271. Through case problems and other learning methods, the student will address the marketing decision-making and planning processes employed by middle and top managers. Using advanced marketing concepts, the student will develop tactics and strategies for satisfying consumer and industrial consumer needs.

**BUAD 273 Labor Relations 3 CR**

Prerequisite: BUAD 131. The purpose of the course is to present the rights and duties of management in dealing with labor and the economic consequences of union and management policies and practices. The course also deals with administrative activity in terms of human relationships involved.

**BUAD 274 Organizational Behavior 3 CR**

Prerequisite: BUAD 131. Analysis of human behavior in organizational settings with the purpose of determining appropriate leadership styles. Emphasis on resolving human dilemmas in the organization. There will be case studies, critical incidents, and role playing. Simulation models are augmented with lecture and cases to maximize student involvement.

## **BUSINESS ENTREPRENEURSHIP (BUEN)**

**BUEN 100 Introduction to  
Entrepreneurship 1 CR**

This course is designed to provide an introduction to the process of turning an idea into a successful start-up business. A primary focus is for the student to explore the potential of being a successful entrepreneur. The course introduces the student to the processes for creating a potentially successful business plan. The student will use entrepreneurial discovery processes, assess opportunities for venture creation, and develop presentation skills to convince others of the potential success to implement the business entity.

**BUEN 101 Entrepreneurship-  
Developing a Business Plan 2 CR**

Prerequisite: BUEN 100 or concurrently. This course is a continuation of BUEN 100 and designed to assist the student in the processes for creating a potentially successful business plan, utilizing business plan software. Each student is expected to identify a feasible idea suited to their needs and interests for a business. The student will apply a design and development process to the idea, produce a solid business plan for implementation, and identify and establish an action plan for acquiring the resources (including funding) needed to implement their business plan.

**BUEN 102 Entrepreneurship-  
Business Management 3 CR**

Prerequisite: BUEN 101 or concurrently. This course covers concepts, processes, and techniques for managing a small business. It focuses on aspects that are unique to small business management and small business ownership. An emphasis is placed on the use of quality improvement techniques and ethical management practices.

**BUEN 103 Applying Technology to  
Business Needs 3 CR**

Prerequisite: BUEN 102 or concurrently. The application of specialized software is discussed as a method to integrate business problem-solving tools. Topics in this course include customization of software to fit your business needs, budgetary and expense control methods and analysis, analyzing cash flow patterns, and interpreting financial statements.

**BUEN 104 Presentation Skills 2 CR**

Prerequisite: BUEN 102 or concurrently. This course covers the basic aspects of selling adaptable to any product or potential customer. Persuasive sales presentations will be developed and delivered using the steps of the selling process. Analysis of sales reports and the use of technology to support the sales function and managing online sales processes are also included.

---

**BUEN 105 Entrepreneurship  
Marketing/Advertising 2 CR**

Prerequisite: BUEN 102 or concurrently. This course is designed to explore marketing for small business, identification of a product and/or service potential, advertising plans, marketing strategy and budgeting, determining store location, purchasing procedures, and inventory control.

**BUEN 106 The Marketing/Sales Plan 2 CR**

Prerequisite: BUEN 105 or concurrently. This course is designed to provide you with the skills and knowledge necessary to develop, maintain, and evaluate a marketing plan using simulation software. In addition, techniques are discussed to establish relationships with clients, determine their needs, and motivate customers to purchase products or services.

**BUEN 107 Entrepreneurial Finance 3 CR**

Prerequisite: BUEN 102 or concurrently. This course will provide a practical application of basic financial management principles that apply to entrepreneurs. Specifically, this will be accomplished by providing the tools necessary to maintain proper financial records to make budgetary decisions related to cash and financing needs, pricing of products or services, the payment of taxes and loans, and determining profitability to help you become a successful entrepreneur. This course is required in the Entrepreneurship Program and is available only to students enrolled in the program.

**BUEN 108 Legal Issues and Ethics 1 CR**

Prerequisite: BUEN 102 or concurrently. This course introduces future entrepreneurs to the legal requirements for forming and operating a business. Students will follow the progression of a start-up business and anticipate its legal concerns through the stages of growth up to an initial public offering. It presents the substantive and practical legal guidance necessary to excel in business. The course also includes a review of the ethical issues that small business owners frequently confront.

**BUEN 109 Basic Economic Concepts 3 CR**

Prerequisite: BUEN 102 or concurrently. This course is an introduction to the economic way of thinking and its applications to decision making in the business world. An emphasis is placed on understanding and applying economic concepts to small businesses. In addition, the impact of a global economy is discussed as it relates to economic concepts and its impact on small businesses. This course is a required course in the Entrepreneurship Program and is available only to students enrolled in the program.

**BUEN 110 Risk Management  
for Entrepreneurs 1 CR**

Prerequisite: BUEN 102 or concurrently. This course provides a basic review of the nature of risk management and how to protect a business from preventable and insurable losses. Topics covered include liability and property insurance, data record security, protection of company assets from loss or theft, and establishing a safe working environment through the proactive use of risk management techniques.

**CHEMISTRY (CHEM)****CHEM 10 Fundamental  
Chemical Concepts 3 CR**

Prerequisite: COMPASS pre-algebra assessment score of at least 32, or COMPASS algebra assessment of at least 20, or a “P” in MATH 97 or 98. A basic course for students planning to take more chemistry, but whose background is not adequate to start the regular chemistry series. The course introduces fundamental chemical concepts and the elementary mathematical principles needed to solve chemistry problems.

**CHEM 100 Fundamentals of  
Chemistry I 4 CR**

Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a COMPASS algebra assessment score of 40, or a “C” or better in CHEM 10, MATH 101, or other college-level mathematics

---

course. This is an introductory course in basic chemistry covering chemical concepts and principles of inorganic chemistry. This course includes lecture and laboratory experiences. This course should not be taken by students in curricula requiring a chemistry major or minor. [48-48-96]

Lab Fee

#### **CHEM 110 General Chemistry I 4 CR**

Prerequisites: one year of high school chemistry or a “C” in CHEM 100; and a COMPASS algebra assessment score of at least 71 or a “C” in MATH 121. This course includes the following topics: atomic and molecular structure, chemical bonding concepts, stoichiometric relationships, gas laws, periodic properties, acid-base relationships, some descriptive chemistry, oxidation-reduction, and an introduction to chemical equilibrium. This course includes lecture and laboratory experiences. [48-48-96]

Lab Fee

#### **CHEM 111 General Chemistry II 4 CR**

Prerequisite: a “C” in CHEM 110. This course is a continuation of CHEM 110 and includes the following topics: chemical equilibrium, introduction to chemical thermodynamics, electrochemistry, some descriptive chemistry, nuclear chemistry, and organic chemistry. This course includes lecture and laboratory experiences. [48-48-96]

Lab Fee

#### **CHEM 201 Organic Chemistry I 4 CR**

Prerequisite: a “C” in CHEM 111. This course provides a comprehensive study of the physical and chemical properties of aliphatic, aromatic, and cyclic compounds, including functional groups. Emphasis is placed upon mechanisms and theory of reactions of the basic classes of organic compounds. The course includes lecture and laboratory experiences. [48-48-96]

Lab Fee

#### **CHEM 202 Organic Chemistry II 4 CR**

Prerequisite: a “C” in CHEM 201. This course is a continuation of CHEM 201 and provides a comprehensive study of the preparations, synthesis, and mechanisms of reactions of the functional classes of

organic compounds including selected topics in biochemistry. [48-48-96]

Lab Fee

#### **CHEM 210 Introduction to Organic and Biochemistry 4 CR**

Prerequisite: a “C” in CHEM 100 or 110. A brief introduction to organic chemistry as it applies to biochemistry. Organic topics include the structure, physical properties, and chemical behavior of the major classes of organic compounds. The structure, function, formation, and reactions of carbohydrates, fats, proteins, and nucleic acids are covered. The metabolism of the main classes of biochemical compounds will be emphasized in conjunction with the role of vitamins, hormones, and related compounds. This course includes lecture and laboratory experiences [48-48-96]

Lab Fee

### **COMMUNICATION (COMM)**

#### **COMM 101 Foundations of Interpersonal Communication 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. The course focuses on providing the student with an experience in human communication with emphasis placed on becoming an effective communicator in a variety of face-to-face communication situations.

#### **COMM 101H Foundations of Interpersonal Communication-Honors 3 CR**

Prerequisite: an ACT composite score of 20 or higher, or an ASSET reading or writing score of 51 or higher, or a COMPASS reading or writing score of 93 or higher, or the written approval of the honors coordinator. This course has as its central focus the development of leadership and interpersonal skills. This course is designed to provide an understanding of leadership and group dynamics theory. The student will be assisted in developing a personal philosophy of leadership, an awareness of the ethical responsibilities of leadership, as well as an awareness of one's own style of leadership and interpersonal communication. In

---

addition to a focus on the communication styles of leadership, the course will integrate readings from the humanities, classic works of literature, and contemporary multicultural writings and experiential learning exercises along with readings and discussions of additional leadership theories. This course is offered in the fall of odd years.

**COMM 111 Business and Technical Communication** **3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. The course focuses on providing experience in both formal and informal communication situations encountered in the business and technical world. Interpersonal relations, interviews, formal speeches, and group problem solving are stressed.

**COMM 205 Introduction to Group Communication** **3 CR**

Prerequisite: COMPASS writing score of 38 or “C” in ENGL 97 or 99. Study of the basic processes of small group interaction. The course focuses on the group as a means of human encounter, problem solving, and creative thinking. Analysis of individuals as participants and of group discussion and effectiveness occurs. Become a better group member and leader of groups.

**COMM 207 Public Speaking** **3 CR**

Prerequisite: COMPASS writing score of 38 or “C” in ENGL 97 or 99. Theories, techniques, and practice in creating and delivering various types of speeches. The course focuses on researching and organizing speeches, audience analysis, dealing with speech apprehension, and development of skills in delivering effective informal and formal speeches in business and professional situations.

**COMM 210 Oral Interpretation** **3 CR**

Prerequisite: COMPASS writing score of 38 or “C” in ENGL 97 or 99. Training in analysis and basic skills of vocal interpretation of literature and drama. Practice in vocal discipline and communication from the printed page.

**COMM 241 Foundations of Mass Communication** **3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. Theoretical and practical introduction to mass media, concentrating on electronic media (radio and television), the Internet, magazines, newspapers, and books. Students will learn the historical development, sociological impact, and current industry trends of mass media.

**COMM 281 Forensics Practicum** **1 CR**

A course in which the student gains practical experience in forensics and debate competition. Course includes researching and writing speeches, researching literature, performance, and score tabulation. Specific duties to be arranged with the director of forensics and debate. Course may be repeated for credit toward graduation up to four credit hours. [0-16-16]

**COMM 297 Communication Special Topics** **1-3 CR**

This course is designed to allow the student to focus on communication areas such as conflict resolution, persuasion, telecommunication, multicultural, and listening. Since topics change this course may be repeated for credit toward graduation up to six credit hours.

**COMM 299 Field Experience** **3 CR**

Prerequisites: six credit hours of communication or equivalent, a written outline of the student's project or work experience, and fluency in written and oral English. An opportunity for the interested student to gain experience with regional employers through practicums and/or observations.

**COMPUTER-AIDED DRAFTING (DRAF)**

**DRAF 101 Engineering Graphics** **4 CR**

This course provides instruction and CAD-based laboratory practice in graphical communication principles used in industry. Topics include technical sketching, lettering, geometric constructions, multi-view drawings, sectional views, auxiliary views, dimensioning practices, and drawing notation. [16-80-96] Lab Fee

---

**DRAF 120 Machine Drafting 3 CR**

Prerequisite: DRAF 101. This course advances the use of engineering graphics to produce functional drawings of machine mechanisms and basic machine elements. Included are fasteners, cams, gear trains, weldments, and fits. Dimensioning and tolerancing in accordance with ANSI standard Y14.5M are used throughout the course. CAD technology is used exclusively to complete lab assignments. [16-64-80] Lab Fee

**DRAF 141 Descriptive Geometry 3 CR**

Prerequisite: DRAF 101. This course is designed to develop problem-solving skills in the area of spatial relationships. A graphical analysis of points, lines, planes and angles, intersections, revolutions, and developments is undertaken. CAD technology is used exclusively to complete lab assignments. [16-64-80] Lab Fee

**DRAF 181 Applications in AutoCAD 3 CR**

Prerequisite: DRAF 101. This course is not intended as an introduction; students must have a basic understanding of AutoCAD prior to enrollment. This course is a study of AutoCAD and its applications as a continuation to DRAF 101. Students will be exposed to the depth of the AutoCAD system and the variables which control it. Advanced techniques will be taught to complement DRAF 101 in areas such as layer control, dimensioning, modifying geometry, text, blocks, symbol creation, attributes, xrefs, pictorial drawing, and three-dimensional drawing. [32-48-80] Lab Fee

**DRAF 190 Introduction to AutoCAD 3 CR**

An introduction to AutoCAD for those who have a basic understanding of drafting principles. This course is primarily for people in industry, those with a manual drawing background, or those with a curiosity about CAD. Topics will include the computer as a tool, the AutoCAD environment, interfacing with AutoCAD, geometry creation, modifying geometry, dimensioning, producing hard copy, and symbol libraries. [32-32-64] Lab Fee

**DRAF 194 SolidWorks: Parts and Assemblies 3 CR**

Previous CAD/drafting experience recommended. This course is an introduction to the 3-D modeler, SolidWorks, for non-CAD majors. The course will focus on parts, assemblies, and drawings. Topics will include sketching in SolidWorks, creating relationships, parametric constraints, 3-D tools, associative 2-D part drawings, design tables, and assemblies. [32-32-64] Lab Fee

**DRAF 195 SolidWorks: Advanced Applications 3 CR**

Prerequisite: DRAF 194 or 234. This course focuses on advanced concepts in SolidWorks. Topics include advanced sketching techniques, curves, lofts, sweeps, surfaces, basic sheet metal, modeling in assembly, advanced design tables, advanced drawing topics, PhotoWorks, Toolbox, and eDrawings. [32-32-64] Lab Fee

**DRAF 202 Independent Study 1-3 CR**

Prerequisite: departmental approval only. This course provides an opportunity for the student with sufficient skills to pursue projects for advanced learning or personal interest in computer-aided drafting and design. The subject/project details and method of evaluation will be arranged with the supervising instructor. This course may be repeated for additional credit. Lab Fee

**DRAF 211 Dimensioning and Tolerancing 3 CR**

Prerequisites: DRAF 120 and 234. Use of engineering graphics and basic measurement techniques to explore the application and effects of dimensioning and tolerancing. Topics will include geometric dimensioning and tolerancing (GDT), fit analysis, tolerance stackups, metrology, and the effects of tolerancing in the manufacturing environment. Conformance to ANSI Y14.5M-1982 will be stressed throughout. [32-48-80] Lab Fee

**DRAF 221 Architectural Drafting 3 CR**

Prerequisite: DRAF 101 or 190. An introduction to architectural drawing production and practice. The student will prepare portions

of a set of house construction documents including a site plan, floor plan, elevations, foundation plan, wall section and details, and door and window schedules. CAD technology will be used to complete most lab assignments. [16-64-80] Lab Fee

**DRAF 234 SolidWorks 3 CR**

Prerequisite: DRAF 101. An introduction to SolidWorks, a popular 3-D mechanical design tool. Topics will include modeling fundamentals, parametric constraints, associative part drawings, the relationship between 2-D drawings, and 3-D models, design tables, assembly modeling, and visualization. [32-48-80] Lab Fee

**DRAF 251 Advanced Modeling and CAM 3 CR**

Prerequisite: DRAF 194 or 234. A study of advanced modeling techniques, computer-aided manufacturing, and product design. SolidWorks modeling topics that include sweeps, lofts, surfaces, parting lines, mold cavities, and sheet metal. Models will be used to generate rapid prototyping files and to create tool path files for CNC machining. A standard process for product design and problem solving will be used throughout, including problem statements, preliminary ideas, refinement, analysis, decision, and implementation. [16-64-80] Lab Fee

**DRAF 261 Manufacturing Design 3 CR**

Prerequisite: DRAF 120. The application of design principles in solving problems related to the manufacturing of simple work pieces. Students will be involved in the design of jigs, fixtures, gauges, and other work-holding devices, along with the production of detail drawings of their designs. CAD technology will be used to complete lab assignments. [16-64-80] Lab Fee

**COMPUTER ENGINEERING TECHNOLOGY (CET)**

**CET 110 Principles of Electricity and Electronics 3 CR**

Prerequisite: COMPASS reading score of 70 and a COMPASS algebra assessment of 35; or

MATH 101, 110, or 118. This course is a support course for students in technically-related programs. The course is designed to provide a background in electrical/electronic test equipment as basic principles are explored. The course includes basic circuit concepts, DC and AC fundamentals, and an introduction to solid state digital circuits. No prior electrical/electronic background is necessary. [32-48-80] Lab Fee

**CET 125 Digital Logic I 3 CR**

This course is designed for students with no electrical background to provide an understanding of digital logic and digital logic systems. The characteristics of decision-making elements are presented along with appropriate applications. The use of the Boolean Algebra and Karnaugh Mapping is introduced and used throughout the course. [32-48-80] Lab Fee

**CET 140 Microcomputers - Introduction 3 CR**

Prerequisite: CP 101 or CET 125. The architecture and instruction set of the Intel '86 series of microprocessors is introduced and compared to the other microprocessors and microcontrollers. Programs will be written with the aid of an editor and assembler and tested using basic interfacing techniques and I/O hardware. A microprocessor research project will be required for completion of this course. [32-48-80] Lab Fee

**CET 185 Introduction to Operating Systems 2 CR**

This course is designed to introduce the fundamentals of operating system architecture and use. It will develop the skills in both graphical user interface (GUI) and command line operating environments. It will also introduce both single user and multi-user operating systems. [24-24-48] Lab Fee

**CET 208 Configuring Microsoft Windows Vista Client 3CR**

This course prepares the student for the Microsoft Certified Technology Specialist examination, 70-620. It is a complete program that provides the beginning information and

hands-on practice students need to build the knowledge and skills needed for IT Professional certifications as an Enterprise Support Technician or Network Systems Administrator using Windows Vista. [24-48-72] Lab Fee

**CET 219 MCSE V - Designing a Microsoft Windows 2000**

**Directory Service Infrastructure 3 CR**  
Prerequisite: CET 217. This course is fifth in a series designed to prepare students for the MCSE Windows 2000 certification. Students learn to design a Windows 2000 Directory Services infrastructure in an enterprise network. Students will identify the information technology needs of an organization and design an Active Directory structure that meets those needs. This course will prepare students for Microsoft certification examination 70-219. [24-48-72] Lab Fee

**CET 221 MCSE VI - Designing Security for a Microsoft Windows 2000 Network 3 CR**

Prerequisite: CET 219. This course is the sixth in a series designed to prepare students for the MCSE Windows 2000 certification. Students learn how to design security for a Windows 2000 network using Encryption, NTFS, Security Groups Terminal Services, and VPNs. This course will prepare students for Microsoft Certification examination 70-220. [24-48-72] Lab Fee

**CET 222 MCSE VII - Upgrading from Microsoft Windows NT 4.0 to Microsoft Windows 2000 3 CR**

Prerequisite: CET 221. This course is the seventh in a series designed to prepare students for the MCSE Windows 2000 certification. Students will gain practical experience upgrading and restructuring domains to Windows 2000 protocols. Students will also evaluate current infrastructure: hardware, security, applications, network services, plan migration strategy, restructure domains (including migrating users and groups), and set up trusts and group policies. This course will prepare students for Microsoft certification

examination 70-222. [24-48-72] Lab Fee

**CET 228 Supporting and Troubleshooting Applications on a Windows Vista Client for Enterprise Support Techs 3 CR**

Prerequisite: The department strongly recommends taking CET 208 prior to or concurrently with this course. This course covers the Windows Vista Client mapping to the Microsoft Certified IT Professional examination 70-622 for Enterprise Support Technicians. A Comprehensive program of textbook, lab manual and software, the course provides everything students need to build the knowledge and skills necessary to install, support, and troubleshoot the Windows Vista Operating system. [24-48-72] Lab Fee

**CET 230 Local Area Networking I - Network + 3 CR**

Prerequisite: CET 185. This course introduces the student to Local Area Network concepts and topologies, as well as data communication principles. The emphasis in this course will be on the NET+ certification objectives, peer-to-peer networks, and cabling. [32-48-80] Lab Fee

**CET 235 Cisco Networking I 3 CR**

First of four semester courses preparing for Cisco Certified Network Associate certification. Instruction includes networking terminology, networking standards, OSI models, LAN, WAN, IP addressing, cabling, cabling tools, routers, and router programming. [22-42-64] Lab Fee

**CET 236 Cisco Networking II 3 CR**

Prerequisite: CET 235. Second of four semester courses preparing for Cisco Certified Network Associate certification. Instruction includes subnetting router programming, routing protocols, IOS configuration, LAN, WAN, ethernet, topologies, Telnet, packet analysis, and network troubleshooting. [22-42-64] Lab Fee

**CET 240 Windows Server 2008 Active Directory Configuration 3CR**

Prerequisite: The department strongly recommends taking CET 228 prior to or

---

concurrently with this course. Focusing on Active Directory in Windows Server 2008, this course covers configuring, managing, and supporting user and computer accounts, groups, Domain Name System zones and client settings; group policy objects; the new Active Directory Lightweight Directory Service and Active Directory Rights Management Service; backup and recovery; and communication security. This course maps to the Microsoft Certified IT Professional examination 70-640. [24-48-72] Lab Fee

**CET 242 Configuring Windows Server 2008 Network Infrastructure 3CR**

Prerequisite: The department strongly recommends taking CET 240 prior to or concurrently with this course. Focusing on Windows Server 2008 networking, this course covers configuring remote access, Network Access Protection (NAP), network authentication, IPv4 and IPv6 addressing, and Domain Name System (DNS) replication; capturing performance data and monitoring event logs; and managing file and print services. This course maps to the Microsoft Certified IT Professional examination 70-642. [24-48-72] Lab Fee

**CET 246 Windows Server Administration 3CR**

Prerequisite: CET 242. Focusing on Windows Server 2008 administration, this course covers planning server roles; maintaining server security; planning data storage, network load balancing, and server backups; managing software deployment and versioning; monitoring IPv6, server performance and capacity, and Active Directory replication; scheduling server deployments; and designing a rollback contingency plan. This course maps to the Microsoft Certified IT Professional examination 70-646. [24-48-72] Lab Fee

**CET 247 Configuring Windows Server 2008 Applications Infrastructure 3CR**

Prerequisite: The department strongly recommends taking CET 246 prior to or concurrently with this course. Focusing on Windows Server 2008 Applications Infrastructure

technologies, this course covers Terminal Services, Web Services infrastructure and security, Media Server, Microsoft Windows SharePoint Services server options, File Server, Print Services, network maintenance, and Simple Network Management Protocol. This course maps to the Microsoft Certified IT Professional examination 70-643. [24-48-72] Lab Fee

**CET 248 Windows Server Enterprise Administration 3CR**

Prerequisite: The department strongly recommends taking CET 247 prior to or concurrently with this course. Focusing on Windows Server 2008 enterprise administration, topics include planning networks and application services; designing core identity and access management components; planning for migrating, upgrading, and restructuring domains and forests; implementing PKI; and designing virtualization strategy. This course maps to the Microsoft Certified IT Professional examination 70-647. [24-48-72] Lab Fee

**CET 249 Microsoft ISA Server 3CR**

Prerequisite: The department strongly recommends taking CET 248 prior to or concurrently with this course. ISA Server is a robust application layer firewall that provides organizations with the ability to secure critical business infrastructure from the exploits and threats of the modern computing world. ISA's ability to act as an edge firewall, a Virtual Private Networking solution, a reverse proxy server, or a content caching device give it unprecedented flexibility and position it as a valuable security tool for many types of organizations. This course maps to the Microsoft Certified IT Professional examination 70-351. [24-48-72] Lab Fee

**CET 250 Security + 3 CR**

Prerequisite: CET 185, or 260, or 276. This course prepares the student for the CompTIA Security + certification examination. Students will learn about industry-wide security topics including communication security, infrastructure security, cryptography, access

control, authentication, external attack and operational and organization security. Other topics included in this course are protocols used in Linux, UNIX, and Windows 2000, in addition to the TCP/IP suite component protocols and Ethernet operations. Students will gain knowledge in capturing, analyzing, and generating IP traffic; how to exploit protocol weaknesses; and examine defensive solutions. Packet filtering, password policies, and file integrity checking are also covered. [24-40-64] Lab Fee

### **CET 260 A+ Computer Diagnostics and Repair 3 CR**

Prerequisite: CET 140, 185, or 208. A course designed to prepare the student to diagnose and repair personal computers and their peripherals. This course also assists the students to prepare for the A+ Certification tests. Solving hardware and software problems and troubleshooting will be emphasized. [32-48-80] Lab Fee

### **CET 270 Local Area Networking II - Server + 3 CR**

Prerequisite: CET 230 or 235. This course is designed to assist students in successfully obtaining the Server+ certification. This certification is meant for mid- to upper-level technicians responsible for server hardware functionality. It is a mid-level, vendor-neutral certification which is a pertinent complement to vendor-specific networking certifications. [32-48-80] Lab Fee

### **CET 275 Cisco Networking III 3 CR**

Prerequisites: CET 235 and 236. This course covers switching basics and intermediate routing and is the third of four courses leading to the CISCO Certified Networking Associate (CCNA) certification. Instruction focuses on advanced IP addressing techniques (VLSM), intermediate routing protocols (RIP v2, single-area OSPF, EIGRP), command-line interface configuration of switches, Ethernet switching, Virtual LANs (VLANs), Spanning Tree Protocol (STP), and VLAN Trunking Protocol (VTP). [22-42-64] Lab Fee

### **CET 276 Cisco Networking IV 3 CR**

Prerequisites: CET 235, 236, and 275. Fourth of four semester courses preparing for Cisco Certified Network Associate certification. Instruction includes frame relay, Point-to-Point protocol, PAP and CHAP encryption, ISDN protocols, remote access, WAN technologies and design. [22-42-64] Lab Fee

### **CET 278 Fundamentals of Wireless LANs 3 CR**

Prerequisite: CET 230 or 235. This introductory course to Wireless LANs focuses on the design, planning, implementation, operation, and troubleshooting of Wireless LANs. It covers a comprehensive overview of technologies, security, and design best practices with particular emphasis on hands-on skills in the following areas: Wireless LAN setup and troubleshooting; 801.11 (a, b, and g) techniques, products, and solutions; radio technologies; WLAN applications and site surveys; resilient WLAN products, design, installation, configuration, and troubleshooting; WLAN security; vendor interoperability strategies; and emerging wireless technologies. [24-56-80] Lab Fee

### **CET 279 Network Wiring, Design, and Installation 3 CR**

Recommend students have basic computer literacy and Internet skills. Networking experience is desirable but not required. Students should be capable of lifting light loads and climbing ladders to work at ceiling heights. This introductory course focuses on cabling issues related to data and voice connections. It provides an understanding of the industry and its worldwide standards, types of media and cabling, physical and logical networks, and signal transmission. Students will develop skills in reading network design documentation, determining and purchasing cabling equipment, pulling and mounting cable, managing cable, selecting wiring closets, terminating cable at patch panels, installing jacks, and testing cable. This hands-on lab-oriented course stresses documentation, design, and installation issues, (as well as laboratory and

on-the-job safety) and working effectively in group environments. [32-48-80] Lab Fee

### **CET 281 Operating Systems - Windows System Administration 3 CR**

Prerequisite: CET 185. This is a hands-on course to develop skills of administration of the various Windows multi-user platforms (for example, Windows NT, 2000, XP). This will include the fundamentals of the operating system architecture itself. Also, the student will construct, maintain, and monitor the performance of multiple user/device environments. [32-32-64] Lab Fee

### **CET 282 Operating Systems - UNIX 3 CR**

Prerequisite: CET 185, or 208, or 235. This course is designed to develop skills in using the UNIX operating system. Various UNIX-like operating systems and their operations will be introduced. Students will construct and implement a UNIX-based network. [32-32-64] Lab Fee

## **COMPUTER PROGRAMMING (CP)**

### **CP 100 Introduction to the Programming and Systems Environment 2 CR**

This course is designed to give students in the programming area a general introduction to the system environment in which programs will execute. This includes the concepts of computer architecture, networking, and operating systems environments. This course prepares the programmer to write more efficient and effective codes for a variety of hardware and operating systems environments. [24-24-48] Lab Fee

### **CP 101 C++ Programming I 3 CR**

Prerequisites: an intermediate knowledge of DOS and Windows. This course is designed to introduce procedural programming fundamentals using the C/C++ programming environment. The student will learn to write programs involving variable storage, formatted input/output, use of control structures, program repetition, logical operations, file

interaction, and structured programming. [32-32-64] Lab Fee

### **CP 102 Visual Basic I 3 CR**

Prerequisites: an intermediate knowledge of DOS and Windows. This course is designed to introduce procedural and object-oriented/event-driven programming fundamentals using the Visual Basic programming language. Topics include the VB IDE, GUI concepts, objects, properties, events, variables, constants, decision/repetition control structures, operators, functions, sub procedures, array processing, and OOP terminology. [32-32-64] Lab Fee

### **CP 201 C++ Programming II 3 CR**

Prerequisite: CP 101. This course will continue to develop skills in procedural programming and Object Oriented design using the C++ programming language. Skills that will be developed in this course are the use of aggregate data types, storage of data by reference, dynamic data storage and objects (instances, inheritance polymorphism and overloading), resource interaction, as well as introduce exception handling. [32-32-64] Lab Fee

### **CP 202 Visual Basic II 3 CR**

Prerequisite: CP 102. The second of two courses in the Visual Basic programming language using advanced procedural and object-oriented/event-driven techniques. Topics include multi-dimensional arrays, sequential and random file processing, database processing, drag and drop techniques, graphics, advanced OOP techniques, classes and collections, and user-defined types. Other advanced topics include ActiveX, DLL, OLE, VBA, and MDI. [32-32-64] Lab Fee

### **CP 210 Java Programming 3 CR**

Prerequisite: CP 101 or 102. This course is designed to develop programming skills in the most current Java programming environment. These skills will include the use of Object Oriented programming techniques to write both application and applets.

