COURSE DESCRIPTIONS

Course Descriptions

Course Information

Course Credits

The credit for each course is indicated after the title in the course description. One credit is equivalent to one collegiate semester-hour credit. Each credit given for a course is based on approximately three hours of study in that course weekly. This may consist of lectures, out-of-class study, or combinations thereof as follows:

- One hour of lecture plus an average of two hours of out-of-class study.
- Two hours of laboratory study plus an average of one hour of out-of-class study.
- Three hours of laboratory study with no regular out-of-class study.
- One to 10 credits with variable hours for general usage courses: e.g., Coordinated Internship, Occupational Work Experience, Seminar, Supervised Study, Cooperative Education, Special Problems, etc.

Course Hours

The educational programs combine the teaching of theoretical concepts in "Lecture" with an application of principles and practical training in "Laboratory" under faculty supervision. The teaching of theoretical concepts in lectures, seminars, discussions, and other similar classes is identified as "Lecture" and the application of principles and practical training in laboratories, shop, clinical training, supervised work experiences, and other similar classes is identified as "Laboratory." The depiction of "Lecture" and "Laboratory" time each week is for a course conducted over a full Fall or Spring semester. Courses taught over shorter time periods will meet more each week and some courses will vary each week. All courses will meet the required times in total.

The number of lecture hours in class each week (including lecture, seminar, and discussion hours) and/or the number of laboratory hours in class each week (including laboratory, shop, supervised study, and coordinated internship) are indicated for each course in the course description. The numbers of lecture and laboratory hours in class each week are also called "contact" hours because it is time spent under the direct supervision of a faculty member. The contact hours for a course shall be the total of the lecture and laboratory hours. In addition to the lecture and laboratory hours in class each week as listed in the course description, each student also must spend some time on out-of-class assignments through his own direction. Usually each credit hour per course requires an average of two hours of out-of-class preparation each week for lecture and 0 to 5 hours for laboratory.

Course Prerequisites and Corequisites

If a prerequisite is required before enrolling in a course, the prerequisites will be identified by the College in the course description. Courses in special sequences (usually identified by a Roman numeral I, II, etc.) usually require that a prior course or equivalent be completed before enrolling in the advanced course in the sequence. Faculty should be familiar with courses that are exceptions to this procedure. When a corequisite is required for a course, usually the corequisites must be taken at the same time. The prerequisite or equivalent must be completed satisfactorily before enrolling in a course unless special permission is obtained from the instructional department.

Course Numbering System

Three Rivers College uses a uniform course numbering system with two- or three-digit course numbers:

Courses numbered 01-10 are Transitional courses. Credits earned in these courses are not applicable toward associate degree programs; however, upon approval of the Chief Academic Officer, some transitional courses may provide credit applicable to associate of applied science or certificate programs. Students may re-register for those courses in subsequent semesters as necessary until the course objectives are completed.

Courses numbered 100-199 are generally freshman courses applicable toward associate degree and certificate programs.

Courses numbered 200-299 are generally sophomore courses applicable toward associate degree and certificate programs.

Courses ending with the digits 0-4 are primarily for transfer to a four-year college or university. Courses ending with the digits 5-9 are primarily for entry into the job market upon completion of the associate of applied science degree or as part of a specialized associate of science degree that is intended for transfer into a pre-professional program or is a coherent self-sufficient component of a four-year occupational program. It is up to each baccalaureate degree-granting institution to determine what courses it will or will not accept for transfer.

Course Offerings

Designations at the end of course descriptions identify the semesters in which the courses are offered. ("F" means Fall semester, "SP" means Spring semester, "S" means Summer). Some courses are offered on a variable schedule or on demand.

Course Prefixes

ACAD	Academic
ACCT	Accounting
ADJU	Administration of Justice
AGRI	Agriculture
ALHE	Allied Health
ARTS	Art
BHS	Behavioral Health Support
BIOL	Biology
BLAW	Business Law
BMGT	Business Management
BUAD	Business Administration
CHEM	Chemistry
CIVL	Civil and Construction
CPST	Capstone
CONS	Construction
CRJC	Corrections
CRJU	Criminal Justice
CYS	Cybersecurity
DESL	Diesel
ECD	Early Childhood Development
ECON	Economics
EDUC	Education
ELEC	Electronics
EMT	Emergency Medical Technician
ENGL	English
ENGR	Engineering
FIRE	Fire Science
FRST	Forestry
GEOG	Geography
GIS	Geographic Information Systems
GNST	General Studies
GOVT	Government and Political Science
HIST	History
HNRS	Honors
HPER	Health, Physical Education, and Recreation
HVAC	Heating, Ventilation, Air Conditioning/Refrigeration
IST	Information Systems Technology
MAFT	Manufacturing Technology
MATH	Mathematics
MCOM	Mass Communication
MEDR	Mechanical Drafting
MKTG	Marketing
MLT	Medical Laboratory Technician
MST	Information Technology Specialist
MUSC	Music
MUSP	Music - Private Instruction
NURS	Nursing
OTA	Occupational Therapy
PARA	Paramedic
PHIL	Philosophy and Religion
PHYS	Physics
PLUM	Plumbing
PNRS	Practical Nurse
PSYC	Psychology
READ	Reading
SCOM	Speech Communication
SOCI	Sociology
SPAN	Spanish
SURG	Surgical Technology
SWRK	Social Work
THEA	Theater Arts
TRNS	Transportation
WELD	Welding

Academic

ACAD 101 – Academic Life Strategies (3 cr.)
This course aids the student by identifying his or her learning style, personality strengths, as well as the awareness of multiple and emotional intelligence while connecting the student to college resources and services. The students will gain knowledge of note taking, study techniques, exam strategies and their applications to academic success. Students will demonstrate critical and creative thinking strategies to set goals, show workplace readiness, and communicate with others to create a diverse team dynamic. Lecture 3 hours per week. F, SP, S

Accounting

ACCT 211 - Principles of Accounting I (3 cr.)
Prerequisite(s): MATH 02 or placement into MATH 153/MATH 161 or higher.
This course is a study of generally accepted accounting principles as they apply to corporations. Concepts covered include the accounting cycle, financial statements, corporate financing, and the elements of internal control. Lecture 3 hours per week. F, SP

ACCT 212 - Principles of Accounting II (3 cr.)
Prerequisite(s): Completion of ACCT 211 with a minimum letter grade of C.
This course is a continuation of financial accounting subjects, including the Statement of Cash Flows and Financial Statement Analysis. It also covers the study of managerial accounting, including job-order costing and process costing, management reporting, budgeting, performance analysis, pricing, and capital investment decisions. Lecture 3 hours per week. F, SP

ACCT 218 – Payroll Accounting (3 cr.)
Prerequisite(s): ACCT 211 with a minimum letter grade of C.
This course introduces the subject of payroll by presenting the federal and state rules and regulations governing employment, compensation, and payroll taxes. It takes the student step-by-step through the entire payroll process – from timekeeping, computation of gross earnings, and determining federal income tax and other payroll tax withholdings; to preparing and distributing the payroll; to recording or accounting for wages, tax liabilities, and payment or deposits. Students will also learn to use a 10-key calculator in this course. Lecture 3 hours per week. F

ACCT 219 - Accounting Management Software (3 cr.)
Prerequisite(s): IST 100 and ACCT 211 with a minimum letter grade of C.
This course is a study and use of a commercial computerized accounting program. Students use a computerized accounting program to complete a business cycle for a service, merchandising, and manufacturing company. Using the accounting program, they also prepare payroll and employee records. Students create reports and graphs from the end of the period data. Lecture 3 hours per week. SP

ACCT 225 - Intermediate Accounting I (3 cr.)
Prerequisite(s): ACCT 212 with a minimum letter grade of C.
Financial accounting theory applications for accounting standards and the accounting process of corporations are reviewed and practiced. Accounting for the balance sheet, income statement, and the statement of cash flows is discussed, demonstrated, and applied. Emphasis is placed on the use of financial statement analysis in decision-making. Accounting for cash and receivables, inventory valuation, fixed assets, natural resources, and intangibles is examined and applied. Lecture 3 hours per week. F

ACCT 227 – Financial Analysis and Budgeting (3 cr.)
Prerequisite(s): IST 100 and *ACCT 211 with a minimum letter grade of C.*
This course emphasizes preparation of the three primary financial statements and supporting statements in the budgeting process, as well as analysis of financial statements for decision-making purposes. Lecture 3 hours per week. SP