---

Programs will be written using simple event-driven windows, graphical interaction, objects (instances, inheritance polymorphism, and overloading), and resource interaction. [32-32-64] Lab Fee

**CP 212 Java Programming II 3 CR**

Prerequisite: CP 210. This course will build upon the basics of the previous course in Java. This course will further advance Java programming skills in developing enterprise applications incorporating Java Beans, discussion of security issues, as well as simple interaction with databases. This will introduce the nuisances of the various versions and the coding required. The emphasis is on programming. [32-32-64] Lab Fee

**CP 220 Visual Basic for Applications 3 CR**

Prerequisites: CP 102 and a working knowledge of MS Word, Excel, and Access. This course is designed for students who wish to develop advanced macros and modules using Visual Basic for Applications (VBA) within the Microsoft applications Word, Excel, and Access. Topics include macros, modules, variables, constants, control structures, functions, sub procedures, and VBA forms. [32-32-64] Lab Fee

**CP 245 Programming for WIN32API 2 CR**

Prerequisites: CP 201 and 202. This course will develop skills in programming WIN 32API applications using both C/C++ and Visual Basic languages. The emphasis is on writing programs. [24-24-48] Lab Fee

**CP 272 CGI/PERL Programming 3 CR**

Prerequisite: CP 101 or 102. This course will develop skills in programming using PERL with the CGI (Common Gateway Interface) applications. This will introduce interaction with web servers and HTML pages. The emphasis is on writing and debugging programs. [32-32-64] Lab Fee

**CP 280 Web Development with Visual Basic.Net 3 CR**

Prerequisites: CP 202 and DBA 110. This course provides Microsoft Visual Basic programmers and beginning Web developers the

fundamentals of Web application site implementation by using Microsoft ASP.NET and Microsoft Visual Basic.NET. It focuses on using the Microsoft Visual Studio.NET environment and the Microsoft.NET platform to create an ASP.NET Web application that delivers dynamic content to a Web site. It also teaches developers to build data-centric applications and Web services with Microsoft ADO.NET, Microsoft SQL Server 2000, Oracle and the Microsoft.NET Framework. [32-32-64] Lab Fee

## **CRIMINAL JUSTICE (CRJU)**

**CRJU 101 Introduction to Criminal Justice 3 CR**

The processes, institutions, and administration of criminal justice in the United States. The crime problem and criminal law, law enforcement, criminal prosecution, bail, diversion, the jury trial and sentencing, the correctional system (including probation, prisons, inmates' rights, and parole), and introduction to the juvenile justice process will be examined.

**CRJU 104 Introduction to Corrections 3 CR**

The historical development and philosophy of corrections, the development of corrections in the United States, current reforms and approaches in modern corrections (including the concepts of probation, parole, minimum security, and maximum security), and the work of related social agencies will be examined.

**CRJU 105 Institutional Corrections 3 CR**

A survey of the history and philosophy of correctional institutions focusing on the use of imprisonment as a mechanism of social control, custody versus treatment, rights of prisoners, prison and jail management, institutional training programs, examination of contemporary correctional institutions, penological and criminological theory, prison and jail architecture, and prisoner society.

---

**CRJU 106 Correctional Law 3 CR**

Survey of substantive and procedural correctional law (including sentencing, probation, parole, imprisonment, fines and restitutions, and prisoner's rights). Students will analyze the complex legal issues concerning American corrections.

**CRJU 107 Client Growth and Development 3 CR**

An analysis of the correctional client. Specific attention will be directed to the comparison of normal and criminal behaviors; etiologies of delinquent and criminal offenders; identification of mentally disordered, substance and sexual abusers, and predatory and property offenders. Correctional institutional and community-based intervention strategies, referral agencies, and treatment programs will be identified and evaluated.

**CRJU 108 Client Relations in Corrections 4 CR**

A study of social and psychological factors and processes in criminal behavior, including the social concepts of culture, socialization, attitude formation, personal and group alienation, discrimination, and affirmative action programs. Specific attention will be directed to the effect of these social concepts on race and ethnic groups and various methods by which correctional officers may promote diplomacy and conflict resolution. Topics, both directly and indirectly, related to effective client relations (such as stress management, health and wellness, effective communication strategies, professional behavioral standards, and effective and objective documentation) will also be explored.

**CRJU 110 Physical Training 3 CR**

Prerequisite: passing score on the MCOLES Fitness Test. This course is designed to teach students the information and skills necessary to stay fit for duty and fit for life. The course content includes fitness and wellness concepts to provide a healthy lifestyle. Students will participate in a variety of activities designed to improve the cardiovascular system, muscular strength, and flexibility. [8-40-48] Lab Fee

**CRJU 111 Local Correctional Academy 10 CR**

The Local Correctional Academy is a Michigan Sheriffs' Coordinating and Training Council (MSCTC) approved 160-hour training program for correctional personnel supervising inmates in county jails. The program will focus on achieving the skills necessary to maintain the safety and security of the correctional institution. Primary topics include intake procedures, correctional law, cultural diversity, custody and security, subject control, ethics, fire safety, interpersonal communication, prisoner behavior, report writing, sexual harassment and hostile work environment, stress management, suicide awareness, and first aid. Lab Fee

**CRJU 112 Local Correctional Re-Entry Academy 6 CR**

Prerequisite: Criminal Justice Chair approval. The Local Correctional Re-Entry Academy is a Michigan Sheriffs' Coordinating and Training Council (MSCTC) approved 96-hour core training program for candidates eligible for waiver of mandatory training requirements as outlined in the MSCTC Recognition of Prior Training and Experience policy. Core training will focus on achieving the skills necessary to maintain the safety and security of the correctional institution. Primary topics include intake procedures, correctional law, custody and security, fire safety, interpersonal communication, prisoner behavior, suicide awareness, and stress management. Lab Fee

**CRJU 200 Police Operations I 4 CR**

A study of the basic knowledge and skills required for a police officer to safely, effectively, and ethically carry out the patrol function of a law enforcement agency.

**CRJU 201 Criminal Investigation 3 CR**

This course will provide instruction in the techniques of discovering, collecting, recording, processing, and preserving evidence. Included will be instruction on evidentiary considerations in the investigative functions,

preliminary investigation techniques, witness interviewing, death investigation, suspect identification procedures, crime scene research, recording the crime scene, collection and preservation of evidence, fingerprinting, child abuse and sexual assault investigation, narcotics investigation, utilizing informants, surveillance techniques, and special tactical operations. Lab Fee

**CRJU 202 Criminal Law 3 CR**

The study of substantive criminal law as a means of defining and preserving social order. Sources of criminal law; classification crimes against persons, property, and public welfare; principles of criminal liability; elements necessary to establish crime and criminal intent; specific crimes and defenses; and constitutional limitations are examined.

**CRJU 203 Crime and Delinquency 3 CR**

The legal and philosophical basis of the juvenile justice process, the measurement of crime and delinquency, theories of crime and delinquency causation, principle and legal issues pertaining to processing delinquents, (as well as control and preventive measures) are examined.

**CRJU 204 Criminal Procedures 3 CR**

A study of the administration of criminal justice; the nature and scope of police power; the concept of exclusion; laws of arrest, search, seizure, and interrogation; the acquisition of evidence; and judicial protection of the accused will be evaluated.

**CRJU 205 Traffic Control 4 CR**

A study of the traffic problems, regulations and enforcement, traffic laws, auto theft, OUIL enforcement, and accident investigation procedures. Primary attention will be focused upon the use and implementation of the Michigan Vehicle Code.

**CRJU 207 PPCT Defensive Tactics 4 CR**

Skills in pressure point control techniques, use of non-lethal weapons, and police defensive tactics will be developed. Appropriate de-escalation/escalation of force tactics will receive major attention. [0-64-64] Lab Fee

**CRJU 208 Police Operations II 4 CR**

Prerequisite: a "C" in CRJU 200. A continuation of Police Operations I involving the acquisition of the basic knowledge and skills required for a police officer to safely, effectively, and ethically carry out the patrol function of a law enforcement agency.

**CRJU 210 Criminal Justice Practicum 3 CR**

Prerequisites: sophomore standing and coordinator approval. The course is designed to broaden the educational experiences of the student through directed work and observational assignment in selected criminal justice agencies. The course will correlate theoretical knowledge with practical experience. A total of 16 hours of classroom contact and 96 hours of fieldwork will be required. [16-96-112] Lab Fee

**CRJU 211 Criminal Justice Practicum 3 CR**

Prerequisites: CRJU 210 and coordinator approval only. A continuation of CRJU 210. [16-96-112] Lab Fee

**CRJU 212 Emergency Vehicle Operations 3 CR**

Prerequisite: coordinator approval. This course is designed to teach students the information and skills necessary to safely operate a vehicle, conduct vehicle stops, and appropriately control vehicle occupants. Emphasis will be placed on legal and liability issues, policies and procedures, and vehicle dynamics. Students will demonstrate their driving and decision-making skills in realistic situations. [8-40-48] Lab Fee

**CRJU 213 Firearms Training 4 CR**

Prerequisite: coordinator approval. This course will emphasize the skill development and legal applications of firearms as a law enforcement function. Participants will be required to successfully complete the Commission on Law Enforcement Standards firearms course of fire. [20-64-84] Lab Fee

---

**CRJU 220 Management Principles for Criminal Justice Supervisors 3 CR**

An analysis of the principles of management as they apply to public service agencies. Management by objectives, leadership styles, motivational techniques, communications, and management control systems will receive major emphasis. Individual and group involvement in exercises using case problems, group discussions, role playing, and simulation exercises will be utilized.

**CRJU 221 Ethical Problem Solving in Policing 3 CR**

This course is designed to provide the student with an understanding of problem-solving theories and practices. It will examine the concept and basic principles of community policing, analyze the problem-oriented policing model, and examine the most commonly used problem-solving processes. Students will examine and clarify their personal beliefs and values and will apply the law enforcement code of ethics in situational examples.

**CRJU 222 Reserve Officer Training 3 CR**

A 48-hour course designed to prepare police reserves and posse members for their responsibilities. Included will be topics on criminal law and procedure; juvenile law; criminal investigation; cultural diversity and the police response; civil and family dispute mediation; field note taking and report writing; interview and interrogation; narcotics investigation; patrol techniques; responding to crimes in progress; traffic stops, direction, and control; defensive tactics; handcuffing techniques; interpersonal skills; prisoner care and treatment; and firearms familiarity.

**CRJU 297 Field Experience 1 CR**

Prerequisite: department approval. This course provides an opportunity for students to gain experience in a criminal justice agency. [3-13-16]

**CRJU 299 MCOLES Review 1 CR**

In preparation for attaining state licensure, students will develop a resume, gain practical experience in employment interviews,

prepare a portfolio, review study skills, participate in guided study sessions, take practice licensure exams, and take the academy final examination.

**DATABASE ADMINISTRATOR (DBA)****DBA 110 Introduction to Relational Databases 3 CR**

Students will learn effective relational design and gain a general overview of relational database management systems. This course introduces students to the terminology and methods used to create and modify Database Management Systems (DBMS). Emphasis will be given to accessing large databases and developing methods for working with data on different DBMS. The course will concentrate on helping students gain confidence in using DBMS and understanding data structures. [32-32-64] Lab Fee

**DENTAL HYGIENE (DEHY)****DEHY 110 Pre-Clinical Dental Hygiene 6CR**

Prerequisite: formal admission to the Dental Hygiene Program. This course is designed to prepare students for the clinical practice of dental hygiene. It is a combination of a dental hygiene theory class and an instrumentation lab. In theory class students are introduced to the dental hygiene process of care. They begin to learn the educational, preventive, and therapeutic skills associated with providing dental hygiene services. Students begin to develop the techniques and skills necessary for patient care by participating in instrumentation labs and working on student partners while under the supervision of clinical instructors. Successful completion of this course is mandatory for all other dental hygiene courses. [48-128-176] Lab Fee

**DEHY 111 Dental Hygiene Clinic I 3 CR**

Prerequisites: formal admission to the Dental Hygiene Program; and "C" or higher in DEHY 110, 112 and 114; and CPR certification. This course is a combination of dental

---

hygiene theory class and clinical practice. In the lecture part of the class, emphasis is placed on the dental health care of special needs patients. Emphasis is placed on the need for integration of these preventive education techniques into the dental hygiene treatment plan for special needs. Students participate in active learning by completing case studies which include written treatment plans for special needs patients. In the clinical aspect of the course, the student gains experience in the implementation of preventative and educational techniques through requirements in treating adult and child patients. [16-96-112] Lab Fee

**DEHY 112 Medical Emergencies in Dental Practice 2 CR**

Prerequisite: formal admission to the Dental Hygiene Program. This is a course designed for students within the Dental Hygiene Program. The primary focus of this course is on common dental office emergencies as they relate to treatment of patients. This course includes laboratory time in which students develop skills required to effectively treat medical emergencies. Topics covered within the lab and lecture include: assessment, vital signs, CPR, emergency action principles, oxygen therapy, medical/legal ramifications of treatment, medical emergencies, and physiology of emergencies. Students will receive certificates in CPR and First Aid. Special Note: Students must successfully complete this course in the first semester of the Dental Hygiene Program. Successful completion of this course is required prior to enrollment in all clinical dental hygiene courses. [16-32-48] Lab Fee

**DEHY 114 Oral Anatomy 3 CR**

Prerequisite: formal admission to the Dental Hygiene Program. This course is a combination of class and lab. During class students study head and neck anatomy, including muscles, nerves, bones, and tooth anatomy. In the lab component and using mannequins, students begin to acquire skills in tooth identification, eruption patterns, and occlusion. Successful completion of this course

is mandatory for continuing in the program. [32-32-64]

**DEHY 121 Dental Hygiene Clinic II 2 CR**

Prerequisite: formal admission to the Dental Hygiene Program; and “C” or better in DEHY 111. This course is a combination of dental hygiene theory class and clinical practice. In the theory class students continue to refine their knowledge of the dental hygiene process of care by beginning to develop treatment plans for periodontally-involved patients. During instrumentation labs and using mannequins, students are introduced to advanced instrumentation techniques specifically for providing non-surgical periodontal therapies. Students then implement these treatment plans and advanced techniques with their patients in the clinical setting under the supervision of clinical instructors. Successful completion of this course is mandatory for continuing in the program. [08-96-104] Lab Fee

**DEHY 123 Radiography 2 CR**

Prerequisites: formal admission to the Dental Hygiene Program; and “C” or better in DEHY 111 and DEHY 114. This course includes the study of radiography theory and the techniques of exposing, processing, and mounting radiographs. Students also acquire the interpretation skills needed to utilize radiographs successfully during patient care. Emphasis is placed on legal, ethical and safety practices using the ALARA principle. In the lab portion, students learn safety, waste management and quality assurance techniques, as well as intraoral and extraoral imaging techniques with multiple film holding devices. Students complete several practice image series on DXTTR mannequins, including full mouth, vertical bitewing, and special patient techniques. Successful completion of this course is mandatory for continuing in the program. [16-48-64] Lab Fee

**DEHY 130 Community Dentistry I 1 CR**

Prerequisite: formal admission to the Dental Hygiene Program. This course provides first-year students with an introduction to

dentistry, dental hygiene, and the role of the dental team and the health care delivery systems within the community. Students are exposed to concepts in ethics and professionalism and will keep an ethics journal. Additionally, students are introduced to basic research methodologies that will facilitate the learning process used in the Dental Hygiene Program. Students will identify a target population for a community health project that will be completed in Community Dentistry II. Successful completion of this course is mandatory for continuing in the program.

**DEHY 135 Dental Materials 3 CR**

Prerequisites: formal admission to the Dental Hygiene Program; and “C” or better in DEHY 110 and DEHY 114. This course is a combination of classroom and lab instruction. During class students learn about the physical properties of dental materials and how these materials relate to the dental specialties. In the lab students gain experience in the manipulation and preparation of those dental materials commonly used in dental practice. Students also develop the skills to provide the following dental hygiene services: taking impressions, making study models, fabricating athletic mouth protectors, placing sealants, placing fluoride varnishes, placing and removing periodontal dressings, placing rubber dams, polishing and contouring restorations. Successful completion of this course is mandatory for continuing in the program. [32-48-80] Lab Fee

**DEHY 143 Histology 2 CR**

Prerequisites: formal admission to the Dental Hygiene Program; and “C” or better in DEHY 111. This course is a study of the origin and structure of tissues. Emphasis is placed on the histology and embryology of the teeth, face, and oral cavity. The histological origins of healthy and diseased tissues will be related to clinical assessments of dental patients. Successful completion of this course is mandatory for continuing in the program.

**DEHY 222 Oral Pathology 2 CR**

Prerequisites: formal admission to the Dental Hygiene Program; and “C” or better in DEHY 121, DEHY 123, and DEHY 143. This course provides fundamental instruction of the general pathological processes of inflammation and repair, immune response, neoplasia, developmental disturbances and systemic disease. Particular focus is on the etiology and clinical manifestations of pathology of the head and neck region. The course uses case studies to assist in identifying clinical entities and recognizing the relevance of findings to dental hygiene treatment planning. Successful completion of this course is mandatory for continuing the program.

**DEHY 231 Dental Hygiene Clinic III 5 CR**

Prerequisites: formal admission to the Dental Hygiene Program; and “C” or better in DEHY 121. This course is a combination of dental hygiene theory and clinical practice. During theory class emphasis is placed on disease prevention and health promotion strategies. The course project includes designing a behavior modification plan, implementation of that plan and a written research component. Studies include cariology, the use of antimicrobials and chemotherapeutic agents, as well as tobacco cessation programs. During the clinical sessions students utilize their knowledge in developing and implementing comprehensive dental hygiene treatment plans, including taking radiographs using appropriate patient selection criteria. Successful completion of this course is mandatory for continuing in the program. [16-192-208] Lab Fee

**DEHY 232 Community Dentistry II 2 CR**

Prerequisites: formal admission to the Dental Hygiene Program; and “C” or better in DEHY 231. This course is a continuation of Community Dentistry I with more emphasis on community oral health education, epidemiology, and disease prevention. This course is designed to prepare students to meet specific oral health needs of

---

community groups as distinct from the traditional clinical approach that is designed to meet the needs of individual patients. Students will complete a community health project identified in Community Dentistry I that will include assessing, planning, implementing and evaluating a program for a target population. Students will also learn the basic principles of biostatistics and research design. Successful completion of this course is mandatory for continuing in the program.

**DEHY 233 Nutrition** **2 CR**

Prerequisites: formal admission to the Dental Hygiene Program; and “C” or higher in DEHY 121 and CHEM 100 or 110. This course is a study in the science of nutrition principles and their application. Students will learn about the important role that nutrients play in maintaining general and oral health. Using strategies for disease prevention and health promotion, students will begin to develop and implement the skills needed to improve their own diet and to provide dietary counseling for patients. Successful completion of this course is mandatory for continuing in the program.

**DEHY 234 Pharmacology** **2 CR**

Prerequisites: formal admission to the Dental Hygiene Program; and “C” or better in DEHY 121. This course is a study of drugs with special emphasis on those used in dentistry. It focuses on the physical and chemical properties of drugs by groups, dosages, therapeutic effects, and the use of local anesthetics and nitrous oxide pain control modalities. The course also includes the management of medical emergencies relative to the administration of local anesthetics. Successful completion of this course is mandatory for continuing in the program.

**DEHY 241 Clinical Dental Hygiene IV 5 CR**

Prerequisite: formal admission to the Dental Hygiene Program; and “C” or better in DEHY 231. This course is a combination of dental hygiene theory and clinical practice. As students anticipate entering the work

force, they become familiar with practice management issues and prepare cover letters and resumes that are acceptable for seeking employment. Students discuss the interviewing process, as well as traditional and non-traditional career opportunities. During clinical practice sessions, students continue to provide comprehensive dental hygiene services to all their patients. Students also learn the techniques needed to administer local anesthesia and nitrous oxide conscious sedation on students partners during a laboratory portion of this course. Once students demonstrate competency in the lab setting they are able to administer local anesthesia and nitrous oxide conscious sedation on appropriate patients in the clinical setting under the direct supervision of clinical instructors. Successful completion of this course is mandatory for continuing in the program. [16-192-208] Lab Fee

**DEHY 242 Periodontics** **2 CR**

Prerequisites: formal admission to the Dental Hygiene Program; and “C” or better in DEHY 121 and 143. This course examines the etiology, systemic contributing factors, and pathogenesis of periodontal diseases. Particular attention is given to differential diagnosis, treatment planning, and the roles of the dental hygienist in treating periodontal diseases. Students continue with their understanding of non-surgical periodontal therapies and the use of specific chemotherapeutic and anti-microbial agents. Students also study osseous defects, dental implants, and periodontal maintenance therapies. Successful completion of this course is mandatory for continuing in the program.

**DEHY 244 Pain Control** **2 CR**

Prerequisites: formal admission to the Dental Hygiene Program; and “C” or better in DEHY 231 and DEHY 234. This course is a combination of class and lab that studies the physiology of pain and strategies for pain control. Students learn pharmacological, topical, inhalation and local pain control methods. Additionally, students are instructed in

the management of medical emergencies related to the administration of pain control agents. Students learn the techniques needed to administer local anesthesia and nitrous oxide conscious sedation. Students receive laboratory and clinical practice in these techniques in DEHY 241, offered concurrently.

Lab Fee

## **EARLY CHILDHOOD EDUCATION (ECE)**

### **ECE 201 Early Childhood Health, Safety, and Nutrition 3 CR**

This course introduces students to health, safety, and nutrition issues and practices in child care centers and homes (including universal health precautions, community health, and the respective legal implications). Students will study the eating practices and nutrition of young children and the implication they play in promoting healthy physical, social, language, and cognitive development. Emphasis will be placed on preventing communicable diseases and providing safe environments.

Lab Fee

### **ECE 209 Fundamentals of Early Childhood Education 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This course introduces students to various theories and philosophies of childcare, developmentally-appropriate practice, and the CDA functional areas. The critical periods of growth and development for children ages newborn to eight are emphasized. Students apply knowledge based upon either an infant-toddler, preschool age, or family child care emphasis.

### **ECE 210 Child Growth and Development 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This course examines the social, emotional, cognitive, physical, and language development of children ages newborn through adolescence, including the genetic and prenatal influences on the child, the

importance of play and consistent routines, the role of the family, and how nutrition and health issues affect a child's development. New brain research is examined. Students acquire skills in observing, recording, and interpreting child behavior.

Lab Fee

### **ECE 212 Selected Topics in Child Care 1-3 CR**

This course broadens student knowledge through selected topics and issues pertaining to child care. Topics may include administration, nutrition, activities, or legal and ethical issues. Course may be repeated for credit toward graduation up to six credit hours.

Lab Fee

### **ECE 214 Appropriate Assessment with Young Children 3 CR**

Prerequisite: ECE 210 with a “C” or higher. Students explore developmentally-appropriate assessment and observation techniques for children ages newborn to eight. Both standardized and non-standardized assessment tests are reviewed. Advanced behavior management, observation, and recording strategies are explored. Students learn about the Individual Education Plan (IEP) and the Individual Family Service Plan (IFSP) processes.

Lab Fee

### **ECE 215 Positive Child Guidance 3 CR**

This course examines theoretical approaches to guidance, age-appropriate intervention strategies, observation techniques, and group management skills. Emphasis is on the positive development of a child's self-esteem, ages newborn to eight, and positive communications with families. Children's social relationships are examined.

### **ECE 216 CDA Advisor Seminar 2 CR**

Prerequisite: departmental approval. This independent study course provides one-on-one instruction to CDA candidates in the preschool center-based and family day care settings who are completing the final CDA assessment process. A faculty member serves as a CDA advisor to the student who is required to complete 16 hours of field experience. [32-32-64]

---

**ECE 217 School-Age Learning****Environments 3 CR**

This course introduces students to designing exciting, secure, and developmentally-appropriate school-age programs for children ages 5-12. Students explore the physical, social, cognitive, and emotional development of school-age children. Students gain skills in selecting equipment and individual and group management techniques.

**ECE 218 Anti-Bias Curriculum in Early Childhood Settings 3 CR**

This course teaches strategies for effectively managing prejudice, gender, and racial differences within early childhood settings. Focus is on cultural respect and disability awareness through the development and application of anti-bias curricula. Students gain skills in ethical decision making relating to a bias-free environment. Lab Fee

**ECE 219 Creative Arts and Movement for Young Children 3 CR**

Students will have an opportunity to develop techniques in enhancing young children's fine and gross motor skills through hands-on activities incorporating the arts, music, language, space, materials, sound, and physical movement in early childhood learning environments. Lab Fee

**ECE 220 Early Childhood Education Topics 1-3 CR**

This course expands students' knowledge through exploration of early childhood education topics, including developmentally-appropriate practice, program quality assessment, inclusion of special needs children, positive child guidance, and curriculum development for young children. This course is repeatable for up to six credits. Lab Fee

**ECE 221 Early Childhood Internship I 3 CR**

Prerequisite: departmental approval. Students work in early childhood settings to gain professional work experience in the application of developmentally-appropriate practice. Students must complete a

minimum of 275 clock hours of work experience and have program director's approval before registering. Lab Fee

**ECE 224 Introduction to Child Care 3 CR**

This course introduces students to developmentally-appropriate, high-quality child care programming for children ages birth to five. Students will complete routines, scheduling, and activities that encourage children's healthy growth and development. Other topics include the state of Michigan Child Care Licensing Regulations, career opportunities in child care, and types of child care programs.

**ECE 228 Early Childhood Curriculum Development 1-4 CR**

This course focuses on specific curriculum development topics, such as literacy, math, science, music, learning centers, and the senses for children ages newborn to eight years of age. Students complete course objectives in modules. The course may be taken for one to four credit hours and is repeatable for up to six credits. Lab fee may be charged depending on topic.

**ECE 231 Early Childhood Literacy 3 CR**

This course will examine early literacy development and how early childhood providers can support children's literacy development. Emphasis is on functional and meaningful literacy activities that will help to build the necessary foundation for young children to learn to read and write. Lab Fee

**ECE 232 Infant and Toddler Care 3 CR**

Prerequisite: COMPASS reading score of 70, or a "C" in STSK 98 or 99. This course provides students with experience in programming, designing, and sequencing learning experiences for children ages newborn to three including providing secure learning environments, and how space and equipment influence children. Students learn how culture affects young children's development, and how the state of Michigan licensing regulations may pertain to infant and toddler. Students are required to complete 16 hours of field experience while implementing an

infant and toddler rating scale to determine program quality.

[48-16-64]

Lab Fee

### **ECE 233 Early Childhood**

#### **Environments**

**3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This course provides hands-on experience in selecting, preparing, and presenting appropriate curriculum for children in licensed preschool and before-and-after school care settings. Specific areas of study include the development of appropriate learning experiences using music, art, dramatic play, outdoor play, fine and gross motor skills, and literacy. Students learn how to plan appropriate routines. Students are required to complete 16 hours of field experience while implementing a preschool rating scale to determine program quality. [48-16-64]

Lab Fee

### **ECE 237 Young Children with**

#### **Special Needs**

**3 CR**

This course examines young children with disabilities and a variety of methods to help integrate them successfully into a program. Emphasis is on teaching modalities, curriculum, learning materials, environment, and personnel. The evaluation of an Individual Education Plan will be examined. Lab Fee

### **ECE 240 Child Care Administration**

**3 CR**

Students examine the child care administrator's role in directing successful early childhood centers. Topics include safety, child care licensing laws, sound health and nutrition practices, business practices, communication skills, professionalism, personnel management, policy development, accreditation standards, and ethical decision making.

### **ECE 250 Intentional Teaching**

#### **in Early Childhood**

**3 CR**

Prerequisite: “C” or higher in ECE 214. Students learn the components of intentional teaching to ensure all children reach their full potential. Students learn how to use reflection and purposeful planning to ensure each child acquires the skills needed to be successful based on individual assessment.

Students learn how to select the best teaching strategies to promote effective learning across developmental domains. Students will be introduced to coaching, mentoring, and service learning conceptual models in their respective relationships to early childhood education.

### **ECE 260 Positive Relationships**

#### **with Families**

**3 CR**

Students learn how to establish and maintain positive relationships with diverse families of young children. Effective communication strategies are emphasized encouraging equal partnerships with families. Advocacy for families is explored.

## **ECONOMICS (ECON)**

### **ECON 201 Principles of**

#### **Economics-MACRO**

**3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. A study of the American economic system, including the basic tenets of the private enterprise system; national income accounting, economic instability, unemployment inflation; modern theory of income employment, employment and prices; fiscal and monetary policy; banking system (including the Federal Reserve); and related contemporary macroeconomic issues.

### **ECON 201H Principles of**

#### **Economics-MACRO-Honors**

**3 CR**

Prerequisite: an ACT composite score of 20 or higher, or an ASSET reading or writing score of 51 or higher, or a COMPASS reading or writing score of 93 or higher, or the written approval of the honors coordinator. A study of the American economic system including: the basic tenets of the private enterprise system, instability, inflation, unemployment, growth, fiscal and monetary policy, the banking system (including the Federal Reserve System), and related macroeconomic topics. This honors section will focus on the question of the “proper role of the federal government in the economy” by studying poverty and discrimination in the labor markets.

---

## **ECON 202 Principles of**

### **Economics-MICRO**

**3 CR**

Prerequisite: COMPASS reading score of 65 or higher or successful completion of STSK 99." A study of supply and demand analysis; costs of production; structure of American industry; resource pricing; and contemporary microeconomic issues that will include labor economics, urban and rural problems, income distribution, antitrust problems, and international economic issues.

## **EDUCATION (EDUC)**

### **EDUC 200 Foundations of Education 3 CR**

This course introduces students to the historical, sociological, philosophical, and legal foundations of American education with a focus on educational issues and cross-cultural comparison. Special emphasis is placed on the professional responsibilities of teachers.

### **EDUC 201 Cooperative Education I 3 CR**

Prerequisites: EDUC 200 and any one of the following courses: ART 141, LITE 213, MATH 111, MUSI 141, PEP 290, or PSYC 220. This is a coordinated work experience for education students, and it is recommended that students be enrolled in an education class. The course is designed to provide each candidate with the opportunity for limited professional experience in preschool or K-12 classrooms. Students will meet as a class one hour per week.

### **EDUC 202 Cooperative Education II 3 CR**

Prerequisites: EDUC 201 and instructor approval. A continuation of EDUC 201. Students will meet as a class one hour per week.

### **EDUC 203 Cooperative Education III 3 CR**

Prerequisites: EDUC 202 and instructor approval. A continuation of EDUC 202. Students will meet as a class one hour per week.

### **EDUC 204 Education of the**

#### **Exceptional Learner**

**2 CR**

Historical perspective, legislation and litigation, psychological, academic, social, and

cognitive characteristics associated with specific handicapping conditions, assessment and intervention procedures, special education services and programming, the role of family and community, and current issues related to special education.

### **EDUC 250 College Teaching**

#### **Internship I**

**3 CR**

Prerequisite: EDUC 200. This unpaid internship is intended to introduce students to the workings of a college and development of knowledge and skills necessary to be an effective educator in higher education. Activities include attendance at a college board meeting, design of a course and syllabi, selection of instructional materials, interviewing strategies, resume writing, and rotations with college faculty including teaching demos.

### **EDUC 251 College Teaching**

#### **Internship II**

**3 CR**

Prerequisite: EDUC 250. This unpaid internship intends to continue the student's experience from EDUC 250 and will include activities, such as videotaping of a class demonstration; being able to distinguish between the roles of adjuncts and full-time faculty; technology training (including distant learning); attendance at an external college board meeting; rotations in academic advising; open entry/open exit modalities; and learning about effective instruction.

### **EDUC 299 Field Experience**

**1 CR**

Prerequisites: EDUC 200 and coordinator approval. This course provides an opportunity for the student interested in the profession of teaching to gain experience in a local school system.

## **EMERGENCY MEDICAL TECHNICIAN (EMT)**

### **EMT 5C BLS for Healthcare**

#### **Providers**

**.50 CR**

The American Heart Association BLS for Healthcare Providers course is designed to teach the skills of CPR for victims of all ages (including ventilation with barrier device, a

---

bag-valve-mask device, and oxygen), use of an automated external defibrillator (AED), and relief of foreign-body airway obstruction. It is intended for participants who provide health care to patients in a wide variety of settings, including in-hospital and out-of-hospital settings. These health care providers may include (but are not limited to) physicians, nurses, paramedics, emergency medical technicians, respiratory therapists, physical and occupational therapists, physician assistants, and other allied health personnel. Students who successfully complete this program will receive certification from the American Heart Association. Lab Fee

### **EMT 5F BCLS: AHA CPR**

#### **Instructor Course**

**2 CR**

Prerequisite: current (within 1 year) certification in Course “C” (CPR) from the American Heart Association. The American Heart Association (AHA) Cardiopulmonary Resuscitation (CPR) Instructor Course is a 32-hour program designed to provide the student with the training necessary to conduct any of the American Heart Association Basic Cardiac Life Support (BCLS) CPR courses which are offered. This course includes: an overview to BCLS instruction, teaching strategies, safety/health concerns, teaching outlines, organizational strategies, mannequin maintenance/troubleshooting/repair, and criteria for evaluating the CPR student. Students taking this course will be required to take a written and practical skills test. Students will be required to present a mini-lecture on a BCLS skill (cognitive or psychomotor). Certification will be given to students after they complete a practicum. THIS COURSE IS BASED ON THE 2001 GUIDELINES.

Lab Fee

### **EMT 110 Medical First Responder**

#### **Training**

**3 CR**

The Medical First Responder Course is designed to provide licensure for the student with the Michigan Department of Public Health as a medical first responder. This course is based on the 1997 Medical First

Responder curriculum as established by the Michigan Department of Public Health EMS Division. Students who successfully complete the requirements of this course will be licensed as medical first responders with the Michigan Department of Public Health EMS Division. This course is designed to provide the student with the knowledge of what to do for a patient prior to the arrival of an ambulance. This course is designed for anyone who may be required to provide care for a sick or injured individual prior to the arrival of an ambulance. This includes (but is not limited to) firefighters, police officers, and first response team members. The course includes training in CPR; bleeding control; airway management; splinting; extrication; oxygen therapy; and medical, environmental, and other emergencies. [32-32-64] Lab Fee

### **EMT 120 Basic Emergency Medical**

#### **Technician Didactic**

**8 CR**

Prerequisites: current AHA Healthcare Providers CPR card and ASSET test. This course is designed to prepare the student for licensure as a Basic Emergency Medical Technician in the state of Michigan. This course involves medical procedures and use of equipment as prescribed by the American Academy of Orthopedic Surgeons, U.S. Department of Transportation, and the Michigan Department of Consumer and Industrial Services. Topics include: legal responsibilities, anatomy, physiology, patient assessment, management of various emergency situations, extrication, and current standards for BEMTs in the field. This course is based on the 1996 updated requirements for Emergency Medical Technician training.

### **EMT 121 Basic Emergency Medical**

#### **Technician Skills Lab**

**2.25 CR**

Prerequisite: current enrollment in EMT 120. This course is designed to compliment the didactic material learned in the EMT 120 course with the hands-on skills required to perform as a Basic EMT. Students will learn and practice skills such as CPR, patient assessment, splinting, airway management,

automatic defibrillation, bleeding management, medical antishock trouser application, and IV maintenance. Students will also participate in scenario-based education and computer-based testing and scenarios to reinforce skills learned within this area. [0-72-72] Lab Fee

**EMT 122 Defensive Emergency Driving/ AllSafe 1 CR**

Prerequisite: candidates who enroll in this course will have their driving record checked by KCC. The College reserves the right to refuse the driving component to any individual whose driving record does not meet standards of the institution where the driving component is practiced. A course to prepare the licensed EMT (any level) with the defensive driving skills required by the EMS profession. Included in this course is information on AllSafe, defensive driving, tactics, laws regarding operation of an emergency vehicle, and practice in driving. This course includes an eight-hour practice driving component. [12-8-20] Lab Fee

**EMT 123 Basic Emergency Medical Technician Clinical Internship .75 CR**

Prerequisites: current enrollment in EMT 120, 121, 122; HETE 990; and Hepatitis-B inoculation/declination form. This course is designed for students to observe and participate in the clinical experiences in both the pre-hospital and hospital settings. Students must complete a minimum of six eight-hour experiences in the hospital emergency room and on a pre-hospital life support agency. [0-48-48] Lab Fee

**EMT 162A Pharmacology I 2 CR**

Prerequisite: departmental permission. This course is designed to provide the AEMT students with a knowledge of basic pharmacological principles, biological factors influencing drug actions, predictable effects of drugs on physiologic problems, modifiers of predictable effects, commonalities and variations between the actions of drugs employed for comparable therapeutic effect, adverse effects of drugs that can and do

commonly occur, and application for pharmacological therapy in the pre-hospital setting. Concentration will focus on cardiovascular drugs in this semester.

**EMT 162B Pharmacology II 2 CR**

Prerequisites: EMT 162A and departmental permission. This course is designed to provide pharmacological information on the remaining non-cardiac drugs, which a paramedic will experience in the pre-hospital and hospital setting. This course is based on the Paramedic Education program requirements as set by the Michigan Department of Consumer and Industrial Services.

**EMT 163A Skills Lab I 2 CR**

Prerequisites: departmental permission and registration in EMT 162A, 164A, and 167A. This course is designed to provide the paramedic student with the skills as prescribed by the Michigan Department of Consumer and Industrial Services (MDCIS) for the paramedic curriculum. This course includes skill practice and scenarios (both computer and classroom). This course is part of the paramedic curriculum and must be taken with EMT 163B within the same year of instruction. [0-64-64] Lab Fee

**EMT 163B Skills Lab II 2 CR**

Prerequisites: departmental permission and registration in EMT 162B, 164B, and 167B. This course is designed to provide the paramedic student with the skills as prescribed by the Michigan Department of Consumer and Industrial Services (MDCIS) for the paramedic curriculum. This course includes skill practice and scenarios (both computer and classroom). This course is part of the paramedic curriculum and must be taken with EMT 163A within the same year of instruction. [0-64-64] Lab Fee

**EMT 164A Paramedic Clinical Internship I 5 CR**

Prerequisites: departmental permission and HETE 990. This course is designed to provide the first semester clinical hours necessary to meet the requirements of the Michigan Department of Consumer and

---

Industrial Services paramedic curriculum and U.S. Department of Transportation. This course includes clinical rotations at various sites including ambulance, hospital, and skilled-care facilities. [16-240-256] Lab Fee

**EMT 164B Paramedic Clinical Internship II** **5 CR**

Prerequisite: departmental permission and HETE 990. This course is designed to provide the second semester clinical hours necessary to meet the requirements of the Michigan Department of Consumer and Industrial Services paramedic curriculum and U.S. Department of Transportation. This course includes clinical rotations at various sites including ambulance, hospital, and skilled-care facilities. [16-240-256] Lab Fee

**EMT 165 Paramedic Pediatric Advanced Life Support** **2 CR**

Prerequisites: EMT 162, 167A; OIT 227; BIOL 201; and departmental permission. This course is designed to provide the paramedic student with the skills and knowledge to handle pediatric emergencies in the pre-hospital setting. Pediatric patients are not treated as "young" adults. They are a distinct population with different responses to injuries than adults. This course is run concurrently with EMT 23P (Pediatric Trauma Life Support Training). Therefore, students are not allowed to enroll in EMT 23P concurrently with this course. [24-16-40] Lab Fee

**EMT 166A Cardiology I** **2 CR**

Prerequisites: EMT 60A, or BIOL 201, and departmental permission. This is a course designed to provide knowledge in cardiology to fulfill the needs of the AEMT (Paramedic) Program. This course involves medical procedures and use of equipment as stated by the U.S. Department of Transportation, Michigan Department of Public Health, and the American Heart Association Advanced Cardiac Life Support standards. Topics include: rapid interpretation of EKGs, static recognition of EKGs, electrical therapy, pharmacological therapy, and basic algorithms for treatment of cardiac arrhythmias.

**EMT 166B Cardiology II** **2 CR**

Prerequisites: EMT 60A, or BIOL 201, or EMT 166A, and departmental permission. This course is designed to provide knowledge in cardiology to fulfill the needs of the AEMT (Paramedic) program. This course involves medical procedures and use of equipment as stated by the U.S. Department of Transportation, Michigan Department of Public Health, and the American Heart Association Advanced Cardiac Life Support standards. Topics include pathophysiology of heart disorders, 12 lead EKG interpretation, pediatric ACLS, and pharmacological therapy.

**EMT 167A Advanced EMT I** **4 CR**

Prerequisites: departmental permission and concurrent enrollment in EMT 60A or BIOL 201, EMT 162A, 163A, 164A, and 166A. This course is designed to prepare the student for licensure as an Advanced Emergency Medical Technician (Paramedic) in the state of Michigan. This course includes patient assessment techniques and concepts, advanced airway management, fluid and shock resuscitation, acid/base and body buffer systems, and multi-systems trauma treatments. Included in this course is a module on medical terminology. The course involves medical procedures and use of equipment as prescribed by the U.S. Department of Transportation, Michigan Department of Public Health, and Calhoun County Medical Control Authority.

**EMT 167B Advanced EMT II** **4 CR**

Prerequisites: EMT 60A or BIOL 201, EMT 162A, 163A, 164A, 166A, 167A, and departmental permission. This course is designed to prepare the student for licensure as an advanced emergency medical technician in the state of Michigan. The course involves medical procedures and use of equipment as prescribed by the U.S. Department of Transportation, the Michigan Department of Public Health, and Calhoun County Medical Control Authority. Topics include: advanced life support in gynecological emergencies,

---

behavioral emergency management, gastro-intestinal emergencies, lab test analysis, and other medical emergencies.

**EMT 168 Advanced Practice 4 CR**

Prerequisites: EMT 162A, 163A, 164A, 166A, 167A, BIOL 201, and departmental permission. This course provides the paramedic student the knowledge in the transport of patients with special considerations and advanced EMT operations as prescribed in the U.S. Department of Transportation's paramedic curriculum. Student will take a comprehensive exam at the conclusion of this course for certification by Kellogg Community College. This certification can be used as evidence of completion for the National Registry Exam (passage of which leads to licensing in most U.S. states).

**EMT 270 EMS System Management 4 CR**

Prerequisites: EMT 120A or 120B and 120C; ECON 202; and departmental permission. This course is designed to give the student practical insight into the management process of EMS as a service industry. The course specifically applies management principles to the EMS setting. This course builds on previous course work which students have participated in throughout their studies. Topics within this course include: EMS management structures, EMS-related problems, EMS public relations, EMS funding/finance, EMS special programs, employee relations, community relations, leadership concepts, communications skills, OSHA/MIOSHA, and legislation which affects EMS and the work place.

**EMT 275 EMS Management Practicum 3 CR**

Prerequisite: EMT 270. This course is designed to provide the student with an opportunity to observe/practice the theories/concepts which they learned within the EMS management course (EMT 270). Students will be assigned to an agency supervisor for a 64-hour practicum. During this time the student is required to observe the daily activities of the supervisor in relationship to

management principles. Students are encouraged to develop a project with their supervisor which demonstrates management concepts. Students will meet on a regular basis with the practicum instructor for advice regarding their assignment. [16-64-80]

**EMT 280 EMS Instructor/Coordinator Training 5 CR**

Prerequisites: licensure as an EMT-B, EMT-S, or EMT-P; three years of full-time field experience; and departmental approval. The EMS instructor/coordinator course is designed to provide the student with the knowledge to become a licensed EMS Instructor/Coordinator within the state of Michigan. This course is based on the U.S. Department of Transportation National Standard Curriculum for an instructor training program. This course is approved by the Michigan Department of Public Health in conjunction with EMT 285 for licensure as an EMS Instructor/Coordinator in Michigan. For more information please contact the EMS Education Director or EMS Instructor-Trainer. Lab Fee

**EMT 285 EMS Instructor/Coordinator Practicum 5 CR**

Prerequisites: EMT 280 and departmental approval. The EMS Instructor/Coordinator Practicum course is designed to provide the student with guided student teaching within an EMS course or courses. The student will be assigned a site(s) for student teaching. Within this site(s) the student will follow MDPH guidelines in didactic and lab skills lecture. The course instructor and site instructor will periodically meet with the student to review their performance. Following successful completion of this course, the student will be recommended for MDPH licensure as an EMS Instructor/Coordinator. [72-32-104]

**EMT 290 UMBC Critical Care Emergency Medical Transport Program 5 CR**

Requirements for paramedics to participate: two years as a licensed paramedic, current certifications in CPR, ACLS, BTLIS or

PHTLS, and PALS. Requirements for nurses to participate: two years as a licensed registered nurse, current certifications in CPR, ACLS, PALS, and BTLs/PHTLS or TNCC. This course is based on the nationally-accepted University of Maryland-Baltimore County Critical Care Emergency Medical Transport Program. This program is designed to prepare paramedics and nurses to function as members of a critical care transport team. Critical patients that must be transported between facilities require a different level of care from hospital or emergency field patients. Participants will gain an understanding of the special needs of critical patients during transport, become familiar with the purpose and mechanisms of hospital procedures and equipment, and develop the skills to maintain the stability of hospital equipment and procedures during transport. Topics include: the critical care environment, breathing management, surgical airway management, hemodynamic management, cardiac management, pharmacological management; GI, GU, and renal management, neurological management, complications of transport, and special considerations. Lab Fee

**EMT 291 UMBC Critical Care Emergency Medical Transport Program Clinical Internship 1.25 CR**  
Prerequisites: enrollment in EMT 290. Hepatitis B inoculation or declination form is required. This course compliments the didactic portion of the UMBC CCEMTP Program by providing clinical experiences as recommended by the State of Michigan EMS Division. Legislation is pending which may require clinical experiences to be authorized to function within the State of Michigan as a CCEMTP. This course meets those requirements. Students will participate in clinical experiences with a pre-hospital critical care provider and within the hospital emergency room, operating room, intensive care unit, cardiac catheterization unit and critical care unit. [0-20-20]

**EMT 295 UMBC Pediatric/Neonatal Critical Care Transport Course 4 CR**  
Required to participate: two years of documented experience in critical care environment. This intensive one-week course is designed to prepare experienced paramedics, nurses, and respiratory therapists to function as members of a pediatric and neonatal critical care support team. This course is based on the nationally-accepted University of Maryland-Baltimore County course in pediatric/neonatal care. Participants will gain an understanding of the special needs of critical patients during transport, become familiar with the purpose and mechanisms of hospital procedures and equipment, and develop the skills to maintain the stability of hospital equipment and procedures during transport. In addition, this course may serve as a springboard for those institutions looking to expand into pediatric critical care.

## **ENGINEERING TECHNOLOGY (ENTE)**

**ENTE 160 Manufacturing Processes 3 CR**  
A hands-on introduction to the processes used to measure, form, fabricate, machine, and finish materials. Laboratory experience in a variety of machining and welding processes will take place at the Regional Manufacturing Technology Center in the Fort Custer Industrial Park. This course will be self-paced instruction through a series of learning modules. Please see your advisor for more details. [0-64-64] Lab Fee

**ENTE 195 Cooperative Work Experience 1-3 CR**  
Prerequisite: departmental approval. A coordinated industrial work experience for selected students enrolled in the Drafting and Design and Computer Engineering Technology curricula. Enrollees will be under the supervision of the College and the participating company. Written reports will be required, and a performance appraisal of the student will be made by the College and

the employer. Students will meet as a class one hour per week.

**ENTE 198 Independent Study 1-3 CR**

Prerequisite: departmental approval. Courses may be repeated for additional credit. An opportunity for the interested student with a good scholastic record to pursue independently the study of some subject under the direction of a member(s) of the faculty. Subjects are chosen and arrangements made to suit the needs of individual students.

**ENTE 215 Material Science 3 CR**

This course is intended to introduce the student to the materials used in engineering/industry and their properties. The types of material studied will include ferrous and nonferrous metals, plastics, rubber, ceramics, glass, and cement. In addition, material inspection, testing, and the effects of heat treatment and corrosion will be studied. Laboratory experiences will include the testing and inspection of materials. [48-16-64] Lab Fee

**ENTE 220 Statics and Strengths of Materials 3 CR**

Prerequisite: MATH 118 or TEMA 111. This course is a study of the force systems which act on an object at rest and the behavior of materials when placed under loads and restraints. Topics will include calculating centers of gravity and moments of inertia; predicting the effect of forces applied in tension, compression, shear, and torsion on riveted and welded joints; and developing bending moment diagrams for beams and columns. Laboratory experiences will focus on the methods of material testing. [48-16-64] Lab Fee

**ENGLISH (ENGL)**

*English courses numbered 0 to 99 have options on content and variable credit aimed at meeting local area needs. Up to six hours of credit from these courses shall be applied toward the associate in general studies degree. Credit earned from these courses shall also be used toward other*

*associate degrees or certificates when applicable and will be evaluated upon admission to a specific program. Diagnostic testing in writing will be available prior to each semester and also during the semester. Contact an academic advisor or the Arts and Communication department chairperson for information.*

**ENGL 95 Spelling Improvement 1 CR**

This class will concentrate on individual and group work to develop the skills students need to improve their spelling for college-level work.

**ENGL 96 English as a Second Language 3 CR**

Prerequisite: COMPASS writing score of 0-27. This course is designed for students whose primary language is not English. It provides foundations in English language structure, reading of English, and conversation. Course may be repeated up to three times.

**ENGL 97 Writing Skills 3 CR**

Prerequisite: COMPASS writing score of 0-27. Recommend STSK 98 be taken concurrently. Students will learn grammar, mechanics, sentence structure, and paragraph development in a traditional classroom and laboratory setting. Classroom experience will be group work, lecture, writing, and revision. Homework will require access to computer (on or off campus.) Instruction will be delivered through individualized programming and computerized exercises. Lab Fee

**ENGL 99 Self-Paced Instruction in Writing Skills 1 CR**

Prerequisite: COMPASS writing score of 28-37. Recommend STSK 99 be taken concurrently. This course will help students improve their spelling, vocabulary, grammar, and writing. It is self-paced, individualized, and benefits students in all disciplines. Computer-based instruction. [0-24-24] Lab Fee

**ENGL 120 Writing Improvement 3 CR**

Prerequisite: COMPASS writing range 38-77 or a "C" in ENGL 97. Recommend STSK 99 be taken concurrently with other courses that

---

require heavy reading and writing. Designed to improve basic writing skills. Writing assignments emphasize the paragraph and short compositions. Emphasis is on grammar, usage, punctuation, and writing.

**ENGL 151 Freshman Composition 3 CR**

Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and COMPASS writing score of 78, or “C” in ENGL 120. Writing expository prose with emphasis on the thesis sentence, idea development, unity, continuity, coherence, patterns of exposition, and educated usage.

Lab Fee

**ENGL 151H Freshman Composition-Honors 3 CR**

Prerequisites: COMPASS writing score of 93-100, and student must meet one or more of the Honors Program's eligibility requirements. The intellectually-able student is permitted to pursue in-depth studies in expository writing. The student must be interested in developing excellence in writing. Lab Fee

**ENGL 152 Freshman Composition 3 CR**

Prerequisite: a “C” in ENGL 151. A continuation of ENGL 151, including research writing, examination, and discussion of selected readings.

Lab Fee

**ENGL 152H Freshman Composition-Honors 3 CR**

Prerequisite: a “C” in ENGL 151H, or ENGL 151 with departmental or honors coordinator's approval. A continuation of ENGL 151 Honors with emphasis on preparation and writing of a research paper on a challenging topic. Analysis of fiction and nonfiction selections to refine critical thinking skills.

Lab Fee

**ENGL 153 Technical English 3 CR**

Prerequisite: COMPASS writing score of 78 or a “C” in ENGL 120. Instruction and practice in writing for industry and technology. Emphasis is on meeting the written communication needs for the technical student.

Lab Fee

**ENGL 201 Advanced Composition 3 CR**

Prerequisite: ENGL 152. Practice in expository writing to develop a mastery of clear, accurate style. This course is recommended for all students majoring in English or in pre-professional programs. Writing assignments are individually designed to relate to students' majors.

Lab Fee

**ENGL 203 Introduction to Creative Writing 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. ENGL 201 recommended prior to ENGL 203. Designed to introduce students to the basic elements that govern the creation of short fiction, poetry, and creative nonfiction. Emphasis is on development of creative style and the development of craft in handling poetic form.

**ENGL 204 Advanced Creative Writing 3 CR**

Prerequisite: a “C” in ENGL 203. Designed to facilitate students' understanding of the ways fiction, poetry, and drama work. Students will deal with theory and technique in traditional and contemporary works, emphasis on expanding creative scope, and developing students' own voice and style.

**ENGL 205 Script Writing for the Media 3 CR**

Prerequisite: a “C” in ENGL 120 or COMPASS writing score of at least 72. This course emphasizes writing for the media using current industry practices. Students will learn writing of script for radio and television broadcasting, audio and video production, and screen play for film style production.

**ENGL 215 Grant Writing 3 CR**

Prerequisite: ENGL 151. Emphasis on understanding the grant-making process, writing an effective grant proposal, and evaluating a grant proposal.

**ENGL 269 Writing for the Elementary Classroom 3 CR**

Prerequisite: a “C” in ENGL 151. A lecture/workshop structured to develop the writing

---

skills of prospective teachers and to explore the means by which the writing ability of elementary school children can be encouraged, developed, and evaluated. Lab Fee

**ENGL 298 Independent Study 1-3 CR**

Prerequisite: departmental approval only. An opportunity for the interested student with a good scholastic record to pursue independently the study of some subject under the direction of a member(s) of the professional staff. Subjects are chosen and arrangements made to suit the needs of the individual students. Course may be repeated for credit toward graduation up to three credit hours.

## **FIRE SCIENCE (FISC)**

**FISC 102 Firefighter I and II 12 CR**

This course includes basic fire fighting skills while utilizing tools and equipment commonly used by municipal fire departments. Hazardous materials operations (24-hour) level training is a required component.

*NOTE: The current fire science curriculum is offered as a career advancement program for the already certified volunteer or career firefighter. The program can recognize a limited number of training certifications issued by the state of Michigan and the state of Indiana. This course is sanctioned by the Michigan Fire Fighters Training Council, the firefighter certification agency for the state of Michigan. Students possessing state certifications should contact Kalamazoo Valley Community College (KVCC) for transferability. Students in need of Firefighter II certification are encouraged to contact KVCC, 269-488-4202 or visit the KVCC web site at <[www.kvcc.edu](http://www.kvcc.edu)> for program updates.*

**FISC 110 Fire Prevention 3 CR**

This course will introduce students to an important function of any progressive fire department—fire prevention. Major topics include fire prevention inspection techniques, the importance of code enforcement procedures, and developing public fire education programs.

**FISC 111 Building Construction 3 CR**

Students will explore the methods and materials used to construct buildings, how the design and engineering

of a structure can influence smoke and fire travel, and how the structural integrity of a building is affected by fire. The safety of building occupants and firefighters is emphasized.

**FISC 112 Fire Service Tactics 3 CR**

This course will examine modern firefighting techniques used to effectively mitigate a variety of incidents. Students will review different tactics related to general and specific fire situations. It is designed to prepare firefighters and fire officers to successfully execute strategic assignments from incident managers.

**FISC 210 Fire Cause Determination 3 CR**

Firefighters and fire officers will learn how to determine the origin and cause of a fire. Identifying and preserving evidence, recognizing when the assistance of a more highly trained investigator is needed, and courtroom procedures will be discussed.

**FISC 211 Instructional Techniques 3 CR**

This course is a comprehensive approach to the basics of instructing and presenting. Students will study characteristics of adult learners, learn to identify training needs, develop outlines, and make presentations in class. The operation of audiovisual equipment will be demonstrated.

**FISC 212 Incident Management 3 CR**

The emphasis of this course is to provide firefighters and fire officers with the knowledge and skills necessary to manage incident operations. Classroom activities will focus on recognizing incident priorities and the ability to manage fire serve personnel, equipment, and other resources.

## **FRENCH (FREN)**

**FREN 101 Elementary French 4 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. Introductory course stressing pronunciation, comprehension, basic grammar structures, and French culture and civilization. Individual/small group sessions to

---

practice grammar and pronunciation are used. [32-32-64] Lab Fee

**FREN 102 Elementary French 4 CR**

Prerequisite: a "C" in FREN 101. Aimed at developing communicative ability, this course is based on a series of "real-life" themes, situations, and speech. Vocabulary and grammatical structures are presented within an appropriate thematic or situational context. Emphasis is on vocabulary and syntax. [32-32-64] Lab Fee

**FREN 201 Intermediate French 4 CR**

Prerequisite: a "C" in FREN 102. Comprehensive oral and written reviews of grammatical structures through varied reading selections, conversations, and presentations. [32-32-64] Lab Fee

**FREN 202 Intermediate French 4 CR**

Prerequisite: a "C" in FREN 201. Extensive reading to further develop vocabulary and mastery of the language. Advanced prose selections from varied French writers. [32-32-64] Lab Fee

## **GEOGRAPHY (GEOG)**

**GEOG 100 Physical Geography 4 CR**

Prerequisite: COMPASS reading score of 70, or a "C" in STSK 98 or 99. A one-semester lecture and laboratory course devoted to the study of man's environment on earth. Areas of consideration include earth-sun relationships, the earth's waters, tectonic and gradational processes, earth materials, the atmosphere, elements and controls of climate, soils, and vegetation. Man, as an active force within and upon this environment, is considered. [48-16-64] Lab Fee

## **GRAPHIC DESIGN (GRDE)**

**GRDE 100 Introduction to Graphic Design 3 CR**

This course introduces the student to graphic design by covering areas inherent to the field, including history, contemporary design, work-related occupations, people in graphic design, marketing, typography, printing,

software, and hardware. The course also provides an overview of the Graphic Design Program, covering options available to students to potentially guide their development within the program. [24-24-48] Lab Fee

**GRDE 105 Using and Troubleshooting the Macintosh 3 CR**

This course explores the components, terminology, features, and uses of the Macintosh operating system. Additional consideration is given to software and hardware, peripherals, diagnosing and troubleshooting, Internet devices, upgrading, maintaining, and networking. Through hands-on exercises the student will learn to navigate through the Macintosh operating system, while understanding some of the more complex issues that Mac users face on a daily basis. [24-24-48] Lab Fee

**GRDE 130 Page Layout 4 CR**

This course explores the components, terminology, features, and uses of InDesign. Emphasis is given to creating professional-looking layouts utilizing InDesign as the layout vehicle. Through hands-on lectures, demonstrations, and projects, the student will learn the essential techniques and functions of the program while understanding some of the more complex issues of this software. [32-32-64] Lab Fee

**GRDE 140 Vector Drawing 4 CR**

This course explores the components, terminology, features, and uses of Illustrator. Emphasis is given to creating professional-looking artwork and graphics utilizing Illustrator as the layout vehicle. Through hands-on lectures, demonstrations, and projects, the student will learn the essential techniques and functions of the program while understanding some of the more complex layout issues that designers face when using the software. [32-32-64] Lab Fee

**GRDE 161 Flash 4 CR**

This course explores the components, terminology, features, and uses of Flash. Emphasis

---

is given to creating professional-looking animations for web pages utilizing Flash as the layout vehicle. Through hands-on lectures, demonstrations, and projects, the student will learn the essential techniques and functions of the program while understanding some of the more complex issues that designers face when using this software. [32-32-64] Lab Fee

**GRDE 167 Dreamweaver 4 CR**

This course explores the components, terminology, features, and uses of Dreamweaver. Emphasis is given to creating professional-looking web pages utilizing Dreamweaver as the layout vehicle. Through hands-on lectures, demonstrations, and projects, the student will learn the essential techniques and functions of the program while understanding some of the more complex issues that web designers face when using this software. [32-32-64] Lab Fee

**GRDE 170 Photoshop 4 CR**

This course introduces the components, terminology, features, and uses of Photoshop. Emphasis is given to creating professional-looking artwork and graphics utilizing Photoshop as the layout vehicle. Through hands-on overviews, tutorials, and competencies, the student will learn advanced techniques of the program while understanding some of the more complex issues that designers face when using this software. [32-32-64] Lab Fee

**GRDE 200 Design Lab 4 CR**

Prerequisites: GRDE 130, 140, and 170. This course focuses on preparing students to effectively communicate ideas and information to business and consumer audiences using design. Students will work in a professional lab environment with the instructor working as the manager on individual projects. Students will be asked to complete a series of projects while developing speed and proficiency through the process. [32-32-64] Lab Fee

**GRDE 201 Design Practicum 4 CR**

Prerequisites: GRDE 130, 140, and 170. This course is a practicum that focuses on

students developing their design portfolio. Students will work in a professional lab environment with the instructor working as the manager on individual projects. Students will be asked to strengthen their current portfolios while completing self-marketing campaigns in preparation of entering the job market. Emphasis will be placed on completing a strong portfolio upon completion of this course. [32-32-64] Lab Fee

**GRDE 207 Advertising Design 4 CR**

Prerequisites: GRDE 130, 140, and 170. This course is designed to develop the design and marketing abilities of students. The course also deals with relevant issues related to advertising design as applied to business and design through a study of applied strategies and case histories. A variety of advertising design techniques will be studied while students are pushed to develop strategies and ideas from concept to completion. Students will be asked to complete comprehensive ad campaigns by the end of the semester. [24-40-64] Lab Fee

**GRDE 260 Graphic Design Field Experience 3 CR**

This course allows the student to work with the instructor through field-related experiences. The instructor works as the manager with the student on a variety of projects taken from business and industry. The course allows the student to gain experience and understanding of the field outside the classroom in a job like environment.

**GRDE 270 Graphic Design Internship 3 CR**

This course requires the student to gain relevant field experience by placing the student in a non-classroom environment that exposes them to modern business and practices. Typically, local advertising agencies, graphic design firms, and printing houses are utilized to provide a valid work experience for the student. Students will either be placed by the instructor or can choose an internship location upon approval from the instructor. [32-32-64]

---

**GRDE 297 Graphic Design-Special Topics** 4 CR

This course allows the student to explore focus areas, such as specific software, publications, printed material, and web page development. Since topics change, this course may be repeated for credit toward graduation up to eight credits. [32-32-64]

Lab Fee

**GRDE 298 Independent Study** 1-4 CR

Prerequisite: departmental approval necessary prior to registration. An opportunity for the interested student to pursue independently the study of some subject under the direction of a member(s) of the professional staff. Problems are designed and arrangements made to meet the needs of the individual students.

## **HISTORY (HIST)**

**HIST 103 American Foundations** 3 CR

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. A survey of the political, economic, and social history of the United States from the colonial era to 1877.

**HIST 104 Modern America** 3 CR

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. A survey of the political, economic, and social history of the United States from 1877 to the present.

**HIST 104H Modern America—Honors** 3 CR

Prerequisite: an ACT composite score of 20 or higher, or an ASSET reading or writing score of 51 or higher, or a COMPASS reading or writing score of 93 or higher, or the written approval of the honors coordinator. A survey of the political, economic, and social history of the United States from 1877 to the present. An honors course for superior students enrolled in HIST 104. Entry to honors status only by the invitation of the instructor. Emphasis on individual study and personal projects.

**HIST 106 Religious History** 2-4 CR

A comparative study of the historical development, doctrine, and practices of the major varieties of Christianity or of other great world religions. Pertinent social factors and recent events will also be explored. The specific topic to be studied will change from semester to semester, and students may enroll again for up to a total of six credit hours as often as the study topic is changed. With certain topics students must be able to attend religious events or exhibits scheduled in the evening or on weekends. Humanities or social science credit.

**HIST 151 Western Civilization: Early Western World** 3 CR

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This course is a survey of the major developments in European Civilization from the ancient Middle East, Greece and Rome, medieval period, Renaissance, and Reformation to early modern Europe (mid-1600s). Selected political, economic, social, religious, intellectual, and aesthetic elements that form present-day western civilization will be emphasized. The course will also emphasize the interchange of ideas between Asia, Africa, and the West, as well as an understanding of our cultural history as essential to the study of other cultures.

**HIST 151H Western Civilization: Early Western World-Honors** 3 CR

Prerequisite: an ACT composite score of 20 or higher, or an ASSET reading or writing score of 51 or higher, or a COMPASS reading or writing score of 93 or higher, or the written approval of the honors coordinator. This course is a survey of the major developments in European Civilization from the ancient Middle East, Greece and Rome, medieval period, Renaissance, and Reformation to early modern Europe (mid-1600s). Selected political, economic, social, religious, intellectual, and aesthetic elements that form present-day western civilization will be

emphasized. The course will also emphasize the interchange of ideas between Asia, Africa, and the West, as well as an understanding of our cultural history as essential to the study of other cultures. An honors course for superior students enrolled in HIST 151. Entry to honors status only on invitation of the instructor. Emphasis on individual study and personal projects.

### **HIST 152 Western Civilization:**

#### **Modern Western World**

**3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This course is a survey of the major developments in European Civilization from the mid-1600s to the present. Selected political, economic, social, religious, intellectual, and aesthetic elements from the scientific revolution to the contemporary world will be considered. The impact of revolution, nationalism, and world war upon recent world events will be emphasized. The course will also include the interchange of ideas between Asia, Africa, and the West.

### **HIST 152H Western Civilization: Modern Western World-Honors**

**3 CR**

Prerequisite: an ACT composite score of 20 or higher, or an ASSET reading or writing score of 51 or higher, or a COMPASS reading or writing score of 93 or higher, or the written approval of the honors coordinator. This course is a survey of the major developments in European Civilization from the mid-1600s to the present. Selected political, economic, social, religious, intellectual, and aesthetic elements from the scientific revolution to the contemporary world will be considered. The impact of revolution, nationalism, and world war upon recent world events will be emphasized. The course will also include the interchange of ideas between Asia, Africa, and the West. An honors course for superior students enrolled in HIST 152. Entry to honors status only upon invitation of the instructor. Emphasis on individual study and personal projects.

### **HIST 201 Global History to 1500** **3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. An interdisciplinary study of various world civilizations in Africa, the Americas, Asia, and Europe from 10,000 B.C.E. (Before Common Era) to 1500 C.E. (Common Era). This course will use a comparative approach to study a variety of global themes and patterns over time. Humanities or social science credit.

### **HIST 202 Global History from 1500 to Present**

**3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. An interdisciplinary study of various world civilizations in Africa, the Americas, Asia, and Europe from 1500 C.E. (Common Era) to the present. This course will use a comparative approach to study a variety of global themes and patterns over time. Humanities or social science credit.

### **HIST 210 History of Michigan** **3 CR**

The origin and development of the contemporary political, economic, and social institutions of the state of Michigan. The relation of this history of the state to that of the nation is stressed.

### **HIST 211 History of England** **3 CR**

This course will examine English history and its culture from the Roman invasions through the English Civil War and the Glorious Revolution. Students will study England’s cultural traditions (legal, religious, and philosophical, as well as artistic and literary) within the political, economic, and social context. Emphasis is placed on the origins and development of the institutions most affecting the heritage of the English-speaking world.

### **HIST 220 Great Lives** **3 CR**

Lives of key individuals who have helped shape the course of history along with description of the nature, method, problems, and impact of the biographical approach to history. The specific topic will change from semester to semester. For either humanities or social science credit. Course may be

repeated for credit toward graduation up to six credit hours.

### **HIST 240 African American History 3 CR**

This course will focus on the African American experience since the era of the Civil War. Major emphasis will be placed on the background and development of the civil rights movement of the 1950s and 1960s. An overview of the contributions of African Americans to American culture will be explored, as well as the sociocultural obstacles faced by this minority group.

### **HIST 260 History of Middle East and North Africa 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This course is a survey of the Middle East and North Africa from antiquity to the present. Major themes include the origin and evolution of monotheism; the rise and fall of various empires, such as the Persian and Ottoman, and the rise of their successor states; American and European influence; Arab nationalism; the Arab-Israeli conflict, and the emergence of radical Islamic movements such as Hamas and al Qaeda.

### **HIST 285 Theological Studies Internship 3 CR**

Prerequisites: sophomore standing and coordinator approval only. This course is designed to give on-site field experience in line with the student's professional objectives. Required are 248 hours of experience plus attendance at scheduled seminars. [16-240-256]

### **HIST 286 Theological Studies Internship 3 CR**

Prerequisites: sophomore standing and coordinator approval only. This course is a continuation of HIST 285, although a different placement setting may be selected. [16-240-256]

### **HIST 297 Special Topics in History 2-4 CR**

This course concentrates on specific regions, themes, events, and eras in history. Particular

emphasis may be placed on field experience and academic research, as well as evaluation of primary sources in history. Since topics change this course may be repeated for credit toward graduation up to six credits.

### **HIST 298 Independent Study 1-3 CR**

Prerequisite: coordinator approval only. This course is an opportunity for the interested student with a good scholastic record to pursue independently the study of a subject while under the direction of a member of the professional staff. Subjects are chosen and arrangements are made to meet the needs of individual students.

## **HUMANITIES (HUMA)**

### **HUMA 150 Encounter with the Arts 2 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This course is designed to introduce students to the performing arts. Students must be able to attend specific exhibits and performances in art, theatre, music, dance, and cinema in the evening and on weekends. Classroom activities will be based on the lecture/discussion format. Humanities credit. Lab Fee

### **HUMA 150H Encounter with the Arts-Honors 2 CR**

Prerequisite: an ACT composite score of 20 or higher, or an ASSET reading or writing score of 51 or higher, or a COMPASS reading or writing score of 93 or higher, or the written approval of the honors coordinator. This course is an introduction to the arts. Students will attend artistic performances and pursue in-depth studies of the arts; contribute to classroom discussion and discovery; and work independently to bring artistic discovery to the classroom. Lab Fee

### **HUMA 200 Honors Seminar 1 CR**

This seminar is for Gold Key and Trustees Scholarships' recipients only. Students will meet with faculty to discuss topics pertaining to their studies, the community, the arts, and other selected areas.

---

## **HUMA 205 Ethical Dilemmas in**

### **Modern Society** **3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This course will examine the roots of cultural values and how they affect decision making on social, political, and personal moral issues, as well as philosophical thought on ethical issues. It will also compare Western perspectives with those of the East, Mideast, Africa, and Native America. Students will be assigned readings in both ethical theory and practice and use historical and literary sources to analyze ethical issues. Themes to be discussed may range from euthanasia, poverty, people as property, to the environment. It is recommended that the student’s reading score on the COMPASS test fall within the 72-100 range.

### **HUMA 241 Dance for Elementary Educators** **3 CR**

A lecture workshop designed to prepare students who plan to teach children in the elementary education classroom how to effectively utilize dance activities and movement as a vital component in the curriculum. Course stresses imaginative movement and the relationship between aesthetic experience and students’ lives.

## **HUMAN RESOURCES (HURE)**

### **HURE 100 Career Exploration: Career Investigation** **1 CR**

Course work will clarify individual career interest and values. Students can then apply interest and values to career options. Students will explore areas of preference and personality characteristics that apply to the work environment. The process will include using self-scoring inventories and activities. The completion of this section prepares the student to outline educational goals that support career options. Lab Fee

### **HURE 110 Career Exploration: Career Planning** **1 CR**

The course will allow students to identify career descriptions, salaries, job outlooks, and educational requirements of career

options. Assignments will include first-hand information from employers, career professionals, and career resources. The completion of this section prepares students to outline a 5- and 10-year career plan with goals and objectives. HURE 100 is recommended prior to enrollment.

### **HURE 120 Career Exploration: Job Search Fundamentals** **1 CR**

This course is designed to provide insight and direction for building job search strategies prior to graduation. Job Search Fundamentals will teach students how to gather critical documentation throughout their educational experience, as well as teach professional presentation strategies. Objectives include learning how to develop and maintain a job search network; conduct an informational interview; create and maintain a portfolio; and complete a resume. HURE 100 and 110 are recommended prior to enrollment.

### **HURE 200 Job Search Elementals: Resume Writing** **1 CR**

This course is designed to provide successful job search strategies for graduating students embarking on a job search in a new career field. Job Search Elementals will teach students how to take control of their job by using simple planning, organization, and sales techniques. Resume writing objectives include learning how to create a resume, write a cover letter, create a reference sheet, and write a follow-up letter. Lab Fee

### **HURE 210 Job Search Elementals: Interviewing** **1 CR**

This course is designed to provide successful job search strategies for graduating students embarking on a job search in a new career field. Job Search Elementals will teach students how to take control of their job by using simple planning, organization, and sales techniques. Interviewing objectives include learning how to answer interview questions, generate interview questions, and conduct in an interview. HURE 200 is recommended prior to enrollment. Lab Fee

---

**HURE 220 Job Search Elementals:****Job Development 1 CR**

This course is designed to provide successful job search strategies for graduating students embarking on a job search in a new career field. Job Search Elementals will teach students how to take control of their job by using simple planning, organization, and sales techniques. Job development objectives include learning how to create a list of suitable job leads, complete an employer profile, and plan and conduct a job search. HURE 210 is recommended prior to enrollment. Lab Fee

**HUMAN SERVICES (HUSE)****HUSE 101 Introduction to Human Services 3 CR**

This course introduces the student to the basic conceptual knowledge of social organizations and the role of the human service worker. Included are the beginning skills for social service practice and discussion of the ethical commitments and legal considerations underlying professional helping careers.

**HUSE 183 Practicum in Human Services 3 CR**

Prerequisites: HUSE 101, 220, and instructor approval. Supervised practicum with the adolescent and adult populations. This course is designed to provide experience in the integration and application of the knowledge and skills of the human service worker. The student will be supervised in a reality-based work environment.

**HUSE 184 Practicum in Human Services 3 CR**

Prerequisites: HUSE 101, 220, and instructor approval. Supervised practicum with pre-school and elementary-age children. This course is designed to provide experience in the integration and application of the knowledge and skills of the human service worker. The student will be supervised in a reality-based work environment. [0-48-48]

**HUSE 185 Human Service Internship 3 CR**

Prerequisites: HUSE 101, 204, 220, 260, and

coordinator approval. A course designed to give on-the-job field experiences commensurate with the student's career objectives. Required are 175 hours of on-the-job experience plus attendance at a two-hour scheduled seminar every other week. [32-175-209]

**HUSE 186 Human Service Internship 3 CR**

Prerequisites: HUSE 101, 204, 220, 260, and coordinator approval. Continuation of HUSE 185, although a different placement setting is generally selected. [32-175-209]

**HUSE 200 Psychosocial Approach to Aging 3 CR**

This course explores the social, psychological, economic, and physical aspects of aging. There is an emphasis on the concerns and social options of the aged in contemporary American society.

**HUSE 203 Introduction to Substance Abuse 3 CR**

This course provides a comprehensive overview of the history of drug use and abuse, explores the theoretical and practical issues, and surveys treatment modalities and current prevention strategies.

**HUSE 204 An Introduction to Report Writing Techniques for the Human Service Worker 3 CR**

Prerequisite: ENGL 151. This course provides an opportunity for students to learn record-keeping and report-writing techniques needed by human service workers. Because report writing requires critical professional judgment at all levels, emphasis will be placed on expanding the students' general information in the human service field.

**HUSE 210 Child Psychology 3 CR**

This course investigates early childhood sensorimotor and symbolic learning, as well as the theories of perceptual-motor, cognitive, and social emotional processes involved in the growth of children. Specific intervention strategies for the disturbed child are explored.

---

**HUSE 211 Psychosocial  
Maladjustment in Children 3 CR**

Prerequisite: HUSE 210, or PSYC 201, or coordinator approval. There is an emphasis on the recognition of children's most common behavioral and emotional difficulties as they occur in family, school, play, and crisis situations. Major theories are explored. Special consideration is given to the psychological and social needs of handicapped, abused, mentally impaired, bereaved, adopted, and foster children.

**HUSE 220 Communication Skills  
in Helping Relationships 3 CR**

This course teaches the psychology of interviewing, as well as the skills for conducting effective interviews. This involves the techniques for establishing rapport, developing counseling responses, identifying behavioral goals, and implementing strategies to bring about change or crisis intervention.

**HUSE 225 Culturally Sensitive  
Practice 3 CR**

This course will provide the student with the knowledge and strategies to work with the various life styles, needs, and problems of different racial and cultural groups. The content of the course incorporates important concepts and empirical findings that pertain to ethnic-sensitive practice.

**HUSE 230 Nutrition 3 CR**

Course includes the study of essential nutrients and their functions as they relate to normal health, as well as the selection of food to meet the identified nutrient requirements.

**HUSE 240 Basic Concepts in  
Social Work 3 CR**

This course introduces the student to the social work profession, its value base, and code of ethics. There is an emphasis on methods and skills with an overview of social issues and client needs relative to social work practice.

**HUSE 241 Human Services with  
Organizations and Communities 3 CR**

The generalist human service worker assumes a wide range of roles. The role of the broker

is to link the client with community resources and services. This course helps students become familiar with various organizations and understand how they function in communities.

**HUSE 242 Human Behavior and  
the Social Environment 3 CR**

Students will develop critical thinking skills as they evaluate and apply various human development theories to client situations. Emphasis will be placed on the relationships among biological, social, psychological, and cultural systems as they affect the "person-in-environment" and as they constitute a pluralistic society. While traditional theories will be explored, a special effort will be made to encourage students to explore "alternative theories" with respect to diverse cultures. The following social systems will be examined: individuals, families, groups, organizations, and communities.

**HUSE 250 Introduction to  
Group Techniques 3 CR**

Prerequisite: HUSE 101 or consent of the human services coordinator. This course introduces the student to the theoretical concepts and principles of group work methodology. There is an emphasis on basic practice skills and intervention techniques.

**HUSE 251 Human Services and  
Behavior Modification 3 CR**

This course introduces the student to the theory and application of behavior modification. The focus is on how the behavioral theory works with agencies and other organizations in the community.

**HUSE 260 Family Dynamics 3 CR**

Prerequisite: HUSE 220. This course examines the family system as a basic social institution. Emphasis is placed on issues that are important to the individual and the family. The student will also be introduced to theoretical viewpoints and conceptual frameworks that have been proven useful in intervention of marriage and family issues.

---

**HUSE 261 Perspectives of Families 3 CR**

Families are viewed from several perspectives. This course examines the family system as an entity in itself, the individual people making up the family system, and the impact of the environment upon how the family functions.

**HUSE 270 Selected Topics in Human Services 3 CR**

This course will be offered to cover topics in response to the special interests of students. Topics may include family communication, programming, legal and ethical issues, cross-cultural practice, foster care, burn out, problem assessment, or sign language. Since topics change, students may take this course for up to six credit hours toward graduation.

**HUSE 271 Later Life and the Family 3 CR**

This course focuses on understanding the problems and the potentials of later life. Some of the major problems and common public perceptions of the lives of the aging population will be explored.

**HUSE 272 Substance Abuse, Co-Dependency, and the Family 3 CR**

This course provides students an opportunity to understand the relationship between substance abuse, co-dependency, and the family. The focus is on the unique problems facing the families of substance abusers and how they attempt to cope.

**HUSE 273 Youth and Substance Abuse 3 CR**

This course introduces students to the problems of substance use/abuse by children and adolescents. Variables that influence youth drug-use trends (including geographic location, peer group, and current drug-use trends) will be explored.

**HUSE 280 Death and Dying 3 CR**

This is a psychosocial examination of death and dying in contemporary American society, although other societies at other time periods are considered. Medical, ethical, legal, and religious issues will be discussed. Instruction

includes lectures, films, tapes, and a student position paper.

**HUSE 290 Social Welfare 3 CR**

This course explores the social forces supporting the development of social welfare and social service policy. There is a focus on how people are affected by such problems as poverty, child abuse, alcoholism, crime, mental retardation, overpopulation, and emotional difficulties.

**HUSE 291 Child Welfare 3 CR**

Students will have an opportunity to examine programs and services provided for children and adolescents through traditional mental health agencies and schools.

**HUSE 298 Independent Study 1-3 CR**

Prerequisite: consent of the human services coordinator. An opportunity for the interested student with a good scholastic record to pursue independently the study of some subject under the direction of a member(s) of the human services staff. Subjects are chosen and arrangements are made to suit the needs of the individual student.

**INDUSTRIAL TRADES**

A number of Industrial Trades program are available at the Regional Manufacturing Technology Center including Industrial Electricity/Electronics; Industrial Heating, Ventilation, Air Conditioning and Refrigeration; Industrial Instrumentation; Industrial Machine Tool; Industrial Millwright/Maintenance Mechanic; Industrial Pipefitting; Industrial Robotics; Industrial Tool and Die; and Industrial Welding. For a program outline and list of modules see the Industrial Trades Schedule or the website at [www.kellogg.edu/RMTC](http://www.kellogg.edu/RMTC).

**INDUSTRIAL WELDING (INWE)****INWE 297 Welding Art 2 CR**

Co-requisite: ART 297. Welding Art blends an understanding of metal sculpture with basic welding and metal forming processes. In this module, the student will conceptual-

---

ize a welded art sculpture, develop a supply list, apply various welding processes such as shielded metal arc welding, gas tungsten arc welding, brazing, and gas metal arc welding, and use metal forming and cutting equipment to create a unique, welded art sculpture.

Lab Fee

## **INFORMATION TECHNOLOGY (IT)**

### **IT 110 Information Technology and Project Management 3 CR**

This course provides an understanding of organizational information and technology used by various business subsystems. Information technology will be used in the demonstration of organization, planning, and project control. Students will gain practical knowledge in managing information project scope, schedule and resources as a competitive resource. It also covers the technical and organizational foundations of information systems.

Lab Fee

### **IT 200 Cooperative Education I 2-5 CR**

Prerequisite: co-op coordinator approval. This is a coordinated work experience for students in the Computer-Aided Drafting, Computer Engineering Technology, Computer Programming, Database Administrator, Information Technology, and/or Office Information Technology Programs. To be enrolled in this course, students must be in a technology-related position providing new career-related experiences in the workplace. Cooperative education is designed to provide each candidate with the necessary educational, technical, and people-related skills to be successful in a technology-related position. Students will meet as a class one hour per week. Topics (including human relations, career selection and marketing, investing and retirement planning, professionalism, and ethical practices in the workplace) will be a focus for the weekly co-op sections.

### **IT 201 Cooperative Education II 2-5 CR**

Prerequisite: co-op coordinator approval. This is a coordinated work experience for students

taking technology-related programs. It is a continuation of IT 200. To be enrolled in this course, students must be in a technology-related position providing new career-related experiences in the workplace. Students will meet as a class one hour per week.

### **IT 202 Cooperative Education III 3-5 CR**

Prerequisite: co-op coordinator approval. This is a coordinated work experience for students taking technology-related programs. It is a continuation of IT 201. To be enrolled in this course, students must be in a technology-related position providing new career-related experiences in the workplace. Students will meet as a class one hour per week.

## **INTERNATIONAL TRAVEL (INTL)**

### **INTL 210 International Travel 2-4 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This course focuses on specific topics relevant to international culture. International travel is required. Since the specific topic to be studied may change from semester to semester, students may repeat the course for up to six credits.

Lab Fee

### **INTL 211 International Travel— Science and Math 2-4 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and COMPASS pre-algebra score of 50, or COMPASS algebra score of 20, or a “C” in MATH 99 or higher level mathematics course. This course integrates ecological, biological, chemical, mathematical, and/or geological principles in an international travel experience. It combines on-site observations, interviews, and tours with content and application. Lab Fee

## **JAPANESE (JAPA)**

### **JAPA 101 Introductory Japanese 4 CR**

Students taking introductory Japanese will be learning the basic Japanese language sufficient to handle everyday practical conversation. They will also be introduced to

Japanese culture, history, and current events in the light of economics and international relationships. Lab Fee

### **JAPA 102 Introductory Japanese 4 CR**

Prerequisite: JAPA 101. Students will continue learning the basic Japanese language sufficient to handle everyday practical conversation. They will also continue studying Japanese culture, history, and current events in light of economics and international relationships. Lab Fee

## **JOURNALISM (JOUR)**

### **JOUR 111 Mass Media Environment 3 CR**

Introductory course designed to acquaint the student with the various media for communicating public information. The requirements and qualifications of the mass media jobs are discussed. Newspapers, magazines, radio, television, trade publications, public relations, and the motion picture field and their responsibilities are surveyed. The press in a free society is also discussed.

### **JOUR 112 News Writing 3 CR**

Prerequisite: ENGL 151 (may be taken concurrently). The fundamental principles of gathering, writing, and editing news are taught; emphasis is on observation, organization, writing, and editing of materials for mass media. Lessons consist of writing from simple fact sheets, practicing news gathering and editing techniques, and using computer publishing software. Lab Fee

### **JOUR 154 Writing for Student Publications 1-3 CR**

Prerequisite: permission of publications advisor. Students will plan, write, edit, and distribute publications for *The Bruin* (College newspaper), *Mosaic* (College literary magazine), and/or other campus publications. Instruction will include Associated Press style, journalistic ethics and practices along with guest lectures by local journalists and writers, and field trips to local newspapers. Students interested in writing for publication may enroll in JOUR 154 for up to three credit

hours. This course may be repeated for credit up to six credit hours.

## **LITERATURE (LITE)**

*English 151 is recommended before enrolling in all literature courses.*

### **LITE 100 Building Foundations through Literature 3 CR**

Prerequisite: COMPASS reading score of 46. Reading, discussing, and writing about literature with emphasis on the essay and short story. Students will learn new approaches to comprehending vocabulary and written text.

### **LITE 105 Introduction to Literature 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. Studies in critical reading and appreciation of the major forms in fiction, poetry, and drama. Required course for English majors and minors.

### **LITE 205 World Literature 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. Using Western literature as a guide to explore the ideas we believe in and how we came by them, this course begins with the literature of Hebrew people and the Greeks and continues to the rebirth of humanism during the Renaissance.

### **LITE 206 World Literature 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. Using Western literature as a guide to explore the ideas we believe in and how we came by them, this course begins with the literature of humanism during the Renaissance and traces the changes in our beliefs up to the present day.

### **LITE 211 American Literature 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. A survey of American literature to the early twentieth century.

### **LITE 212 American Literature**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. A survey of American literature from the early twentieth century to the present.

---

**LITE 213 Children's Literature** **3 CR**

Prerequisite: COMPASS reading score of 70, or a "C" in STSK 98 or 99. A general survey of the prose, poetry, and illustrated books suitable for the elementary grades. Enrollment for elementary education majors or others who meet the prerequisite.

**LITE 216 Film Interpretation** **3 CR**

Prerequisite: COMPASS reading score of 70, or a "C" in STSK 98 or 99. ENGL 152 recommended prior to LITE 216. An introduction to film, including visual elements, meanings, and genre through study of outstanding examples of historical and contemporary feature films. May include foreign films.

Lab Fee

**LITE 222 British Literature II** **3 CR**

Prerequisite: COMPASS reading score of 70, or a "C" in STSK 98 or 99. A survey of British literature from the Romantic Period until the present.

**LITE 223 Shakespeare** **3 CR**

Prerequisite: COMPASS reading score of 70, or a "C" in STSK 98 or 99. A study of selected Shakespearean plays designed to increase the reader's appreciation and understanding of Shakespeare's art.

**LITE 230 Bible as Literature** **3 CR**

Prerequisite: COMPASS reading score of 70, or a "C" in STSK 98 or 99. A survey intended to identify the major literacy genres and themes contained in the Bible with an emphasis on the Old Testament.

**LITE 240 African-American Literature** **3 CR**

Prerequisite: COMPASS reading score of 70, or a "C" in STSK 98 or 99. A survey of African-American literature from 1600 to the present.

**LITE 285 Interdisciplinary Humanities** **2-4 CR**

Prerequisite: COMPASS reading score of 70, or a "C" in STSK 98, or "P" in STSK 99. Studies in the relationship of literature and literary study to a second discipline: science,

philosophy, psychology, social science, or fine arts. The literary genre and period and the second area vary from semester to semester. Course may be repeated for credit toward graduation up to six credit hours.

**LITE 298 Independent Study** **1-3 CR**

Prerequisite: departmental approval only. An opportunity for the interested student with a good scholastic record to pursue independently the study of some subject under the direction of a member(s) of the professional staff. Subjects are chosen and arrangements made to suit the needs of individual students. Course may be repeated for credit toward graduation up to three credit hours.

**LITE 299 Field Experience** **1-3 CR**

Prerequisites: a written outline of the student's project or work experience and departmental approval. An opportunity for the interested student to gain experience with regional employers through practicums and/or observations. May be repeated up to a maximum of six credit hours.

**MATHEMATICS (MATH)**

*In courses numbered 121 and higher, students are expected to have a calculator capable of exponential, logarithmic, and trigonometric computations. In courses numbered 122 and higher, meaningful computer activities using or illustrating principles from these courses will be included. Waiver of Mathematics Prerequisites: Students wishing to show competencies equivalent to MATH 98, 99, 101, 121, 122, 124, or 140 may do so by taking the appropriate portion of the COMPASS assessment. Arrangements may be made at the KCC Testing and Assessment Center in the Lane-Thomas Building.*

**MATH 97 Mathematics Clinic** **3 CR**

Prerequisite: COMPASS pre-algebra assessment score of at least 15. After diagnosis, through testing and/or consultation with the mathematics instructor in charge of the clinic, a study plan will be developed for the student's needs or problems. The clinic instructor is available to provide individual help for the students.

Lab Fee

---

**MATH 100 Pre-Algebra** **3 CR**

Prerequisite: COMPASS pre-algebra assessment score of at least 32 or a “P” in MATH 98. An introduction to integers and rational numbers; order of operations; variable and algebraic expressions; linear equations; graphing; application problems; proportions; geometric formulas; and basic computation of polynomials. Lab Fee

**MATH 101 Beginning Algebra** **4 CR**

Prerequisite: COMPASS pre-algebra assessment score of at least 50, or COMPASS algebra assessment score of at least 20, or a “P” in MATH 98, or a “C” in MATH 99. A review of arithmetic, operations on integers and rational numbers and geometric formulas; solutions of linear equations and inequalities; graphs of linear equations and linear systems; polynomials and factoring; rational expressions and equations; and radical expressions and equations.

**MATH 110 Applied Algebra I** **3 CR**

Prerequisite: ASSET numerical skill assessment score of 37-43, or COMPASS pre-algebra assessment score of at least 28, or COMPASS algebra assessment score of less than 34, or a “P” in MATH 98, or a “C” or better in MATH 99. Intended for students who have not had one unit of high school algebra, or it has been five or more years since the student has taken high school algebra. A review of arithmetic, fundamentals of algebra including absolute values, operations with positive and negative numbers, algebraic expressions, operation with polynomials and algebraic fractions, solution of linear equations, fractional equations, and introduction to graphing. Laboratory experiences will be used in this class to show direct application. [48-16-64] Lab Fee

**MATH 111 Mathematics for Elementary Teachers** **4 CR**

Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a COMPASS algebra assessment score of 40, or a “C” in MATH 101. This course is designed for students majoring in elementary education

and to give mathematical understandings and skills necessary to teach in elementary schools. Logical developments and structure are emphasized throughout. Topics included are sets, natural numbers, integers, rational numbers, irrational numbers, numeration systems, calculator applications, and selected topics from number theory. Students are recommended to have a scientific calculator. Specifications will be discussed by the instructor. Lab Fee

**MATH 112 Mathematics for Elementary Teachers II** **4 CR**

Prerequisite: a “C” in MATH 111. This course is the second of a two-course sequence that is designed to develop the mathematical understandings and skills required to teach effectively in elementary schools. Logic, formal reasoning, and the use of mathematics software are emphasized throughout. Topics include statistics, probability, geometric shapes, congruence, geometric construction, and measurement. Students are recommended to have a scientific calculator. Specifications will be discussed by the instructor. Lab Fee

**MATH 118 Applied Algebra/Trigonometry I** **3 CR**

Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a COMPASS algebra assessment score of 35, or a “C” in MATH 101 or 110. This course includes the following topics: scientific notation, review of basic algebra, solution of linear equations, graphing of algebraic functions, introduction to trigonometry, solution of right triangles, vectors, graphs of trigonometric functions, solution of oblique triangles. Laboratory experiences will be used in this course to show direct applications. Students are required to have a graphing calculator. Specifications will be made by the instructor. Designed for students in technical, occupational fields. [48-16-64] Lab Fee

**MATH 119 Applied Algebra/Trigonometry II** **3 CR**

Prerequisite: a “C” in MATH 118. This

course is a continuation of MATH 118 and includes the following topics: complex numbers, trigonometric identities, solution of trigonometric equations, solving systems of linear equations, rational expressions, solution of rational equations, solution of quadratic equations, logarithmic and exponential functions. Students are required to have a graphing calculator. Specifications will be made by the instructor. Designed for students in technical, occupational fields. [48-16-64] Lab Fee

**MATH 121 Intermediate Algebra 4 CR**  
Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a COMPASS algebra assessment score of 40, or a “C” in MATH 101. Topics included are subsets or the number system, the number line, relations and functions, graphs of linear equations and linear inequalities, linear systems of equations, polynomials, rational expressions and equations, exponents and radicals, complex numbers, polynomial equations, exponential and logarithmic functions and equations, and applications. Students are required to have a scientific calculator. Specifications will be made by the instructor.

**MATH 122 Trigonometry 3 CR**  
Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a COMPASS algebra assessment score of 71, or a “C” in MATH 121. This course is a study of trigonometric functions, their inverses and graphs, identities, equations, radian measure, and solution of triangles. Students are required to have a graphing calculator. Specifications will be made by the instructor. [48-16-64] Lab Fee

**MATH 124 College Algebra 4 CR**  
Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a COMPASS algebra assessment score of 71, or a “C” in MATH 121. This course is designed for those desiring a study of college algebra prior to studying trigonometry. A study of polynomial, rational, exponential, and logarithmic functions; inequalities; systems of equations;

progressions; permutations and combinations; binomial theorem; probability; proportions and variation; mathematical induction; elementary theory of equations; elementary matrices and vectors; and introductory plane analytical geometry. Students planning to study calculus will need MATH 122 first. Students are required to have a graphing calculator. Specifications will be made by the instructor. Lab Fee

**MATH 128 Finite Mathematics with Applications 3 CR**  
Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a COMPASS algebra assessment score of 71, or a “C” in MATH 121. A study with applications of set theory, linear functions, matrices, systems of linear equations and inequalities, linear programming, counting principles, probability concepts, statistics, and probability distribution. Students planning to study calculus should elect MATH 140 in preference to MATH 128. Students are required to have a graphing calculator. Specifications will be made by the instructor. Lab Fee

**MATH 130 Statistics 3 CR**  
Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a COMPASS algebra assessment score of 71, or a “C” in MATH 121. A study of basic descriptive statistics, introduction to probability, probability distributions, sampling theory, hypothesis testing, analysis distributions, sampling theory, hypothesis testing, analysis of variance, and linear correlation and regression. Students are required to have a graphing calculator. Specifications will be made by the instructor. Lab Fee

**MATH 135 Math for Liberal Arts 4 CR**  
Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a COMPASS algebra assessment score of 40, or a “C” in MATH 101. This is a liberal arts mathematics course primarily intended for students who are not majoring in business or science. Emphasis is on the communication of mathematical ideas, problem

solving, applications, and the historical nature of mathematics. Specific topics for this course are selected from the following areas: logic and reasoning, set theory, numeration systems, probability and statistics, number theory, graph theory, algebra and geometry, and the mathematics of finance and investment. Students are recommended to have a calculator capable of exponential and logarithmic computations. Specifications will be discussed by the instructor. Lab Fee

#### **MATH 140 Preparation for Calculus 4 CR**

Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a COMPASS college algebra assessment score of 43, or a “C” in MATH 122. Topics in this course include: introductory plane geometry, algebraic functions and their graphs, introduction to theory of equations, combinations and binomial theorem, exponential and logarithmic functions, trigonometric functions, and arithmetic and geometric sequences. Students are required to have a graphing calculator. Specifications will be made by the instructor. Lab Fee

#### **MATH 141 Calculus I 5 CR**

Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a COMPASS college algebra assessment score of 60, or a “C” in MATH 140. Topics in this course include: limits, differentiation of algebraic and transcendental functions, the definite integral, fundamental theorem of calculus, and applications. Students are required to have a graphing calculator. Specifications will be made by the instructor. Lab Fee

#### **MATH 142 Calculus II 5 CR**

Prerequisite: a “C” in MATH 141. A study of the techniques of integration, limits, series, and applications. Students are required to have a graphing calculator. Specifications will be made by the instructor. Lab Fee

#### **MATH 241 Calculus III 4 CR**

Prerequisite: a “C” in MATH 142. Vector calculus, partial derivatives, multiple integrals, and applications. Lab Fee

#### **MATH 242 Differential Equations and Linear Algebra 4 CR**

Prerequisite: a “C” in MATH 241. A study of elementary differential equations, including an introduction to LaPlace transforms and applications, and systems of linear equations, including eigenvalues and eigenvectors. Students are required to have a graphing calculator. Specifications will be made by the instructor. Lab Fee

### **MEDICAL LABORATORY TECHNOLOGY (MELA)**

#### **MELA 100 Fundamentals of Medical Laboratory Technology 4 CR**

Prerequisite: admission to the Medical Laboratory Technology Program. The student will acquire skills in and learn the theory associated with basic aspects of clinical laboratory science such as phlebotomy, centrifugation, specimen processing, pipetting, spectrophotometry, laboratory safety, use of glassware, and microscopy. [48-32-80] Lab Fee

#### **MELA 120 Hematology 5 CR**

Prerequisite: MELA 100 or departmental approval. This comprehensive study of blood includes the specific areas of red cells, white cells, and hemostasis. Normal blood plus conditions of anemia, leukemia, and bleeding will be covered. Laboratory techniques related to the analysis of blood will be integrated throughout the course. [51-72-123] Lab Fee

#### **MELA 135 Introduction to Medical Microbiology 2 CR**

Prerequisite: admission to Medical Laboratory Technology Program. Introduction to the microorganisms affecting humans. Theoretical concepts, identification schemas, diagnostic characteristics, biochemical reactions, and isolation techniques will be covered. Laboratory will provide experience in isolation, identification, and performance of antimicrobial susceptibility tests of microorganisms that are medically important and commonly encountered. [32-32-64] Lab Fee

---

**MELA 140 Immunology/  
Body Fluid Analysis** **3 CR**

This comprehensive study of body fluids and immunology will cover both normal and disease states. Applicable laboratory exercises will be integrated throughout the course. [32-40-72] Lab Fee

**MELA 210 Clinical Chemistry** **5 CR**

This course involves the application of basic chemistry techniques to the physiology of biological systems. Emphasis is placed on the generation and manipulation of data and the use of electronic biomedical equipment. Appropriate laboratory exercises are integrated throughout the course. [54-62-116] Lab Fee

**MELA 220 Immunoematology** **4 CR**

This course covers the application of immunological techniques learned in MELA 140 to specific laboratory situations such as antibody identification, cross matching of blood, and the investigation of immunological problems of pregnancy. Appropriate laboratory exercises are integrated throughout the course. [42-46-88] Lab Fee

**MELA 235 Advanced Clinical  
Microbiology** **3 CR**

Prerequisite: successful completion of MELA 135. A continuation of concepts and principles of MELA 135. Identification techniques and clinical and laboratory diagnosis of infectious diseases will be discussed in detail. Includes discussion and practice of rapid diagnostic tests. [32-48-80] Lab Fee

**MELA 250 Seminar** **1 CR**

Prerequisite: must be taken concurrently with MELA 260. This comprehensive review of course work, which was completed previously, is designed to prepare the student for national certifying examinations, provide a forum for discussion of current issues in clinical laboratory science, and augment the concurrent clinical experience. Case studies, guest lecturers, and special projects are used.

**MELA 260 Coordinated Clinical  
Practicum** **14 CR**

Prerequisite: completion of all other course work required for graduation, concurrent with MELA 250, or program coordinator's approval. This is a fully-supervised, coordinated period of clinical experience, which takes place in an affiliated clinical laboratory facility as assigned by program officials. It is the capstone course in the Medical Laboratory Technology Program as it provides application and practice of skills acquired in previous course work.

**MELA 265 Advanced Clinical  
Practicum** **10 CR**

Prerequisites: completion of all other course work required for graduation, concurrent with MELA 250, laboratory work experience, or program coordinator's approval. This is a fully supervised, coordinated period of clinical experience that takes place in an affiliated clinical laboratory facility as assigned by program officials. It is the capstone course in the Medical Laboratory Technology Program as it provides application and practice of skills acquired in previous course work. Past work experience in a clinical lab allows for a shortened practicum.

**MUSIC (MUSI)**

*Courses designated "E" are for enrichment only. These courses are for zero credit and are not transferable to any institution. Fees for "E" courses include instructor costs and fees.*

**MUSI 100 Fundamentals of Music** **2 CR**

This course develops the fundamental skills necessary for reading music and understanding rhythm and melody. This course prepares the non-music reader for MUSI 130.

**MUSI 103 Women's Choir** **1 CR**

The KCC Women's Choir is an ensemble of female vocalists which emphasizes general musicianship and provides training in all musical styles of women's choral literature. Performances are presented on campus and

throughout the community. This wonderful and fun group is open to everyone from beginners to the more experienced choral musician. [16-16-32]

**MUSI 103E Women's Choir** **0 CR**  
Same description as MUSI 103. [16-16-32]

**MUSI 104 Community Chorus** **1 CR**  
Community Chorus is a non-auditioned, mixed ensemble. This ensemble seeks to explore repertoire not accessible to the average church choir. A wide range of choral music is prepared for performance throughout KCC's district. If you enjoy singing and are looking for a congenial atmosphere to experience challenging choral literature, this is the choir for you! Everyone is welcome in this ensemble which can be taken for enrichment as well as for credit.

**MUSI 104E Community Chorus** **0 CR**  
Same description as MUSI 104. [24-24-48]

**MUSI 105 Kellogg Singers** **1 CR**  
Prior vocal and/or instrumental experience recommended. Kellogg Singers is a non-auditioned chamber choir that gives students the opportunity to develop their vocal skills while performing challenging choral literature ranging from the Renaissance and Contemporary periods not generally suited for the larger choral ensemble. Special attention is given to authenticity of stylistic performance in each of the periods and styles represented. The ensemble maintains an active performance schedule on and off campus.

**MUSI 105E Kellogg Singers** **0 CR**  
Same description as MUSI 105.

**MUSI 106 Eclectic Chorale** **1 CR**  
A choir ensemble that develops general musicianship and provides training in choral singing. The repertoire will consist of multicultural sacred and contemporary works. The class, developed for readers and non-readers of music, will include basic choral techniques and methods. Performances are presented on campus and in the community. Course may be repeated for credit toward graduation up to four credit hours.

**MUSI 106E Eclectic Chorale** **0 CR**  
Same description as MUSI 106.

**MUSI 107 Voice Class** **2 CR**  
A study of the fundamental processes of breath control, tone production, diction, blending, and interpretation. The learning experience is augmented through the use of video and audio taping. The course is designed to benefit students interested in solo and choral singing. [0-48-48] Lab Fee

**MUSI 107E Voice Class** **0 CR**  
Same description as MUSI 107. [0-48-48]

**MUSI 109 Concentus Vocal Ensemble** **1 CR**  
Concentus Vocal Ensemble is a small vocal group of four to eight voices which specializes in repertoire written for advanced small ensemble singing. The group consists of singers who are selected through the annual choral audition process in the fall semester of each academic year. The group's repertoire focuses on madrigals, chanson, lied and a variety of vocal works from the musical theatre and show choir genre. The choir regularly performs on and off campus. Interested students must be a registered member of the Kellogg Singers for audition/membership.

**MUSI 112 Individualized Voice Lessons I** **1-2 CR**  
Open to all students. Credit is given to students for individualized lessons with private music teachers employed by the College. This performance-based course may be taken for one or two credits. Lab Fee

**MUSI 113 Individualized Voice Lessons II** **1-2 CR**  
Open to all students. Credit is given to students for individualized lessons with private music teachers employed by the College. This performance-based course may be taken for one or two credits. Lab Fee

**MUSI 114 Individualized Voice Lessons III** **1-2 CR**  
Open to all students. Credit is given to students for individualized lessons with private music teachers employed by the College.

This performance-based course may be taken for one or two credits. Lab Fee

### **MUSI 115 Individualized**

#### **Voice Lessons IV 1-2 CR**

Open to all students. Credit is given to students for individualized lessons with private music teachers employed by the College. This performance-based course may be taken for one or two credits. Lab Fee

#### **MUSI 120 Beginning Piano Class 2 CR**

Emphasis is on the development of basic skills in music reading, simple transposition, chord and scale structure, and elementary accompaniment techniques. [0-48-48]

Lab Fee

#### **MUSI 120E Beginning Piano Class 0 CR**

Same description as MUSI 120. [0-48-48]

Lab Fee

#### **MUSI 121 Intermediate Piano Class 2 CR**

Prerequisite: MUSI 120. Further emphasis on the development of keyboard skills with the playing of compositions in various musical styles. [0-48-48]

Lab Fee

#### **MUSI 121E Intermediate**

#### **Piano Class 0 CR**

Prerequisite: MUSI 120. Same description as MUSI 121. [0-48-48]

Lab Fee

#### **MUSI 122 Individualized**

#### **Piano Lessons I 1-2 CR**

Open to all students. Credit is given to students for individualized lessons with private music teachers employed by the College. This performance-based course may be taken for one or two credits. Lab Fee

Lab Fee

#### **MUSI 123 Individualized**

#### **Piano Lessons II 1-2 CR**

Open to all students. Credit is given to students for individualized lessons with private music teachers employed by the College. This performance-based course may be taken for one or two credits. Lab Fee

Lab Fee

#### **MUSI 124 Individualized**

#### **Piano Lessons III 1-2 CR**

Open to all students. Credit is given to students for individualized lessons with private music teachers employed by the College.

This performance-based course may be taken for one or two credits. Lab Fee

### **MUSI 125 Individualized**

#### **Piano Lessons IV 1-2 CR**

Open to all students. Credit is given to students for individualized lessons with private music teachers employed by the College. This performance-based course may be taken for one or two credits. Lab Fee

Lab Fee

#### **MUSI 127E Individualized Lessons-**

#### **Enrichment 0 CR**

Open to all students. This non-credit course is designed for those students who wish to study music with a private teacher but do not need College credit. This course may be repeated. Lab Fee

Lab Fee

#### **MUSI 130 Music Theory I 3 CR**

Students are required to take MUSI 132 concurrently with MUSI 130. A study of fundamentals, including notation, scales, intervals, basic chord constructions, and the rhythmic/metric aspect of music. Emphasis is placed on the acquisition of basic skills necessary for composition and harmonization of music. Lab Fee

Lab Fee

#### **MUSI 131 Music Theory II 3 CR**

Prerequisites: MUSI 130 and 132. A continuation of MUSI 130 emphasizing non-harmonic tones. Introduction to diatonic seventh chords and their resolutions, borrowed chords, non-dominant seventh chords, and diatonic common chord modulations. Lab Fee

Lab Fee

#### **MUSI 132 Aural Comprehension/**

#### **Music Reading I 1 CR**

Students are required to take MUSI 130 concurrently with MUSI 132. A sequential course designed to develop critical listening skills in music reading with special emphasis on ear training and sight singing. Students will be encouraged to participate in computer-assisted instruction for additional assistance. [16-16-32] Lab Fee

Lab Fee

#### **MUSI 134 Aural Comprehension/**

#### **Music Reading II 1 CR**

Students are required to take MUSI 131 concurrently with MUSI 134. A continuation of MUSI 132. This course is designed

to develop critical listening skills in music reading with special emphasis on ear training and sight singing. Students will be encouraged to participate in computer-assisted instruction for additional assistance. [16-16-32] Lab Fee

**MUSI 135 Individualized Instrumental Lessons I 1-2 CR**

Open to all students. Credit is given to students for individualized lessons with private music teachers employed by the College. This performance-based course may be taken for one or two credits. Lab Fee

**MUSI 136 Individualized Instrumental Lessons II 1-2 CR**

Open to all students. Credit is given to students for individualized lessons with private music teachers employed by the College. This performance-based course may be taken for one or two credits. Lab Fee

**MUSI 137 Individualized Instrumental Lessons III 1-2 CR**

Open to all students. Credit is given to students for individualized lessons with private music teachers employed by the College. This performance-based course may be taken for one or two credits. Lab Fee

**MUSI 138 Individualized Instrumental Lessons IV 1-2 CR**

Open to all students. Credit is given to students for individualized lessons with private music teachers employed by the College. This performance-based course may be taken for one or two credits. Lab Fee

**MUSI 141 Fundamentals of Music for Teaching 3 CR**

Designed to prepare the student to use the rudiments of music through singing and playing informal instruments. Includes a survey of elementary school music texts, music listening activities, skills of music reading, and creative work in music. Lab Fee

**MUSI 160 Concert Band 1 CR**

Concert band is an all-campus organization dedicated to the performance of fine literature. The aesthetic aspect of the music is stressed

and special emphasis is placed on musical style. This ensemble presents concerts on campus and in the surrounding community. Students participating in the ensemble are expected to practice outside of rehearsal time to ensure maximum benefit from the rehearsals. May be repeated up to four credit hours. [0-48-48]

**MUSI 160E Concert Band 0 CR**

Same description as MUSI 160. [0-48-48]

**MUSI 161 Jazz Band 1 CR**

Jazz Band affords students the opportunity to develop performance skills in contemporary and traditional jazz music. This ensemble presents concerts on campus and in the surrounding community, and will include music from various jazz and rock idioms. Students participating in the ensemble are expected to practice outside of rehearsal time to ensure maximum benefit from the rehearsals. May be repeated up to four credit hours [0-48-48]

**MUSI 161E Jazz Band 0 CR**

Same description as MUSI 161. [0-48-48]

**MUSI 170 Youth Orchestra 0.5 CR**

Prerequisite: audition required. The study of masterpieces of Western culture through performance in rehearsal hall and public concerts. Course may be repeated for credit up to a maximum of four semester hours. [0-48-48]

**MUSI 170E Youth Orchestra 0 CR**

Prerequisite: audition required. Same description as MUSI 170. [0-48-48]

**MUSI 211 Music Appreciation 3 CR**

Prerequisite: COMPASS reading score of 70, or a "C" in STSK 98 or 99. This course is designed to give students the tools to listen to all types of music with greater understanding. The basic elements of music and their use in many different performance styles and cultures will be emphasized.

**MUSI 227 Accompanying 1 CR**

Prior keyboard experience is necessary. This course is for students who will be accompanists for the KCC Singers and/or Jazz

Ensemble and may be repeated for credit not to exceed a total of two credit hours. Supervised experience in accompanying vocal and instrumental music, both solo and ensemble. [0-16-16]

**MUSI 232 Music Theory III 3 CR**

Prerequisites: MUSI 131 and 134. MUSI 232 must be taken concurrently with MUSI 235. A continuation of MUSI 131 with emphasis on diatonic and chromatic modulations, augmented sixth chords, neapolitan sixth chords, sixth and other altered chords. Additional emphasis on music analysis and original composition. Lab Fee

**MUSI 233 Music Theory IV 3 CR**

Prerequisites: MUSI 232 and 235. MUSI 233 must be taken concurrently with MUSI 236. A continuation of MUSI 232 designed to reinforce the melodic, harmonic, and rhythmic concepts of traditional music and an introduction to twentieth century compositional techniques. Additional emphasis placed on form analysis of larger forms to include the sonata allegro variation, rondo, and the fugue. Lab Fee

**MUSI 235 Aural Comprehension III 1 CR**

Corequisite: MUSI 232. A continuation of MUSI 134. The course develops dictation, error detection, and sight-reading applied to chromatic materials, irregular meters, and improvisation as applied to jazz harmonies. Lab Fee

**MUSI 236 Aural Comprehension IV 1 CR**

Corequisite: MUSI 233. A continuation of MUSI 235. The course develops two- and three-part dictation, error detection, and sight-reading applied to twentieth century harmonic and melodic materials. Lab Fee

**MUSI 240 Music in Early Childhood 3 CR**

This course will develop an understanding of the musical development of young children. The development of actual teaching skills in addition to theoretical knowledge will be an integral part of this course. These teaching skills will be developed through required lab and field experience. [32-16-48]

**MUSI 250 Music History I 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. Music from antiquity through the Baroque. Literature and theory of vocal and instrumental music leading up to the classical time period.

**MUSI 251 Music History II 3 CR**

Music after Baroque. An examination of the major movements, forms, and composers of the classical, romantic, and contemporary periods.

**MUSI 260 Basic Conducting 2 CR**

The course develops the fundamental skills necessary for conducting, including beat patterns; use of left hand; gestures for attack, release, etc.; and score preparation and reading. Students will conduct both in the classroom and in sessions with the College ensembles.

**MUSI 270 Sacred Choral Literature 3 CR**

Prerequisite: MUSI 260. This course is designed to acquaint the student with a brief history of sacred music, as well as the sacred music of today. Emphasis will be placed on literature usable by choirs with a non-traditional balance of parts. This course will also address methods of adapting published arrangements for specific choirs.

**MUSI 297 Music Special Topics 1-3 CR**

This course is designed to allow the students to explore focus areas in music such as conducting, multicultural, choral repertoire, and show choir techniques. Since topics change this course may be repeated for credit toward graduation up to six credits.

**MUSI 297E Music Special Topics 0 CR**

Same description as MUSI 297.

**NURSING (NURS)**

**NURS 105 Nursing Assistant Training Program 3 CR**

Prerequisites: high school diploma or GED, or COMPASS reading assessment score of at least 62, or a grade of “C” or better in STSK 98; and TB test. The Nursing Assistant Training Program is an 80.5-hour

---

course approved by the state of Michigan, Department of Public Health. The course consists of classroom, laboratory, and clinical instruction. The major emphasis is on long-term care with integration of concepts from acute care and home health care. Classroom hours will focus on theory, while laboratory hours will focus on attainment of skills that are necessary for the nursing assistant to possess. Clinical hours will focus on implementing skills obtained in the laboratory and will take place in a long-term care setting. [36-44.5-80.5]

**NURS 135 Maternal and Child Nursing 6 CR**

Prerequisites and corequisites: see specific Nursing Program progression outline, and the student must demonstrate dosage calculation competency. This course is designed to present the concepts of health and illness from conception through adolescence. The nursing process, growth and development, and the family are integrated. Clinical experience is provided with obstetric and pediatric clients in acute care units, community health agencies, schools, and in simulated experiences in the nursing computer and skills lab. [48-128-176] Lab Fee

**NURS 136 The Transition 2 CR**

Prerequisite: LPN Advanced Placement admission. The Transition combines independent study, selected skill competencies, and online discussions to accomplish learning. This course is designed to assist students to begin the transition from licensed practical nurse (LPN) to registered nurse (RN). The professional responsibilities of the LPN and RN are examined and compared. Major emphasis is placed on the use of the nursing process as a tool for assisting patients to meet their biopsychosocial needs. Critical thinking skills are explored in relation to managing patient care. This course is required for LPN Advanced Placement applicants only prior to entering nursing courses. [24-24-48]

**NURS 140 The Nature/ Art of Nursing 2 CR**

Prerequisites: admission to the Nursing Program. This course is designed to introduce the student to the nature and art of nursing. The focus will be on core essential characteristics and behaviors of professional nursing. The major program concepts that will be introduced include caring, communication, and professionalism.

**NURS 145 The Science of Nursing 6 CR**

Prerequisites: admission to the Nursing Program, CPR for Healthcare Providers, updated TB skin test, and completion of health information forms. This course is designed to introduce the student to the science of nursing through the use of the nursing process. Core concepts include critical thinking, evidence based practice, and communication. The clinical portion of the course includes directed learning activities with application of concepts in lab and clinical settings related to wellness throughout the lifespan. [64-96-160] Lab Fee

**NURS 150 Chronic Physiologic Integrity 6 CR**

Prerequisite: a "C" in NURS 145. This course is designed to introduce the student to the principles that guide nursing action in meeting the needs of the chronically ill client. Multiple clinical sites will be utilized for a variety of experiences. [64-96-160] Lab Fee

**NURS 155 Family Processes 6 CR**

Prerequisite: a "C" in NURS 145. This course is designed to introduce the student to the concepts of health and illness throughout the life span. The nursing process, growth and development, and the family are integrated in both the theory and clinical setting. The clinical portion will consist of obstetric, pediatric, community health agencies, and school systems. Simulated experiences in the nursing lab will enhance the critical thinking skills of the clinical sessions. [64-96-160] Lab Fee

**NURS 160 Pharmacology Application in Nursing Practice 3 CR**

Prerequisite: admission to the Nursing

---

Program. This course is designed to provide the student with an overview of pharmacology with an emphasis on clinical applications within the context of the nursing process. The course is organized by medication classification. It explores indications, modes of action, effects, contraindications and interactions for selected drugs. Specific nursing responsibilities related to drug administration are emphasized. Concepts from this course will be utilized throughout the nursing clinical experiences.

**NURS 245 Mental Health Nursing 6 CR**

Prerequisites and corequisites: see curricular guide information. The study of the dynamic relationship between adjustment mechanisms, stress, and their effect on the personality with a focus on the role of the nurse in mental health and illness throughout the life span. Clinical experience is provided in various community mental health agencies. The focus is on the role of the nurse in mental health and illness throughout the life span. [48-128-176] Lab Fee

**NURS 247 Pharmacology in Nursing Practice 1 CR**

Prerequisites and corequisites: see curricular guides for program progression. Course is designed to provide nursing students with a knowledge of biological factors influencing drug actions, predictable effects of drugs on the physiological problem, modifiers of the predictable effects, commonalities and variations between the actions of drugs employed for comparable therapeutic effect, adverse effects of drugs that can and do commonly occur, and application of the nursing process in drug therapy. Pharmacological content is divided equally among the three one-credit courses.

**NURS 248 Pharmacology in Nursing Practice 1 CR**

Prerequisites and corequisites: see curricular guides for program progression. Course is designed to provide nursing students with a knowledge of biological factors influencing

drug actions, predictable effects of drugs on the physiological problem, modifiers of the predictable effects, commonalities and variations between the actions of drugs employed for comparable therapeutic effect, adverse effects of drugs that can and do commonly occur, and application of the nursing process in drug therapy. Pharmacological content is divided equally among the three one-credit courses.

**NURS 250 Adult Nursing II 6 CR**

Prerequisites and corequisites: see specific Nursing Program progression outline. This course builds on the course content of NURS 130 and focuses on the nursing care of adults with altered health states. The nursing process is used as a continuing theme to integrate classroom theory with more complex clinical nursing care. Multiple clinical sites including acute care, long-term care, home health care, and/or primary care will be used to provide clinical experiences. [48-128-176]

Lab Fee

**NURS 255 Adult Nursing III 6 CR**

Prerequisites and corequisites: see specific Nursing Program progression outline. This course builds on the content of NURS 130 and 250 and continues the focus on nursing care of adults with altered health states of a very complex nature. The nursing process is used as a continuing theme to integrate advanced classroom theory and clinical practice. The clinical focus in this course is complex care management. Multiple clinical sites will be utilized for a variety of clinical experiences. [48-144-192]

Lab Fee

**NURS 260 Leadership and Management in Nursing Practice 6 CR**

Prerequisites and corequisites: see specific Nursing Program progression outline. This course is designed to develop beginning leadership skills for the associate degree nursing student that are necessary to manage clients and healthcare workers. Clinical experience will take place in a variety of settings. [48-144-192]

Lab Fee

---

**NURS 271 Health Promotion/  
Maintenance** **5 CR**

Prerequisites: Completion of Level I nursing courses. This course is designed to introduce the student to common health care needs that require nursing care. Prevention and/or early detection of health problems and strategies to achieve optimal health are the major focuses for this course. The clinical portion will consist of application of teaching/learning principles and general wellness assessment in a variety of settings. [48-96-144] Lab Fee

**NURS 276 Psychosocial Integrity** **5 CR**

Prerequisite: Completion of Level I nursing courses. This course is designed to introduce the student to the therapeutic environment providing support to clients, throughout the life span, with various behavioral disorders. Emphasis will be on communication skills, caring, and providing a safe environment. Clinical experience is provided in various community mental health agencies. [48-96-144] Lab Fee

**NURS 280 Acute Physiologic  
Integrity** **6 CR**

Prerequisite: Completion of Level I nursing courses. This course builds on the content of NURS 270 and continues to focus on nursing care of clients with altered health states of an increasingly complex nature. Emphasis will be on critical thinking and decision-making skills. The clinical focus in this course is complex care management with a variety of clinical sites utilized. [48-144-192] Lab Fee

**NURS 285 Management/  
Leadership in Nursing** **6 CR**

Prerequisite: Completion of Level I nursing courses. This course is designed to introduce the student to beginning leadership and management concepts. Focus is on delegation, prioritization and mentorship. Clinical experience will be gained in a variety of setting. [48-144-192] Lab Fee

---

**OFFICE INFORMATION  
TECHNOLOGY (OIT)**

**OIT 100 Introduction to Computer  
Information Systems** **3 CR**

The principles of information technology relating to business are covered (including hardware, software, communications, networks, the Internet and information systems). Programming concepts, web page creation, navigation of the World Wide Web, and use of application software are introduced to assist the student in developing a technology learning plan. This course presents strategies for purchasing, installing, and maintaining a computer system. Students will be exposed to career planning and industry standard certifications to help achieve personal and professional goals involving information technology. Students are expected to spend time working online with a computer beyond the assigned activities. Discussions and class activities are designed to assist students, with no prior information technology experience, to be successful. Lab Fee

**OIT 109 Keyboarding I** **2 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This open entry course is designed to present basic touch keyboarding skills and proper keyboarding techniques. Students will learn to type the alphabetic keys, numeric keys, symbol keys, and the numeric keyboard. Credit is not applicable toward the Office Information Technology certificate/degree programs. Minimum speed attainment of 20 words per minute on a two-minute timing with five or less errors is necessary for a “C.” [0-32-32] Lab Fee

**OIT 110 Keyboarding II** **2 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This open entry course is designed to teach mastery of the keyboard, mechanics of the computer, accuracy and speed in typing, practice of basic office keyboarding skills, and production of office materials. Students will be

introduced to basic document processing using Microsoft Word. Students will learn to create memorandums, modified block and block letters with envelopes, unbound and left-bound reports, and tables. Minimum speed attainment of 33 words per minute on a three-minute timing with five or less errors is necessary for the grade of “C.” Students enrolling in this course must know how to type using the touch method and be able to key for two minutes at 20 words per minutes with five or less errors. [0-32-32] Lab Fee

### **OIT 111 Keyboarding III 2 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and OIT 110. This open entry course is designed to teach continued emphasis on keyboarding techniques and development of speed and accuracy. Students will review and build mastery in the creation of memorandums, letters, reports, and tables. Students will be introduced to creating documents with graphics, as well as advanced Microsoft Word techniques used to enhance keyboarding. Minimum speed attainment of 48 words per minutes on a three-minute timing with five or less errors is necessary for a “C.” [0-32-32] Lab Fee

### **OIT 112 Keyboarding IV 2 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and OIT 111. This open entry course is designed for advanced keyboarding students. Students will be introduced to international keyboarding. They will learn to work with documents going to Canada, Mexico, France, Germany, and Japan. Students will also be introduced to typing both medical and legal documents. Emphasis will be placed on building keyboarding speed and accuracy. Students in this course will be simulating actual business-world activities with the creation and editing of their documents. Minimum speed attainment of 50 words per minute on a five-minutes timing with five or less errors is necessary for a “C.” [0-32-32] Lab Fee

### **OIT 116 Office Procedures 3 CR**

A lecture course designed to prepare the learner for working in the changing office of the twenty-first century. Office and clerical responsibilities will be studied and practiced that will emphasize technology, communication skills needed for working in today's office, the changing nature of work, and the changing organizational structures, as well as critical thinking skills. The learner will also obtain hands-on exposure to the Internet and an electronic calendar program. The learner should plan on spending time on the computer outside of class to complete the hands-on portion of the class. [24-24-48] Lab Fee

### **OIT 160 Applications Software 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. It is strongly recommended that students have keyboarding skills or have taken OIT 109. An introductory course surveying popular microcomputer software using hands-on instruction. Topics will include windows, word processing, spreadsheets, and databases. [16-32-48] Lab Fee

### **OIT 176 Beginning Word 2 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This open entry course introduces students to the basic features of Word. Major topics will include creating and editing a document, creating a research paper, using a wizard to create a resume, creating a cover letter with a table, and creating web pages. [0-32-32] Lab Fee

### **OIT 177 Intermediate Word 2 CR**

Prerequisite: OIT 176. This open entry course introduces students to the intermediate features of Word and prepares them for the Microsoft Office Specialist Core examination. Major topics will include creating a document with a table, chart, and watermark; generating form letters, mailing labels, and envelopes; creating a professional newsletter; and integrating merged form letters to e-mail addresses using an Access table. [0-32-32] Lab Fee

---

**OIT 178 Advanced Word 2 CR**

Prerequisites: OIT 176, 177, or earned Microsoft MOS certification at the core level. This open entry course introduces students to the advanced features of Word and prepares them for the Microsoft Office Specialist Expert examination. Major topics will include working with a master document, an index, and a table of contents; creating an online form; using Visual Basic for applications with Word; and linking an Excel worksheet and charting its data in Word. [0-32-32] Lab Fee

**OIT 181 Beginning Excel 2 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This open entry course introduces students to the basic features of Excel. Major topics will include: creating a worksheet and embedded chart; formulas, functions, formatting, and web queries; what-if analysis, charting, and working with large worksheets; and creating static and dynamic web pages using Excel. [0-32-32] Lab Fee

**OIT 182 Intermediate Excel 2 CR**

Prerequisite: OIT 181. This open entry course introduces students to the intermediate features of Excel and prepares students to take the Microsoft Office Specialist (MOS) Core Certification exam. Major topics will include: financial functions, data tables, amortization schedules, and hyperlinks; creating, sorting, and querying a worksheet database; creating templates and working with multiple worksheets and workbooks; and linking an Excel worksheet to a Word document. [0-32-32] Lab Fee

**OIT 183 Advanced Excel 2 CR**

Prerequisite: OIT 182. This open entry course introduces students to the advanced features of Excel and prepares students to take the Microsoft Office Specialist (MOS) Expert Certification exam. Major topics will include: creation and manipulation of business-formatted worksheets and charts using appropriate functions and formulas in Excel; creation of worksheets utilizing

data tables, hyperlinks, databases, templates, and consolidated capabilities; integration of graphics, Word, Access, and Excel data into appropriate business reports, etc.; using Visual Basic for Applications code to create procedures for specific worksheets; using advanced techniques to audit and validate data, solve problems using Excel's Solver, Scenario Manager, and Pivot Table, Pivot Chart, and data Map utilities; importing and exporting data and collaborating on worksheets tracking data changes; and Microsoft Office Specialist (MOS) Expert Certificate exam objectives. [0-32-32] Lab Fee

**OIT 184 Beginning PowerPoint 2 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This open entry course introduces students to the basic levels of Microsoft PowerPoint. Students will be introduced to selecting a template, starting and customizing a new slide show from an outline, saving and reviewing a presentation, viewing a web page using a browser, and publishing a presentation as a web page. Introductory information about Microsoft Office Specialist (MOS) will be presented. [0-32-32] Lab Fee

**OIT 185 Intermediate PowerPoint 2 CR**

Prerequisite: OIT 184. This open entry course introduces students to the intermediate levels of Microsoft PowerPoint. Students will be introduced to adding sound effects and hyperlinks to slides, printing speaker notes, and using the macro recorder to create a macro. Upon completion of this course, students will be ready to take the Microsoft Office Specialist (MOS) Certification exam. [0-32-32] Lab Fee

**OIT 187 Beginning Access 2 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This open entry lab course introduces students to the basics of Microsoft Access. Students will be introduced to creating a database using design and datasheet views, querying a database using the select query window, and maintaining a database using the design and update

---

features of Access. Introductory information about the Microsoft Office Specialist (MOS) certification exam program will be presented. [0-32-32] Lab Fee

**OIT 188 Intermediate Access 2 CR**

Prerequisite: OIT 187. This open entry lab course introduces students to the intermediate features of Microsoft Access. Students will be introduced to creating reports, forms, and combo boxes; enhancing forms with OLE fields, hyperlinks, and subforms; and creating an application system using macros, wizards, and the switchboard manager. Upon completion of this course students will be ready to take the Microsoft Office Specialist (MOS) Certification exam. [0-32-32] Lab Fee

**OIT 189 Advanced Access 2 CR**

Prerequisite: OIT 188. This open entry lab course introduces students to the advanced features of Microsoft Access. Students will be introduced to advanced report techniques, advanced form techniques, advanced applications development techniques, integrating an Excel worksheet to an Access database, and Microsoft Office Specialist Expert examination requirements. Upon completion of this course students will be ready to take the Microsoft Office Specialist (MOS) Certification exam. [0-32-32] Lab Fee

**OIT 190 Microsoft Outlook 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This open entry course introduces students to the basic and intermediate levels of Microsoft Outlook. Students will learn the capabilities of Outlook (such as attaching a file to a message, replying to and forwarding messages, organizing tasks by using folders, printing a task list, and using advanced calendar features). Upon completion of this course, students will be ready to take the Microsoft Office Specialist (MOS) Certification exam. [0-48-48] Lab Fee

**OIT 192 Beginning Publisher 2 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This

open entry course introduces students to the basics of Microsoft Publisher. This software is part of the highly successful Microsoft Office Suite. Publisher provides the basics for Desktop Publishing. Students will learn to create and edit a publication, design a newsletter, prepare a tri-fold brochure, create business forms and tables, and integrate Publisher with other Office applications. Students will work with customizing content, graphics, design sets, and color schemes. [0-32-32] Lab Fee

**OIT 193 Beginning Project 2 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This open entry course is designed to introduce students to planning a project. The Microsoft Project Program enables you to define the steps that are needed to complete your end-of-project goal. You will learn to use the software to help calculate dates, responsibilities, and costs plus clearly communicate the project information to all those involved. Students will learn to complete basic project management, which includes defining, organizing, tracking, and communicating information about a project in order to meet a project goal. [0-32-32] Lab Fee

**OIT 195 Introduction to the Internet 2 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This is open entry lab course. Little known a few years ago, the Internet is one of the more popular and fastest growing areas in computing. Today the Internet can be used to carry out research, shop, converse with people around the world, and in many other ways. In this course students will learn basics of using the Internet. Students will be able to move around, find, and retrieve information. Students will become familiar with search engines and master the art of communication using the Internet. [0-32-32] Lab Fee

**OIT 196 Introduction to Windows 2 CR**

COMPASS reading score of 70, or a “C” in STSK 98 or 99. This open entry lab course

---

introduces students to the latest Windows operating system. Students will be introduced to the Windows Desktop, learn to use menus and toolbars, and learn to manage files in a Windows environment. [0-32-32]  
Lab Fee

**OIT 197 Proofreading 2 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This open entry course is designed to teach students how to find and correct errors in written communication. Students will learn to concentrate, have patience, and pay attention to detail. Basic proofreading symbols will be introduced. Students will review formatting, spelling, and writing mechanics. Students will learn to use their proofreading skills on simulated real-world business documents.  
Lab Fee

**OIT 200 Independent Study 1-3 CR**

Prerequisite: departmental approval. Course may be repeated for additional credit. An opportunity for the interested student with a good scholastic record to pursue independently the study of some subject under the direction of a member(s) of the faculty. Subjects are chosen and arrangements made to suit the needs of individual students.

**OIT 226 Legal Terminology 2 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This open entry lab course introduces students to basic legal terminology. Students will be learning the meanings of over 1200 words and phrases. Paralegals, legal administrative assistants, court reporters, law students, and others in the legal field will become more comfortable with their work after taking this course. Students will be using a self-directed CD which accompanies the book to help reinforce the terminology learned. [0-32-32]  
Lab Fee

**OIT 227 Medical Terminology 2 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This open entry lab course introduces students to basic

medical terminology. Prefixes, suffixes, word roots, combining forms, special endings, plural forms, abbreviations, and symbols are included in the content. A self-paced computerized program allows the students to progress at their own rate. Emphasis is placed on spelling, definition, usage, and pronunciation. [0-32-32]  
Lab Fee

**OIT 228 Medical Office Scheduling and Billing 3 CR**

Prerequisite: OIT 227. This course introduces students to the basic features of using computers in the medical office. Students will learn to input patient information, schedule appointments, enter transactions, file insurance claims and bill patients, review and record payments, and balance accounts. The HIPAA Privacy and Security Rules will be presented. Students will learn how to use NDCMedisoft Advanced, widely-used medical administrative software. This software is only available in the KCC Open Entry labs. Students should be able to type 30 wpm before taking this course.  
Lab Fee

**OIT 229 Medical Coding 2 CR**

Prerequisites: OIT 227 and 228. This open entry course introduces students to the skills needed to be a successful physician practice medical coder. Students will learn to review patients' medical records and assign diagnosis and procedure codes. Proofreading skills and accuracy will be stressed because accurate coding is a critical part of ensuring that claims follow the legal and ethical requirements of government programs and other payers, as well as the federal HIPAA laws. Medical Coder Certification will be discussed. Lab Fee

**OIT 241 General Machine Transcription 3 CR**

Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a "C" in OIT 111. This open entry course is designed to provide an introduction to the operation of the machine transcriber, a review of basic English, spelling and transcription skills, and provide practice in applying the cognitive

skills of spelling, punctuation, and grammar to the transcription of letters and memos. Machine transcription is a fusion of skills that combines the sub skills of keyboarding, oral and written communication, listening, and decision making. Lab Fee

### **OIT 243 Legal Machine**

#### **Transcription I 2 CR**

Prerequisites: OIT 241 or departmental approval, PARA 110 or a legal terminology background, ENGL 120 or 151, keyboarding skills of at least 45 wpm, and familiarity with Microsoft Word or WordPerfect. This open entry course will provide a basic study of legal transcription techniques; the formatting of legal documents; and the sub-skills of keyboarding, oral and written communications, listening, and decision making, which are necessary to work in a legal environment. Lab Fee

### **OIT 244 Legal Machine**

#### **Transcription II 2 CR**

Prerequisites: OIT 241 and 243, PARA 110 or legal terminology background, ENGL 120 or 151, keyboarding skills of at least 45 wpm, familiarity with Microsoft Word or WordPerfect. This open entry course will build on the legal transcription skills learned in OIT 243 and introduce students to intermediate transcription skills needed in working in different legal specialty environments. Lab Fee

### **OIT 245 Medical Machine**

#### **Transcription I 2 CR**

Prerequisites: OIT 241, 227 or medical terminology background, ENGL 120 or 151, keyboarding skills of at least 45 wpm, familiarity with Microsoft Word or WordPerfect. This open entry course will provide a basic study of medical transcription techniques; the formatting of medical documents; and the sub-skills of keyboarding, oral and written communication, listening, and decision making, which are necessary to work in a medical environment as a transcriptionist. Lab Fee

## **PARALEGAL (PARA)**

### **PARA 110 Introduction to Paralegalism 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a COMPASS writing score of 78, or a “C” in ENGL 120. This course provides the student with an introduction to the general concepts and terminology of the legal and paralegal professions. Topics include the United States’ legal and court systems, legal analysis and research, legal ethics and professional responsibility, licensure and regulation, and a survey of the major procedural and substantive areas of law. The course includes a survey of paralegal employment and career options, and introduces the student to the skills required of paralegals—including preparing documents and pleadings, organizing and managing information, interviewing, and investigating. Lab Fee

### **PARA 120 Basic Legal Research and Writing 4 CR**

Prerequisite: a “C” in PARA 110. This course introduces the student to the law library, legal sources, the process of conducting legal research, and the basic principles and techniques of legal writing. Topics include the study and use of legal research techniques and tools such as digests, case reporters, statutory compilations, loose-leaf services, legal encyclopedias, court rules, administrative codes, treatises, form books, jury instructions, and citators. The student will use finding tools and secondary sources to locate primary authority (Michigan and federal law), brief cases, analyze information and legal materials, review various types of legal documents, use proper citation form, shepardize, and use the Internet and computer-assisted legal research databases to conduct research and gather information. The student will access a computer-assisted legal research database and conduct research using a computer. This course includes the preparation of pleadings, agreements, memoranda, correspondence, forms, and legal documents. Lab Fee

---

**PARA 201 Paralegal Internship 3 CR**

Prerequisites: sophomore standing and coordinator approval. This course provides the student with a coordinated internship placement under the field supervision of an attorney, paralegal, or other legal personnel. This course is designed to broaden the educational experience of the student through directed work and observational assignments in selected legal settings. In addition to 96 hours of field work, the student must attend 16 hours of classroom instruction.

**PARA 202 Paralegal Internship 3 CR**

Prerequisites: PARA 201 and coordinator approval. This course is a continuation of PARA 201 and provides the student with an additional coordinated internship placement under the field supervision of an attorney, paralegal, or other legal personnel. This course is designed to broaden the educational experience of the student through directed work and observational assignments in selected legal settings. In addition to 96 hours of field work, the student must attend 16 hours of classroom instruction.

**PARA 220 Cooperative Education 3 CR**

Prerequisites: sophomore standing coordinator approval. This course provides the student with law-related employment experience in a legal setting under the field supervision of an attorney, paralegal, or other legal personnel. In addition to 200 hours of field work, the student must attend required related seminars.

**PARA 221 Cooperative Education 3 CR**

Prerequisites: sophomore standing and coordinator approval. This course is a continuation of PARA 220 and provides the student with additional law-related employment experience in a legal setting under the field supervision of an attorney, paralegal, or other legal personnel. In addition to 200 hours of field work, the student must attend required related seminars.

**PARA 232 Real Estate Law and Property Transactions 3 CR**

Prerequisite: PARA 110 or departmental

approval. This course examines the law of real property and real estate transactions, including terminology and principles of substantive law and procedure. Topics include the role of the paralegal in real estate transactions, types of land ownership, title, property transactions, land contracts, leases, the landlord-tenant relationship, public regulation, encumbrances and liens, easements, financing and mortgages, types and preparation of deeds and documents of title, and real estate closings. This course includes the preparation of pleadings, agreements, contracts, leases, and other related forms and documents. Lab Fee

**PARA 233 Wills, Trusts, and Probate Administration 3 CR**

Prerequisite: PARA 110 or departmental approval. This course examines the law of estate planning, wills, trusts, intestacy, and probate administration, including terminology and principles of substantive law and procedure. Topics include the paralegal's role in estate planning and probate administration, the probate court, strategies for working with clients and gathering information, forms of property ownership and title, intestacy, non-probate transfers, preparing estate planning documents (such as wills, advanced directives, powers of attorney, and trusts), taxation issues, and preparing documents required to probate an estate in Michigan. This course includes the preparation of pleadings, agreements, estate planning documents, court documents, and related forms. Lab Fee

**PARA 234 Family Law 3 CR**

Prerequisite: PARA 110 or departmental approval. This course examines family law (domestic relations law), including terminology and principles of substantive law and procedure. Topics include the role of the paralegal in family law matters, the Michigan Family Code, marriage, cohabitation, common law marriage, marital agreements, annulments, legal separation, divorce, custody determinations, support obligations, property division, adoption, paternity, surrogacy, juvenile matters, personal protection orders, and the role of the Family Court and Friend of the

---

Court. This course includes the preparation of pleadings, agreements, forms, and other related documents.

Lab Fee

### **PARA 236 Employment Law 3 CR**

Prerequisite: PARA 110 or departmental approval. This course examines laws pertaining to the employer-employee relationship from hiring through discharge, including terminology and principles of substantive law and procedure. Topics include the employment relationship, hiring, employment at will, workplace torts, agency relationships, workers' compensation, employee benefits and compensation, discrimination law, the Americans with Disabilities Act and other federal and state legislation, evaluating job performance, privacy issues, safety regulations, unemployment compensation, labor relations and collective bargaining, administrative agencies and procedures, arbitration and alternative dispute resolution, and the paralegal's role in the hearings and appeals process. This course includes the preparation of pleadings, court documents, agreements, forms, and other related documents. Lab Fee

### **PARA 237 Law Office Management 3 CR**

Prerequisite: PARA 110 or departmental approval. This course examines the operations of a law firm and introduces the student to the parameters and policies of the business of law, including terminology and procedure. Topics include timekeeping, billing and financial management, trust funds accounts, docket control systems, calendaring systems, records and file management, client relations, legal fees, technology in the legal setting, information management, personnel relations, law library organization and management, and law office systems. The student will use a variety of computer software applications including specialty legal software and will prepare documents and forms. Lab Fee

### **PARA 240 Litigation Procedures 3 CR**

Prerequisite: PARA 110 or departmental approval. This course examines the litigation process, including terminology and principles of substantive law and procedure. Topics

include the paralegal's role in the litigation process, the structure and function of the U.S. courts, the Michigan State and Federal Rules of Court, the stages of a lawsuit, service of process, investigation and formal discovery procedures, evidence, managing the case file, case preparation for trial, litigation technology (including specialty software), alternative dispute resolution, and appellate proceedings. This course includes the preparation of summons, pleadings, motions, discovery requests, court documents, jury instructions, and related forms. Lab Fee

### **PARA 245 Trial Advocacy 3 CR**

Prerequisite: PARA 110 or departmental approval. This course examines the trial process, including terminology and principles of substantive law and procedure. Topics include the paralegal's role in the preparation and execution of effective trial advocacy, preparation of exhibits, assistance in jury selection, preparing material for trial, gathering evidence, working with both the Michigan and the Federal Rules of Evidence, trial objections, interviewing and investigation, and preparation of jury instructions and other court documents. The student will prepare and present opening and closing statements, and conduct direct and cross examinations. This course includes the preparation of a variety of court documents and forms. Lab Fee

### **PARA 250 Administrative Law 3 CR**

Prerequisite: PARA 110 or departmental approval. This course examines the relationship between federal and state governmental administrative agencies and private citizens, including terminology and principles of substantive law and procedure. Topics include the role of the paralegal in administrative matters; investigation and discovery; alternative dispute resolution; rule-making procedures; regulations and administrative codes including Michigan's Administrative Code; licensing; formal and informal actions; the administrative hearing process; and how law is created, enforced, and adjudicated by administrative agencies. This course includes

---

the preparation of a variety of pleadings, documents, and forms. Lab Fee

### **PARA 251 Advanced Legal Research and Writing 3 CR**

Prerequisite: a “C” in PARA 120. This course is a continuation of PARA 120 and enhances the student's knowledge of the law library, legal sources, and the legal research process. This course also focuses on further development of the student's competence in the principles and techniques of technical writing, and emphasizes analysis and synthesis of legal information and sources. Topics include the study and use of legal research techniques and tools such as digests, case reporters, statutory compilations, loose-leaf services, legal encyclopedias, court rules, administrative codes, treatises, form books, jury instructions, and citators. The student will use finding tools and secondary sources to locate primary authority (Michigan and federal law), brief cases, analyze information and legal materials, review various types of legal documents, and use the Internet and computer-assisted legal research databases to conduct research and gather information. The student will access computer-assisted legal research databases (Westlaw and Lexis-Nexis) and conduct research using a computer. This course includes the preparation of pleadings, agreements, memoranda, correspondence, forms, legal documents, and an appellate brief. Lab Fee

### **PARA 252 Bankruptcy and Creditor-Debtor Law 3 CR**

Prerequisite: PARA 110 or departmental approval. This course examines the law of bankruptcy and collections, including terminology and principles of substantive law and procedure. Topics include the Federal Bankruptcy Code and Bankruptcy Rules, the role of the paralegal in bankruptcy practice, gathering and managing information, document preparation, a comparison of the various chapters within the Bankruptcy Code, exemptions, preferences, bankruptcy legal research and writing, bankruptcy litigation

and appeals, the role of the trustee, the debtor's perspective, the creditor's perspective, Michigan collections law and procedure, and the use of technology including specialty software. This course includes the preparation of pleadings, court documents, agreements, forms, and other related documents. Lab Fee

### **PARA 290 Selected Topics in Paralegalism 1-3 CR**

Prerequisite: PARA 110 or departmental approval. This course is designed to allow the student to explore current developments and emerging issues in paralegal studies and the legal profession. Lab Fee

## **PHILOSOPHY (PHIL)**

### **PHIL 201 Introduction to Philosophy 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. Philosophy is the rational study of the ultimate questions of human existence. These topics will be investigated: What is reality? Does God exist? What is a person? What is consciousness or mind? What is knowledge? What moral, political, and educational ideals should we seek? What roles should religion, science, and art have in our lives? Special emphasis will be made to explore how a selected group of great philosophers of different cultures of the past, as well as modern times, have attempted to answer those questions. Humanities credit.

### **PHIL 201H Introduction to Philosophy-Honors 3 CR**

Prerequisite: an ACT composite score of 20 or higher, or an ASSET reading or writing score of 51 or higher, or a COMPASS reading or writing score of 93 or higher, or the written approval of the honors coordinator. Philosophy is the rational study of the ultimate questions of human existence. These topics will be investigated: What is reality? Does God exist? What is a person? What is consciousness of mind? What is knowledge? What moral, political, and educational ideals

---

should we seek? What roles should religion, science, and art have in our lives? Special emphasis will be made to explore how a selected group of great philosophers of different cultures of the past, as well as modern times, have attempted to answer those questions. As an Honors section, the course will be based on a seminar format in which students will have an active role in discussing, analyzing, and presenting philosophical ideas with others in the class.

**PHIL 202 Introduction to Ethics 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. Ethics is the philosophic study of moral values. These questions will be explored: What makes actions right or wrong? Can moral beliefs or values be proven or evaluated? What values of life should we strive for? Should we blame or punish people for their actions? Can rights be defined or justified? And is individual liberty more important than collective authority or societal needs? Practical applications to medicine, law, business, and world affairs will be made. Humanities credit.

**PHIL 230 Philosophy of Religion 3 CR**

Philosophy of religion is a branch of philosophy itself and, therefore, is about providing reasons and evaluating arguments for religious hypotheses. Students will develop an understanding of the basic tenets of major theistic systems, such as Hinduism, Buddhism, Taoism, Judaism, Islam, and Christianity. Students will explore how they approach these philosophic subjects: systematic consistency, the nature of deity, the response to atheism, the role of religious experience, ethics, the problem of evil, the relationship between faith and reason, and others. Students will critically examine and compare many distinct world views in their analysis.

**PHIL 250 Topics in Philosophy 2-4 CR**

This course will discuss particular issues, topics, or authors in philosophy with a focus on introducing students to a cross-cultural perspective. Since the specific topic to be

studied will change from semester to semester, students may repeat the course for up to six credit hours.

**PHIL 298 Independent Study 1-4 CR**

Prerequisite: departmental approval only. This course is an opportunity for the interested student with a good scholastic record to pursue independently the study of a subject while under the direction of a member of the professional staff. Subjects are chosen and arrangements are made to meet the needs of individual students.

**PHYSICAL EDUCATION ACTIVITY (PEC)**

*Courses may be repeated for credit toward graduation up to four credit hours.*

**PEC 103 Tennis 1-2 CR**

This class will teach the basic strokes of tennis. Special emphasis will be placed on rules, singles and doubles strategy, and etiquette of the game. [0-16-16/0-32-32] Lab Fee

**PEC 107 Downhill Skiing 2 CR**

Students will learn the fundamental skills of downhill skiing. All skiers, regardless of ability, will be able to participate in the class. Students will be able to use their own equipment; however, if necessary, equipment is provided for a rental fee. Ski runs are beginning and intermediate in design. On the first scheduled class, students should meet at KCC for a brief introductory session. Weather permitting, skiers will then drive to Timber Ridge Ski Area for their first instructional ski session. [0-32-32] Lab Fee

**PEC 108 Intermediate Swimming 1 CR**

Prerequisite: PEC 123. Intermediate swimming is for students who are comfortable in deep water. Students will progressively increase the distance they are capable of swimming and will expand their stroke proficiency by learning the freestyle/front crawl stroke, backstroke, sidestroke, breaststroke, and butterfly. The American Red Cross Water Safety course is also part of this course. [0-16-16] Lab Fee

---

**PEC 109 Water Exercise 2 CR**

Aquatic fitness activities (such as water exercises, aerobic movements, and use of resistance equipment to promote health-related fitness) are conducted in shallow and/or deep water so swimmers and non-swimmers can participate. [0-32-32] Lab Fee

**PEC 113 Volleyball 2 CR**

This course is designed to introduce the student to the enjoyable leisure-time activity of power volleyball. Instruction will emphasize current rules and techniques for serving, spiking, forearm passing, setting, blocking, and team strategy. [0-32-32] Lab Fee

**PEC 115 Golf 1-2 CR**

The current grip, stance, body position, full swing, central shots, and putting techniques are emphasized. [0-16-16/0-32-32] Lab Fee

**PEC 116 Camping, Backpacking and Hiking 2 CR**

Emphasis will be placed on learning the techniques of backpacking, camping, and hiking; equipment selection; map and compass use; wilderness first aid; trip preparation; food selection and preparation; environmental interpretation; basic safety and survival skills; and related aspects of outdoor recreation. A weekend field trip will be taken to a camping and wilderness area. [0-32-32] Lab Fee

**PEC 121 Healthy Lifestyle Practices 2 CR**

Prerequisite: COMPASS reading score of 70, or a "C" in STSK 98 or 99. This course provides a solid foundation in fitness and wellness concepts that will enable the learner to make healthy behavioral changes and lifestyle choices. Key topics include nutrition; diet and weight control; stress management; and exercise prescription to improve flexibility, muscular strength, and cardio-respiratory fitness. Minimal exercise will be performed in accordance with each student's physical capability. Lab Fee

**PEC 122 National Park Adventure 2-5 CR**

This course is designed to teach the basic concepts and best practices in camping,

outdoor education, and wilderness survival. Participants will develop these skills through experiential learning in a National Park. Class will incorporate trip planning, camp setup and security, hiking, map reading, and navigation using current technologies. Lab Fee

**PEC 123 Beginning Swimming 1 CR**

The purpose of this class is designed to help individuals learn basic swimming and water safety skills in order to make them reasonably safe while in, on, or near the water. It is recommended for the non-swimmer and the self-taught swimmer who desires to learn the proper techniques of swimming. [0-16-16] Lab Fee

**PEC 124 Camping, Fly-Fishing and Outdoor Recreation 2 CR**

This outdoor education class will introduce the student to the leisure activities of fly-fishing, camping, and other optional outdoor activities. Emphasis will be placed on fly-fishing techniques, equipment, river fishing methods, trout habitat and behavior, demonstrations on fly-tying, basic safety and survival skills, map and compass usage, wilderness first aid, trip preparation, and food selection and preparation. Kellogg Community College will provide tents, backpacks, stoves, and compasses. Fly-fishing equipment is available for a user fee of \$20 for the weekend. A weekend field trip will be taken to a Michigan trout stream. A Michigan fishing license and trout stamp must be secured by all students (cost is approximately \$21). [0-32-32] Lab Fee

**PEC 128 Rock Climbing 1-2 CR**

This class will offer an in-depth exposure to indoor and outdoor rock climbing. Students will learn the essentials of safe climbing, such as proper equipment use and care, knot tying, belaying, safety awareness, conditioning, and various climbing techniques. Even though it is physical in nature, this course will also offer a personal growth experience in terms of building a trusting relationship between climber and belayer, appropriate

---

risk taking, extending personal comfort zone, and self-confidence as a climber. Lab Fee

**PEC 131 Self-Defense 2 CR**

Beginning and advanced techniques of self-defense will be taught. Students will be introduced to a series of martial arts skills designed to improve their ability to defend themselves. In attaining an improved proficiency in self-defense techniques, the student's level of self-confidence will also improve. At the end of the course, the student should be able to demonstrate self-defense techniques against the following attacks: chokes (front and back), headlocks, bear hugs, hair pulls, floor techniques, block punches, basic kicks, and basic punches. [0-32-32] Lab Fee

**PEC 133 Beginning Karate 2 CR**

Primarily designed to assist the beginning student of karate in learning the basic technique of defense and attack; other forms of Karate and self defense will be touched upon. This course may be repeated for credit toward graduation up to four credit hours. [0-32-32] Lab Fee

**PEC 134 Advanced Karate 2 CR**

The techniques of defense and attack in Karate are incorporated in this course to bring the student up to a higher level of achievement. Free-fighting, self-defense, and Karate forms are emphasized. This course will include all techniques required for intermediate through Black Belt levels of performance. This course may be repeated for credit toward graduation up to four credit hours. [0-32-32] Lab Fee

**PEC 136 Advanced Weightlifting 2 CR**

Prerequisite: PEC 152. PEC 136 is a continuation of PEC 152. The emphasis is on more advanced methods of bodybuilding. This course may be repeated for credit toward graduation up to four credit hours. [0-32-32] Lab Fee

**PEC 142 Scuba Diving 2 CR**

An introduction to the area of scuba diving and mask and snorkeling techniques

for students interested in becoming certified in NAUI methods. Safety factors, water physiology, aquatic ability, technical ability, marine environment, and emergency procedures will be emphasized. [0-32-32] Lab Fee

**PEC 143 Aerobics 2 CR**

A high-energy aerobic workout that emphasizes fun and personal results. Course participants will decrease body fat and increase cardiovascular fitness using continuous large muscle movements. Workout choreography is structured to be simple to execute and contains basic athletic movements of varying degrees of impact. Participants are encouraged to exercise at their own fitness level with emphasis placed on achieving personal fitness gains. Workouts are set to popular music to increase enjoyment. Step platforms may be used for class variety. [0-32-32] Lab Fee

**PEC 149 Bicycling 2 CR**

This course is designed to expose the cyclist to the basic practices and concepts of leisure-time bicycling, which includes riding technique, adjusting the bike to the rider, selection and purchase of equipment, maintenance and repair, bicycle touring, and safety. Bicycle field trips will be taken locally, and there will be an option for an overnight bicycle tour to a camping area. Students must provide their own bicycle. [0-32-32] Lab Fee

**PEC 150 Wellness Activity: Aquatic Exercise 2 CR**

One-third of the course is devoted to fitness and wellness concepts to promote healthy lifestyles. Aquatic fitness activities such as water exercises, aerobic movements, and use of resistance equipment to promote health-related fitness are conducted in shallow water and/or deep water so swimmers and non-swimmers can participate. [0-32-32] Lab Fee

**PEC 151 Wellness Activity: Aerobics 2 CR**

One-third of the course is devoted to fitness and wellness concepts to promote healthy lifestyles. A variety of activities that improve the cardiovascular system such as walking, jogging, running, and aerobic exercises to

popular music will be introduced. Participants are encouraged to exercise at their own fitness level with emphasis on achieving personal fitness goals. [0-32-32] Lab Fee

**PEC 152 Wellness Activity: Weight Training 2 CR**

One-third of the course is devoted to fitness and wellness concepts to promote healthy lifestyles. An individual exercise program will be developed with and for each student for purposes of weight loss or gain, body building, general wellness, or for participation in athletics or recreational sports. [0-32-32] Lab Fee

**PEC 153 Wellness Activity: Sport Conditioning 2 CR**

One-third of the course is devoted to fitness and wellness concepts to promote healthy lifestyles. The purpose of this class is to design a sports-specific training program for students interested in recreational or competitive sports participation. Course content will include health-related fitness concepts and practices, exercise principles, sports nutrition, weight training, and specific neuromuscular training, when appropriate. [0-32-32] Lab Fee

**PEC 155 Wellness Activity: Cross Country Skiing 2 CR**

One-third of the course is devoted to fitness and wellness concepts to promote healthy lifestyles. Cross country skiing techniques will be taught in order for the student to develop an individual exercise program to meet individual goals, such as general wellness, physical fitness, and/or weight loss or gain. [0-32-32] Lab Fee

**PEC 156 Wellness Activity: Hiking 2 CR**

One-third of the course is devoted to wellness concepts, such as health-related fitness components, nutrition, and exercise prescription. The other two-thirds are activity oriented. Students will be hiking on trail and off trail, and learn map and compass skills and nature interpretation. [16-16-32] Lab Fee

**PEC 159 Wellness Activity: Walking/ Jogging 2 CR**

Part of the course is devoted to wellness concepts such as health-related fitness, nutrition, weight management, and exercise prescription. Students will learn the correct mechanics for walking, jogging, and running. Information such as proper attire for different environments and injury prevention will be included. [16-16-32] Lab Fee

**PEC 160 Wellness Activity: Tennis 2 CR**

Part of the course is devoted to wellness concepts such as health-related fitness, nutrition, weight management, and exercise. Students will learn tennis skills such as the serve, forehand, backhand, and volley. Rules, terminology, and game strategy in both singles and doubles are included. [0-32-32] Lab Fee

**PEC 161 Wellness Activity: Yoga Pilates Fusion 2 CR**

One-third of the course is devoted to fitness and wellness concepts to promote healthy lifestyles. The remainder of the course is activity based and will fuse the Pilates method of body conditioning with the basic postures, breathing techniques, and other practices of Yoga. [10-22-32] Lab Fee

**PEC 162 Yoga Pilates Fusion 1-2 CR**

This course will fuse the Pilates method of body conditioning with the basic postures, breathing techniques, and other practices of Yoga. Lab Fee

## PHYSICAL EDUCATION PROFESSIONAL (PEP)

**PEP 124 Lifeguard Training 3 CR**

Prerequisite: PEC 108. The purpose of this comprehensive course is to provide the necessary minimum skills training for a person to qualify as a lifeguard at pools, non-surf beaches, Y-centers, private clubs, and college settings. American Red Cross First Aid and CPR for the Professional Rescuer are also included in this course. [0-48-48] Lab Fee

**PEP 124E Lifeguard Training 0 CR**

Prerequisite: PEC 108. Same description as PEP 124. [0-48-48]

---

**PEP 125 Lifeguard Recertification 1 CR**

Students must have current American Red Cross Lifeguard Training certification. This course will recertify students in lifeguard training skills, first aid, and American Red Cross CPR for the Professional Rescuer. [0-16-16] Lab Fee

**PEP 150 Introduction to Health, Physical Education, Recreation, and Wellness Professions 3 CR**

An orientation to the various health, wellness, sport, and physical education professions. Underlying principles, history, and disciplines of physical education and sport are emphasized. An overview of career opportunities in the allied fields of health and recreation are included. Required for all students majoring and/or minoring in health, physical education, recreation, and exercise science. [0-48-48] Lab Fee

**PEP 155 Physical Fitness 3 CR**

The primary purpose of this course of study is for the physical education, health education, or recreation major or minor to develop an understanding of physical fitness concepts and practices which are applicable to all areas and levels of professional development. Lab Fee

**PEP 220 Water Safety Instructor 3 CR**

Prerequisite: PEC 108. The purpose of this course is to qualify students to be American Red Cross (ARC) water safety instructors. Upon completion students will be qualified to teach the following American Red Cross courses: Infant and Preschool Aquatic Program, Longfellow's Whale Tale Water Safety Education Program, Seven Levels of the ARC Learn to Swim Program, and Safety Training for Swim Coaches. [0-48-48] Lab Fee

**PEP 220E Water Safety Instructor 0 CR**

Prerequisite: PEC 108. Same description as PEC 220. [0-48-48] Lab Fee

**PEP 241 Basketball Officiating 1 CR**

Course designed to teach the rules and officiating techniques. Practical application of

officiating skills will be stressed. Official state certification in basketball is available upon successful completion of the class. Employment opportunities for officials at local junior and senior high schools and city recreation departments are available. Lab Fee

**PEP 243 Volleyball Officiating 1 CR**

Course designed to teach the rules and officiating techniques. Practical application of officiating skills will be stressed. Official state certification in volleyball is available upon successful completion of the class. Employment opportunities for officials at local junior and senior high schools and city recreation departments are available.

**PEP 244 Baseball Officiating 2 CR**

Course designed to teach the rules and officiating techniques. Practical application of officiating skills will be stressed. Official state certification in baseball is available upon successful completion of the class. Employment opportunities for officials at local junior and senior high schools and city recreation departments are available. Lab Fee

**PEP 245 Softball Officiating 2 CR**

This course is designed to teach the rules and officiating techniques of slow and fast pitch softball. Practical application of officiating skills will be stressed. Official state certification is available upon completion. Lab Fee

**PEP 280 Camping and Outdoor Education 2 CR**

This course is designed for the education major or minor (elementary, junior, or senior high school) to help them develop the philosophy, knowledge, and practices of outdoor education. Students will participate in a one-week session at Clear Lake Outdoor Education Center. [0-32-32] Lab Fee

**PEP 290 Preschool and Elementary Physical Education 3 CR**

This course is designed for the prospective elementary physical education, classroom, preschool, or special education teacher and

youth coaches. The students, while enhancing their own fitness levels and fundamental motor skills, will also learn to assess and teach basic skills and physical fitness concepts. Students will select and teach developmentally-appropriate physical activities for early and middle childhood. Lab Fee

**PEP 298 Independent Study 1-3 CR**

Prerequisite: departmental approval. An opportunity for the interested student with a good scholastic record to pursue independently the study of some subject under the direction of a member(s) of the professional staff. Subjects are chosen and arrangements made to suit the needs of individual students. May be repeated up to a maximum of six credit hours.

**PEP 299 Field Experience 1-3 CR**

Prerequisites: a written outline of the student's project or work experience and departmental approval. An opportunity for the interested student to gain experience with regional employers through practicums and/or observations. May be repeated up to a maximum of six credit hours.

## **PHYSICAL THERAPIST ASSISTANT (PTA)**

**PTA 110 Fundamentals of Physical Therapist Assisting 3 CR**

Prerequisite: admission to the Physical Therapist Assistant Program. This course provides an introduction to the fundamentals in physical therapist assisting. It incorporates traditional approaches to therapeutic exercise and techniques of rehabilitation, including units on positioning, tilt-table, wheelchair management, ambulation, and transfers. Throughout the course emphasis is placed on safe performance of skills through the understanding, as well as the application, of good body mechanics. Units on vital signs, basic aseptic techniques, and wound care are taught, as well as general topics, such as legal and ethical considerations in physical therapy. Medical terminology is learned, practiced, and assessed throughout

the semester. Students visit local physical therapy settings for observational experiences at which time the role of physical therapist assistant is emphasized. Satisfactory completion of this course required for continuation into the second semester of the PTA Program. [32-52-84] Lab Fee

**PTA 112 Kinesiology I 2 CR**

Prerequisite: admission to the Physical Therapist Assistant Program. This course provides an in-depth study of the skeletal system as it pertains to physical therapy. Emphasis is on the application of skeletal anatomy, including joints and their structures, providing a foundation for an understanding of human movement and posture. Learning and practicing palpation skills of bony landmarks prepares the student for applying the theory and technique of goniometry (joint measurement). Additional units include passive range of motion and testing and charting skills. Students will take part in classroom laboratory practice sessions as they learn to apply the skills. Satisfactory completion of this course required for continuation into the second semester of the PTA Program. [24-36-60] Lab Fee

**PTA 114 Physical Therapy Modalities 4 CR**

Prerequisites: PTA 110, BIOL 201, and ENGL 151. In this course students learn and practice theory, principles, and technical skills of selected physical therapy modalities. Units include hydrotherapy; radiant, thermal and electrotherapy modalities; intermittent and sequential compression; and applications of sterile techniques and bandaging. Documentation skills are practiced and assessed throughout the semester. Students will prepare and present an analysis of a research article to their peers using presentation software. [32-70-102] Lab Fee

**PTA 116 Kinesiology II 3 CR**

Prerequisites: PTA 112 and BIOL 201. This course will provide an in-depth study of the anatomy of the neuromuscular and respiratory systems as it relates to physical therapy.

---

Emphasis is on the application of anatomy to an understanding of normal and abnormal human movement in exercise, locomotion, and other motor skills of daily living. Theory and techniques of manual muscle testing, stretching, and respiratory physical therapy techniques are topics included during the semester. Students take part in classroom laboratory practice sessions as they learn to apply the skills. [32-52-84] Lab Fee

**PTA 117 Pathology I 1 CR**

Prerequisites: PTA 110 and BIOL 201. This course provides study of the pathological conditions resulting from disease or injury to selected systems of the body, focusing on the musculoskeletal, respiratory, and immune systems. Each unit will emphasize the signs and symptoms, as well as the physical therapy measures commonly employed in the treatment of these conditions.

**PTA 118 Pathology II 1 CR**

Prerequisites: PTA 117 and BIOL 202. This course is a continuation of PTA 117, Pathology I. Emphasis will be placed on the study of pathological conditions, focusing on the cardiovascular and integumentary system, resulting from disease and/or injury. Signs and symptoms, as well as therapeutic measures related to physical therapy, will be a major focus. Course includes discussion of wellness and implementation of a personal wellness plan.

**PTA 119 Orthopedics 3 CR**

Prerequisites: PTA 116 and BIOL 202. In this course principles and techniques of basic therapeutic exercise and related treatments for the individual with orthopedic conditions are emphasized. Course covers signs and symptoms, surgical interventions, treatment regimen, and implications for rehabilitation topics. Students will take part in classroom laboratory practice sessions as they learn to apply the skills. [24-36-60] Lab Fee

**PTA 120 Neurological Concepts 1 CR**

Prerequisites: PTA 116 and BIOL 202. This in-depth study of the anatomy and physiology of the human nervous system includes the

central, peripheral, and autonomic systems. Units on theory and treatment techniques of coordination, motor control, and neuromuscular re-education emphasize the application of anatomy into function. Students in classroom laboratory-supervised practice sessions apply the concepts learned. [20-10-30]

**PTA 121 Functional Techniques 2 CR**

Prerequisites: PTA 114 and 116. This course teaches the application of principles and basic treatment techniques for rehabilitation as they relate to functional skills. Students learn and practice techniques for performing and teaching skills in ambulation and activities of daily living, and participate in a community wheelchair experience to assist in the understanding of architectural barriers and accessibility. Additional topics include units on industrial rehabilitation and wheelchair maintenance, as well as limited clinical observation in local physical therapy facilities. [16-36-52] Lab Fee

**PTA 122 Pediatrics 1 CR**

Prerequisites: PTA 116 and 117. This course incorporates the study of reflex and child development as it sets the foundation for healthy adult movement patterns. Discussion will include various theory and treatment principles, including sensory integration, as they relate to pediatric physical therapy. Common pediatric diagnoses will be studied with emphasis on signs and symptoms, treatment regimen, and implementation strategies for rehabilitation. Students will travel to a local school to observe the pediatric physical therapy setting.

**PTA 218 Focused Neurology 3 CR**

Prerequisites: PTA 116 and 120. This course introduces more advanced techniques of therapeutic exercise with emphasis on applications for patients with neurological disabilities. Course lecture component includes discussion of related neuropathology. This course also provides instruction on specific physical therapy techniques used with individuals who have spinal cord injuries and traumatic brain injuries. Basic and

---

advanced massage theory and techniques will be presented. Students will learn the foundations of aquatic therapies and take part in an aquatic lab session at a local clinical facility. Students will take part in classroom laboratory practice sessions as they learn to apply the skills. [32-34-66] Lab Fee

**PTA 219 Advanced Intervention Techniques 3 CR**

Prerequisites: PTA 118 and 121. This course introduces the student to many advanced treatment intervention utilized in a variety of physical therapy settings. The course includes units of study on exercise physiology, cardiac rehabilitation, isokinetics, orthotics, and prosthetics. Students will be introduced to selected manual techniques employed in the clinic. Students will take part in classroom laboratory practice sessions as they learn to apply the skills. [32-34-66] Lab Fee

**PTA 220 Concepts in Physical Therapist Assisting 2 CR**

Prerequisites: PTA 118 and 119. This course is an introduction to the methods of referral, reporting, recording, and record keeping in the clinical situation. The role of the physical therapy administrator and issues surrounding reimbursement are discussed. Students will be introduced to special equipment and procedures used in the hospital setting with special emphasis on the intensive care unit. Applications of first aid in the physical therapy field are included. Students have an opportunity to discuss the clinical experiences in which they are participating (PTA 221), particularly with emphasis on the physical therapist assistant interactions with staff and patients. Assignments involve considerable review, research, and writing related to clinical experiences. Students will prepare and present a case study to their peers using presentation software.

**PTA 221 Clinical Experience 1 CR**

Prerequisites: PTA 118, 121, 122, and EMT 110. (CPR certification must be current

whenever the student is in the clinical setting.) Weekly sessions will be spent in area health settings where the student will have an opportunity to apply in the clinical setting those skills developed in earlier course work. Treatment and patient care will be carried out under the supervision of qualified physical therapists and/or physical therapist assistants. Emphasis will also be placed on observing and reporting patients' response to treatment. An ongoing journal of student clinical experiences is required. [0-16-16]

**PTA 223 Seminar in Physical Therapist Assisting 2 CR**

Prerequisites: PTA 219, 220, and 221. Corequisites: PTA 224, 225, and 226. A course designed to foster integration of concepts and skills from previous courses with those gained in the clinical setting. A forum for discussion of clinical experiences. The course includes units on employability skills; communication; geriatrics; cultural diversity and its effects on health care; and the relationship of law, the code of ethics for the profession, and standards of practice to the role of the physical therapist assistant. Current trends and issues in physical therapy are discussed along with the role of the professional organization for physical therapy. Assignments include considerable review, research, and writing related to clinical experiences with emphasis on the psychological and sociological aspects of illness and injury. A cumulative final exam covering the Physical Therapy Assistant Program content is included.

**PTA 224 Coordinated Clinical Experience I 4 CR**

Prerequisites: PTA 219, 220, and 221. Corequisite: PTA 223. (CPR certification must be current whenever the student is in the clinical setting.) A coordinated six-week period of full-time involvement in the clinical setting providing the student an opportunity to work with a variety of patients and develop his/her technical competence. An ongoing journal of the student clinical experiences is required. [0-64-64]

**PTA 225 Coordinated Clinical Experience II** **4 CR**

Prerequisite: PTA 224. Corequisite: PTA 223. (CPR certification must be current whenever the student is in the clinical setting.) The student spends the second six weeks of the semester in a second clinical setting providing additional experience with a variety of patients, equipment, procedures, and personnel. An ongoing journal of student clinical experiences is required. [0-64-64]

**PTA 226 Clinical Exploration** **2 CR**

Prerequisites: PTA 224 and 225. Corequisite: PTA 223. (CPR certification must be current whenever the student is in the clinical setting.) If the student has successfully completed requirements for and met the objectives of PTA 224 and 225, a final clinical site is selected; and four weeks are spent exploring a specific clinical interest and/or sharpening clinical skills. Objectives will be established by the student, clinical supervisor, and faculty. [0-32-32]

**PHYSICS (PHYS)**

**PHYS 111 Introductory Physics I** **4 CR**

Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a “C” in MATH 119 or 122. A lecture and laboratory course dealing with the major areas of physics including measurement, mechanics, heat, and waves. The basic principles of these topics are studied in terms of their application. [48-48-96] Lab Fee

**PHYS 112 Introductory Physics II** **4 CR**

Prerequisite: a “C” in PHYS 111. A lecture and laboratory course, which includes a study of electricity, magnetism, light, and modern physics. [48-48-96] Lab Fee

**PHYS 201 General Physics I** **4 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99; and a “C” in MATH 141. This course deals with mechanics, heat, waves, and their application and is required for engineers, as well as physics and chemistry majors. [48-64-112] Lab Fee

**PHYS 202 General Physics II** **4 CR**

Prerequisite: a “C” in PHYS 201. A lecture laboratory course which includes a study of electricity, magnetism, light, and modern physics. [48-64-112] Lab Fee

**PHYS 241 Statics** **3 CR**

Prerequisites: a “C” in MATH 142 and a “C” in PHYS 201. Forces and moments of acting upon structural bodies under static loads. Concepts of vectors, free-body diagrams, centroids, moments of inertia, and friction.

**POLITICAL SCIENCE (POSC)**

**POSC 200 American System of Government** **3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. A survey of national, state, and local governments in theory and practice.

**POSC 200H American System of Government-Honors** **3 CR**

Prerequisite: an ACT composite score of 20 or higher, or an ASSET reading or writing score of 51 or higher, or a COMPASS reading or writing score of 93 or higher, or the written approval of the honors coordinator. A survey of national, state, and local governments in theory and practice. Designed primarily for students with a special interest in government, politics, or the social sciences. Entry to honors status only on invitation of the instructor. Emphasis on individual study and personal projects.

**POSC 201 American Government (Federal)** **3 CR**

A survey of the origins and development of our national government and political systems in theory and practice. Designed primarily for students with a special interest in government or the social sciences.

**POSC 202 American Government (State and Local)** **3 CR**

A study of the common features of state and local governments in the United States under existing and ideal conditions. Some attention is given to Michigan and the Battle Creek

---

metropolitan area. Designed primarily for students with special interest in government or the social sciences.

**POSC 210 Introductory Comparative Politics 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This course is a comparative study of the political systems, ideologies, and institutions of selected European, Latin American, Asian, and African states. In this course we will give special attention to the dynamics of political change (including contemporary "transition to democracy") and their relationship to economic and social development.

**POSC 211 International Relations 3 CR**

An introduction to international politics and those forces which produce conflict and cooperation. Attention is given to the international political process with regard to economics, diplomacy, military power, international law, and the role of international organization.

## **PSYCHOLOGY (PSYC)**

**PSYC 201 Introduction to Psychology 3 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. Psychology is the science of behavior. Topics investigated: biological foundations of behavior, learning, child development, sensation and perception, thinking, emotion, motivation, individual differences, personality, frustration and adjustment, abnormal behavior, and techniques of psychotherapy.

**PSYC 201H Introduction to Psychology-Honors 3 CR**

Prerequisite: COMPASS reading score of 93. Psychology is the science of behavior. Topics investigated include biological foundations of behavior, learning, child development, sensation and perception, thinking, emotion, motivation, individual differences, personality, frustration and adjustment, abnormal behavior, and techniques of psychotherapy.

As an honors course students will design, implement, and assess activities utilizing the principles and practices of psychology.

**PSYC 220 Developmental Psychology 3 CR**

Prerequisite: PSYC 201. A survey of physical, cognitive, and psychosocial development through the total life span. Emphasis is on the normal changes in human behavior that result from continuous interaction of maturation and experience. Cross-cultural comparisons of developmental patterns are also considered.

**PSYC 250 Abnormal Psychology 3 CR**

Prerequisite: PSYC 201. The study of psychopathology in individuals from four current points of view: psychiatric (biophysical), intrapsychic, phenomenological, and behavioral. Special attention will be paid to describing psychopathology in terms of behaviors. The course will also include current approaches to assessment and treatment.

**PSYC 260 Health Psychology 3 CR**

Prerequisite: PSYC 201. Health Psychology is the study of how psychosocial factors relate to the promotion and maintenance of good health/wellness and with the causation, prevention and treatment of illness. A biopsychosocial approach is applied to this understanding.

**PSYC 270 Human Sexuality 3 CR**

Prerequisite: a “C” in PSYC 201. This course is an introduction to the biological, psychological and social aspects of human sexuality. Topics to be covered include sexual beliefs and values, sexual development, male and female anatomy and physiology, the sexual response cycle, sexual health and wellness, pregnancy, contraception, sexual orientation issues, intimate relationships, sexual dysfunction, and sexual abuse. This course will allow the student an opportunity to build and/or examine their own set of sexual values. Since values are based upon knowledge, students will be required to demonstrate an understanding of information regarding

---

the physiological, psychological and social aspects of human sexual behavior.

### **PSYC 275 Criminal Psychology 3 CR**

Prerequisite: a “C” in PSYC 201. Students will explore current research and psychological and sociological theories regarding the effects of specific mental disorders, personality, biological influences, developmental issues, and social/environmental contributors to both general criminal behaviors, as well as specific crimes and criminal conduct. Also discussed/ explored will be the psychological effects of crime on the victim and society at large, as well as introduction to the profiling and prediction of criminal and violent behaviors.

### **PSYC 280 Special Topics in Psychology 3 CR**

Prerequisite: PSYC 201. This course is the study of content areas in psychology which have a research or theoretical base, but are not offered as part of the regular curriculum. Topics may include conflict/aggression, creativity, self-management, and rehabilitation. Although topics vary, students may only take the course once.

### **PSYC 290 Social Psychology 3 CR**

Prerequisite: PSYC 201. An empirical approach to understanding individual social behavior. Provides an understanding of how behavior, feelings, and thoughts of individuals are influenced and determined by characteristics of the situation. Topics include attitude formation, attraction, prejudice, social roles, aggression, person perception, and self-concept.

## **RADIOGRAPHY (RADI)**

### **RADI 100 Introduction to Radiologic Science and Health Care 2.25 CR**

Prerequisite: admission to the Radiography Program. This course provides an introduction, study, and discussion of several topics important to the new radiography student. We begin by becoming acquainted with Kellogg Community College and the Radiography

Program. Secondly, students will be presented with an overview of the health care environment, various delivery systems and professional roles. Students will explore the organization of hospitals, with emphasis on the imaging department. Government regulations, accreditation standards and reimbursement of healthcare services will be discussed. The evolution of the profession of radiography will also be investigated with study and discussion of educational requirements, educational program accreditation, professional credentialing, professional development and the various professional organizations associated with radiography. This course wraps up with the student investigating and giving thought to legal/ethical issues congruent with health care, with focus on those specific to the imaging profession.

### **RADI 111 Patient Care in Radiologic Science 2.25 CR**

Prerequisite: admission to the Radiography Program. The student will study and master many important patient care responsibilities, including effective communication techniques, infection control procedures, use and care of common medical devices, basic pharmacology and necessary safety practices in the health care environment with emphasis on those especially relevant to the imaging department.

### **RADI 112 Introduction to Imaging Principles .75 CR**

Prerequisite: admission to the Radiography Program. The intent of this course is to introduce the student to the imaging department. Topics covered include an overview of general systemic and skeletal anatomy and arthrology with related imaging terminology. Anatomical positioning and image projection terminology is presented as well. The course also offers an introduction to basic radiographic equipment and the factors that influence image quality. The course wraps up with a presentation of radiation safety practices and dose limits.

---

**RADI 113 Clinical Orientation .75 CR**

Prerequisite: admission to the Radiography Program. This course will provide the student with an orientation to the specific hospital and imaging department where they will complete their first clinical assignment. The student will become acquainted with the physical layout of the facility as well as policies and procedures specific to the organization required of all employees and students. The orientation of the imaging department will cover such topics as health and safety, radiation safety and protection, department equipment and the department's work-flow procedures. The course is intended to ready the student for their first clinical assignment in the fall semester.

**RADI 120 Radiologic Positioning, Procedures and Pathology I 3.5 CR**

Prerequisites: admission to the Radiography Program and a "P" in RADI 113. This course will include instruction of radiologic examinations of the chest, abdomen, upper limb, shoulder, lower limb, pelvis and spine. Critical thinking will be encouraged as students learn to alter radiographic examinations to correlate with patient abilities and needs. Radiographic anatomy and pathology will be presented allowing students to learn to identify normal anatomy versus abnormal pathology. Alternative imaging modalities to better demonstrate specific anatomy and pathology will be discussed. Students will participate in small groups skill-building activities. [48-16-64]

**RADI 121 Radiologic Physics 3 CR**

Prerequisites: admission to the Radiography Program and a "P" in RADI 113. Course covers the principles and practices of x-ray production as they pertain to imaging. Relevant topics from physics will include, but not be limited to, mechanics, electricity, magnetism, radiation, and atomic structure. The primary focus of the class will be the production of x-rays and their interaction with matter.

**RADI 122 Clinical Practice I 2.5 CR**

Prerequisites: admission to the Radiography

Program and a "P" in RADI 113. The student will participate in clinical education two days a week with an assignment to the imaging department of one of five affiliating hospitals. The department's clinical instructor/coordinator will schedule a weekly hands-on lab which will allow the student to learn and practice positioning, equipment manipulation, and radiation protection methods for the radiologic exams of the chest, abdomen, upper extremities, shoulder, lower extremities, pelvis and spine. In addition, the student will be assigned to various areas of the imaging department where they will have the opportunity to observe and learn from registered radiologic technologists and radiologists. Under direct supervision, the student will perform imaging exams on patients securing competency status on five different exams. The course will also facilitate the student's professional growth through encouragement of professional values, attitudes and behaviors.

**RADI 130 Radiologic Positioning, Procedures and Pathology II 3.5 CR**

Prerequisites: admission to the Radiography Program and a "C" in RADI 120, RADI 121 and RADI 122. This course will include instruction of radiologic examinations of the bony thorax, skull, facial bones, sinuses, upper and lower gastrointestinal systems, biliary system and urinary system. The study of contrast media as an image enhancement will be a focus of the course. The student will learn safe and effective methods of contrast administration, as well as the skill of venipuncture as a means of administration. Critical thinking will be encouraged as students learn to alter radiologic examinations to correlate with patient abilities and needs. Radiographic anatomy and pathology will be presented allowing students to learn to identify normal anatomy versus abnormal pathology. Alternative imaging modalities to better demonstrate specific anatomy and pathology will be discussed. Students will participate in small groups skill-building lab activities. [48-16-64]

---

## **RADI 131 Principles of Radiologic**

### **Imaging I**

**3 CR**

Prerequisites: admission to the Radiography Program and a “C” in RADI 120, RADI 121 and RADI 122. In this course, students will move beyond the physics of how the beam is created, to explore how the image is created. Students will study the many variables that affect the creation of the image, as well as study both film/screen and digital image acquisition and processing systems. In addition, image quality factors will be addressed.

## **RADI 132 Clinical Practice II**

**2.5 CR**

Prerequisites: admission to the Radiography Program and a “C” in RADI 120, RADI 121 and RADI 122. The student will participate in clinical education two days a week in the imaging department of one of five affiliating hospitals. The department’s clinical instructor/coordinator will schedule a weekly hands-on course which will allow the student to learn proper patient positioning, proper equipment positioning and technical factor selection of radiologic exams of the bony thorax, skull, facial bones, sinuses, upper gastrointestinal system, lower gastrointestinal system, biliary system and urinary system. Safe and effective methods of administering both positive and negative contrast media to enhance imaging will be covered and the student will have the opportunity to practice and achieve competency in the skill of venipuncture. The student will also be assigned to various areas of the imaging department where they will observe and learn from registered radiologic technologists and radiologists. Under direct supervision, the student will perform imaging exams on patients securing competency status on nine different exams. In addition, the course will facilitate the student’s professional growth through encouragement of professional values, attitudes and behaviors.

## **RADI 210 Clinical Practicum**

**3 CR**

Prerequisites: admission to the Radiography Program and a “C” in RADI 130, RADI 131, and RADI 132. The student will participate

in clinical education five days a week in the imaging department of one of five affiliating hospitals. With this intensive schedule, the student will be allowed the opportunity to fine-tune established skills and learn new skills they may have not yet been introduced to. The department’s clinical instructor/coordinator will schedule a bi-weekly class with varied topics to address student needs. The student will be assigned to various areas of the imaging department where they will observe and learn from registered radiologic technologists and radiologists. Under direct supervision, the student will perform imaging exams on patients, securing competency status on fourteen of the required American Registry of Radiologic Technologists (ARRT) competencies. In addition, the course will facilitate the student’s professional growth through encouragement of professional values, attitudes and behaviors. Upon completion of this course, the student will begin to enjoy a sense of self-confidence in the clinical setting.

## **RADI 220 Radiologic Positioning, Procedures and Pathology III**

**1.25 CR**

Prerequisites: admission to the Radiography Program and a “C” in RADI 210. This course will explore imaging methods as well as pathologic indications for trauma, mobile and surgical imaging. Students will consider the special concerns and challenges encountered with trauma, mobile and surgical imaging. Critical thinking skills will be encouraged as students analyze challenges presented, and determine safe and effective imaging methods. Students will be given the opportunity to present an actual patient case study in which they faced adversity to their routine imaging methods. They will describe how they overcame obstacles while providing exceptional patient care and producing diagnostic images of the highest quality. Students will also be provided an introduction to computed tomography (CT) procedures in which they will learn the basic principles of CT and study examinations of, and pathological indications for the head, chest, abdomen/pelvis and spine.

---

**RADI 221 Principles of Radiologic Imaging II****3 CR**

Prerequisites: admission to the Radiography Program and a “C” in RADI 210. In this course, students will study the “art of image critique.” The common parameters of the imaging process will be presented, as well as the process of analyzing the image from this common perspective. Students will learn a diagnostic problem-solving technique and will explore, in depth, each of the properties which affect radiographic quality. They will determine the controlling and influencing factors of each, their affect on the appearance of the image, how to assess each property, and finally, how to make adjustments correctly. A second component of the course explores various exposure systems. Students will compare the features and the advantages of fixed kilovoltage systems to those of variable kilovoltage systems. Special exposure systems such as automatic exposure control (AEC) and programmed systems will also be discussed. Students will learn to calculate new exposure factors for multiple changes in variables, similar to those that arise in clinical practice. Lastly, the course presents basic features and functions of specialized imaging equipment. Students will study mobile imaging equipment, fluoroscopy and image intensification units, conventional tomography, vascular imaging equipment, computed tomography (CT) and magnetic resonance imaging (MRI) equipment.

**RADI 222 Comprehensive Clinical Experience I****3.75 CR**

Prerequisites: admission to the Radiography Program and a “C” in RADI 210. The student will participate in clinical education three days a week in the imaging department of one of five affiliating hospitals. With this course, the student will be assigned to a different hospital from the one they have been assigned to thus far in the program. The change will allow the student to learn from a different group of technologists and radiologists and offer alternative

ways of accomplishing radiologic examinations. The department’s clinical instructor/coordinator will schedule a bi-weekly lab correlated to the topics presented in RADI 220. The student will focus on some of the more advanced imaging skills such as those associated with surgical imaging and imaging of the trauma patient. In addition, the student will be introduced to CT exams and be offered the opportunity to observe in the CT imaging suite. The student will also be assigned to other areas of the imaging department where they will observe and learn from registered radiologic technologists and radiologists. Under direct supervision, the student will perform imaging exams on patients securing competency status on fourteen of the required American Registry of Radiologic Technologists (ARRT) competencies. In addition, the course will facilitate the student’s professional growth through encouragement of professional values, attitudes and behaviors.

**RADI 223 Radiobiology and Protection****1 CR**

Prerequisites: admission to the Radiography Program and a “C” in RADI 210. This course is intended to identify and justify the need to minimize unnecessary radiation exposure to humans. Students will review the principles of cellular biology and identify the sources of electromagnetic and particulate radiations. They will learn about radiosensitivity and the effects of ionizing radiation on human cells, tissues and organs. Radiation units of measurement, as well as dose limits for both the public and the occupational worker will be presented. Students will learn how as radiologic technologists, they can employ various means to produce high quality diagnostic images at a dose as low as reasonably achievable.

**RADI 230 Cross-Sectional Anatomy 2 CR**

Prerequisites: admission to the Radiography Program and a “C” in RADI 221, RADI 222, RADI 223, BIOL 201 and BIOL 202. This course presents an introduction of human

anatomy from the transverse, sagittal and coronal planes, providing the student an understanding of anatomy in three dimensions. The course is designed for the second-year radiography student as a means to enhance their ability to visualize the appearance and the relationships of anatomical structures in the planar sections. This ability will aid the student with patient positioning skills to accurately demonstrate structures on traditional diagnostic images, as well as a better understanding of anatomy as demonstrated through the sectional imaging modalities of CT and MRI.

**RADI 231 Radiologic Technology  
Special Topics** **3 CR**

Prerequisites: admission to the Radiography Program and a “C” in RADI 221, 222 and 223. This course is the “wrap-up” course for the radiography program. One intention of the course is to ready the student for the American Registry of Radiologic Technologist (ARRT) certification examination upon graduation. In-class registry review sessions will be held, and in addition, students will complete four mock registry examinations. A second intent of the course is focused on radiography post-primary certifications. Students will investigate various imaging modalities secondary to radiography. Special guest speakers from advanced modalities present their area of expertise, offering job specifics and case studies. A third component of the course allows the student to showcase their knowledge and abilities as they leave the program. Each student will present an imaging case study which will focus on a specific pathology they found particularly interesting. The student is the expert in their case and will present all facets of the imaging process that led to the diagnosis.

**RADI 232 Comprehensive  
Clinical Experience II** **3.75 CR**

Prerequisites: admission to the Radiography Program and a “C” in RADI 221, RADI 222 and RADI 223. The student will participate

in clinical education three days a week in the imaging department of one of five affiliating hospitals. The department’s clinical instructor/coordinator will schedule a bi-weekly lab/class with varied topics directed towards the students needs as they complete their final semester of the program and prepare to take the national certification exam. The student will focus on fine-tuning established skills and investigate advanced imaging modalities such as MRI and Interventional Procedures. The student will also be assigned to other areas of the imaging department where they will continue to observe and learn from registered radiologic technologists and radiologists. Under direct supervision, the student will perform imaging exams on patients securing competency status on the final twelve of the required American Registry of Radiologic Technologists (ARRT) competencies. In addition, the course will continue to facilitate the student’s professional growth through encouragement of professional values, attitudes and behaviors.

**SCIENCE (SCIE)**

**SCIE 100 Environmental Science** **4 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. An interdisciplinary approach analyzing man's earthly environment from the vantage point of the biological and physical sciences. The course will focus upon such topics as life cycles, energy, pollution, population, and resource deterioration and depletion. Additionally, philosophic and ethical attitudes of man's relationship to his cultural and natural environment will be examined. Within this framework, man will be studied as a “Citizen of Earth.”

**SCIE 102 Physical Science** **4 CR**

A lecture and laboratory course that integrates the sciences of astronomy, physics, chemistry, and modern contemporary science. Emphasis is placed on applications and principles contributed by all the physical sciences. [48-32-80] Lab Fee

---

### **SCIE 103 Field Investigation in Environmental Studies** 4 CR

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 in 99. This course will provide the student with a multi-integrated education in environmental studies. The students will be investigating life systems in the environment, testing the life support systems, and analyzing the environment to see what impact man's progress has had and will have on it. [16-48-64] Lab Fee

### **SERVICE LEARNING (SERV)**

#### **SERV 200 Service Learning** 3 CR

Prerequisites: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This course examines volunteerism from historical and contemporary perspectives. It provides students with an opportunity to study and experience volunteerism in the community and to discover how communities address issues with diverse populations. This course has as its major objective the encouragement of critical thinking and practical experiences with respect to the concepts of citizenship and social responsibility. The course requires students to participate in a community based service learning project and to complement their community work with written and oral reflections.

### **SOCIAL SCIENCE (SOSC)**

#### **SOSC 298 Independent Study** 1-3 CR

Prerequisite: departmental approval only. An opportunity for the interested student with a good scholastic record to pursue independently the study of some subject under the direction of a member(s) of the social sciences staff. Subjects are chosen and arrangements made to suit the needs of the individual student.

#### **SOSC 299 Field Experience** 1-3 CR

Prerequisites: a written outline of the student's project or work experience and departmental approval. An opportunity for the interested student to have actual field experience in the social sciences. The program would

provide the opportunity to gain experience with regional employers through practicums and/or observations. May be repeated up to a maximum of six credit hours.

### **SOCIOLOGY (SOCI)**

#### **SOCI 201 Introduction to Sociology** 3 CR

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. Why do we behave the way we do? Why do people change? Why do people deviate? This course helps students to understand how they are influenced by group situations and relationships. The focus is on the study of cultures, institutions, and social groups. Basic principles for the study of society are explored.

#### **SOCI 201H Introduction to Sociology-Honors** 3 CR

Prerequisite: an ACT composite score of 20 or higher, or an ASSET reading or writing score of 51 or higher, or a COMPASS reading or writing score of 93 or higher, or the written approval of the honors coordinator. An honors course for highly-motivated students in SOCI 201. Entry to honors status only by department approval. Emphasis on individual study and personal and/or group projects.

#### **SOCI 202 Social Problems** 3 CR

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. The sociological study of current social problems such as delinquent and criminal structures, substance abuse and addiction, the changing family, race and gender relations, issues in mental and physical health, the political system, the interrelation of population growth, environmental concerns, and the internationalization of the work force. SOCI 201 is recommended before enrolling in this course.

#### **SOCI 203 Marriage and Family** 3 CR

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. This course analyzes from a cross-cultural perspective how individuals within the family structure

are influenced by a society's culture, institutions, and social groups. Topics include love, marriage, divorce, parenting, sexuality, conflict resolution, and aging. Since we do not formally prepare people for their role in marriage and the family—this is a must course. SOCI 201 is recommended prior to taking this course.

### **SOCI 204 Race and Ethnic Relations 3 CR**

Students will discover whether their ancestors experienced prejudice and discrimination, why they did or did not, and how individuals and a society can resolve racial and cultural issues. Group relations in different countries will be analyzed with a major emphasis on African Americans, Hispanics, Europeans, Asians, and Gypsies in the United States.

## **SPANISH (SPAN)**

### **SPAN 101 Elementary Spanish 4 CR**

Prerequisite: COMPASS reading score of 70, or a “C” in STSK 98 or 99. Introductory course stressing pronunciation, comprehension, basic grammar structures, and interesting cultural readings. Individual/small group sessions are important to modularized language and cultural development. Lab Fee

### **SPAN 102 Elementary Spanish 4 CR**

Prerequisite: a “C” in SPAN 101. Review of elements of basic and advanced grammar, conversation, and comprehension practices. Reporting on cultural aspects and simple short stories in the language for individual credit. Lab Fee

### **SPAN 131 Conversational Spanish 3 CR**

Students learn to communicate effectively in familiar, conversational Spanish. This course stresses listening and speaking rather than grammatical structures. Lab Fee

### **SPAN 201 Intermediate Spanish 4 CR**

Prerequisite: a “C” in SPAN 102. Comprehensive oral and written reviews of grammatical structures through varied short stories, conversations, and presentations. Lab Fee

### **SPAN 202 Intermediate Spanish 4 CR**

Prerequisite: a “C” in SPAN 201. Extensive reading to further develop vocabulary and mastery of the language. Advanced prose selections from varied masters of the Hispanic world as cultural appreciation. Lab Fee

### **SPAN 203 Advanced Conversational Spanish 3 CR**

Prerequisite: a “C” in SPAN 202 or department approval. This course focuses on the development of oral and written fluency and the development of vocabulary and mastery of the language; to use the Spanish language strategically, to accomplish objectives, and resolve conflicts in culturally appropriate situations. Lab Fee

## **STUDY SKILLS (STSK)**

### **STSK 98 College Reading 4 CR**

Prerequisite: COMPASS reading score of 46. Recommend taking no heavy reading courses. This course is designed to develop reading comprehension, speed of reading, vocabulary, and college reading skills. [48-16-64] Lab Fee

### **STSK 99 Applied Study Skills 1-3 CR**

Prerequisite: a “C” in STSK 98, or COMPASS reading score of 61 or higher. Students will utilize a textbook from another academic course and apply reading strategies for success. Students may pair this course with other courses for up to six credit hours in STSK 99.

### **STSK 111 College Success 1-3 CR**

This course is designed to help students make the transition to college and become better prepared to handle the demands of college. Students will develop more effective methods to study in college including time management, lecture note taking, reading college textbooks and test taking strategies. Students will become more familiar with Kellogg Community College by learning about campus resources that will enrich and support their educational experience.

---

## **THEATRE (THEA)**

*Courses designated "E" are for enrichment only. These courses are for zero credit and are not transferable to any institution. Fees for "E" courses include instructor costs and fees.*

### **THEA 121 Theatre Appreciation I 3 CR**

Prerequisite: COMPASS reading score of 70, or "C" in STSK 98 or 99. Humanities course in theatre as an art, stressing the universality of mans desires, problems, and dreams. This includes a study of the social trends which influenced the work of the playwrights and designers and contemporary methods of theatrical expression. Humanities elective.

Lab Fee

### **THEA 122 Theatre Appreciation II 3 CR**

Prerequisite: COMPASS reading score of 70, or a "C" in STSK 98 or 99. Humanities course in theatre as an art with special attention given to the development of musical comedy and to contemporary themes and productions. Open to all students as a humanities elective.

Lab Fee

### **THEA 125 Stagecraft I 3 CR**

An introductory course in basic technical production including scenery construction, lighting, costumes, makeup, sound, and theatre business management. Class work includes practical experience in conjunction with College productions. [16-32-48]

Lab Fee

### **THEA 218 Acting I 3 CR**

A study of the techniques of acting. Each student is given individualized instruction in developing acting techniques. Laboratory work includes participation in classroom and College productions. [16-32-48]

Lab Fee

### **THEA 218E Acting I 0 CR**

Same description as THEA 218. [16-32-48]

Lab Fee

### **THEA 220 Acting II 3 CR**

Prerequisite: THEA 218. A continuation of THEA 218 which involves intensive study of problems in acting style, as well as the extension of the performer's range in the areas of

characterization and physical interpretation of a role. [16-32-48]

Lab Fee

### **THEA 220E Acting II 0 CR**

Prerequisite: THEA 218. Same description as THEA 220. [16-32-48]

Lab Fee

### **THEA 225 Stagecraft II 3 CR**

Prerequisite: THEA 125. An advanced course in technical production with emphasis on scenery design and construction, scene painting, costume design and construction, makeup design and execution. Students will have opportunities for individualized instruction. Practical experience in conjunction with College productions. [16-32-48]

Lab Fee

### **THEA 230 Script Analysis 3 CR**

Prerequisite: THEA 218. The study of selected plays from the standpoint of the theatre artist. Emphasis is placed on a thorough examination of the play script preparatory to production, including production budgets, set/space requirements, casting problems, and the director's and performer's approach to the material.

### **THEA 251 Introduction to Children's Theatre 3 CR**

The literature, theory, and techniques of theatre for children. Study of formal and informal drama, story theatre, and improvisation. An actual production of a play for children will tour area schools. [16-32-48]

Lab Fee

### **THEA 281 Theatre Practicum 1-4 CR**

This course is required to participate in all KCC theatrical productions, as well as students who have an interest in transferring to a theatrical collegiate program. Students will gain practical experience in all phases of the theatrical art. Includes acting, lighting, makeup, scenery construction, publicity, box office, costuming, stage managing, and properties. Specific duties and academic instruction will be arranged with the director of theatre. Course may be repeated for credit toward graduation up to six credit hours per area of discipline.

Lab Fee

---

**THEA 281E Theatre Practicum 0 CR**

Same description as THEA 281. Lab Fee

**THEA 285 Arts Management 3 CR**

An introductory course in the techniques of arts management, including personnel management and theatre organization, financial planning, grant writing, publicity, graphics, and public relations.

**THEA 297 Theatre Special Topics 3 CR**

This course is designed to allow the students to explore focus areas in theatre such as directing, screening of plays, costumes, makeup, etc. Course may be repeated for credit toward graduation up to six credit hours.

**THEA 297E Theatre Special Topics 0 CR**

Same description as THEA 297.