ACCT 237 - Income Tax Accounting (3 cr.)
Prerequisite(s): ACCT 211 with a minimum letter grade of C.
This course includes a study of the history, theory, and principles of federal taxation with an emphasis on current tax laws and their application to individual taxpayers. Lecture 3 hours per week. F

ACCT 258 - Cost Accounting (3 cr.)
Prerequisite(s): ACCT 212 with a minimum letter grade of C.
This course is a study of the costs of production and the application of those costs to the process cost system. Course includes a complete preparation of a master and flexible budget for managerial decision-making, analysis of current operations, and planning. Lecture 3 hours per week. SP

Administration of Justice

ADJU 100 - Introduction to Law Enforcement (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
Introduction to Law Enforcement provides an overview of history, roles, tasks, and styles of policing. This course introduces students to the fundamental principles of social control and the basic legal restrictions on law enforcement. Lecture 3 hours per week. F, SP, S

ADJU 102 – Introduction to Criminal Justice (3 cr.)
Prerequisite(s): R*EAD 02 or Reading placement of ENGL 111.*
Introduction to Criminal Justice examines the various aspects of the criminal justice system including the police, courts, corrections, legal, and ethical considerations, and theories of crime prevention. Lecture 3 hours per week. SP

ADJU 103 – Introduction to Corrections (3 cr.)
Prerequisite(s): R*EAD 02 or Reading placement of ENGL 111.*
Introduction to Corrections provides an overview of the history, administration, and practices within the correctional system. Students will examine concepts of punishment, incarceration, community supervision, programs, and issues related to corrections. Lecture 3 hours per week. F

ADJU 104 – Introduction to Criminal Courts (3 cr.)
Prerequisite(s): R*EAD 02 or Reading placement of ENGL 111.*
Introduction to Criminal Courts focuses on the organization and structure of various court systems within the U.S. The role of the prosecutor, defense attorney, judge, and jury will be reviewed, as well as the procedures involved with the trial process. Lecture 3 hours per week. SP

ADJU 113 - Criminal Law (3 cr.)
Prerequisite(s): R*EAD 02 or Reading placement of ENGL 111.*
This course examines the legal principles and Constitutional restrictions on federal and state criminal law. Students differentiate between various criminal offenses and explain the elements required of each law. Both model penal code and Missouri statues are reviewed. Lecture 3 hours per week. F, SP, S

ADJU 114 – Constitutional Law (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course examines the legal restrictions established by the U.S. Constitution. Supreme Court decisions impacting law enforcement and criminal procedures are reviewed. Lecture 3 hours per week. F, SP

ADJU 147 - Juvenile Procedures (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course provides an overview of the organization, structure, and legal aspects of the juvenile justice system. The history of juvenile law, sociological theories, and treatment strategies will be reviewed. Introduction to the juvenile system in Missouri is included. Lecture 3 hours per week. SP

ADJU 213 - Court Procedures (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course explains the structure and hierarchy of the federal and state court systems. Each step of the trial process and landmark court decisions related to criminal procedures are reviewed. Lecture 3 hours per week. SP

ADJU 223 - Community Policing and Homeland Security (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course identifies the various policing strategies used throughout the history of the United States, with special emphasis on community policing and homeland security. This course begins by explaining how policing has evolved and what factors have impacted the various eras of policing. The philosophy of community policing and the role of police in homeland security is described in detail. Lecture 3 hours per week. F, SP

ADJU 233 - Criminal Investigation (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course reviews the basic procedures, laws, and court cases related to criminal investigations. The specific techniques used to investigate a variety of crimes is discussed. Lecture 3 hours per week. F, SP

ADJU 243 - Police Administration (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course identifies theories of management, the role of police managers, and the impact management has upon employees. A discussion of legal issues, the creation of a department budget, and scheduling employees are covered. Lecture 3 hours per week. SP

Agriculture

AGRI 110 - Soils & Soil Fertility (4 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course is a study of the basics of soil development, classifications, management, fertility, testing, and origin as related to plant growth. Lecture 3 hours/Laboratory 2 hours/Total 5 hours per week. SP

AGRI 120 - Plant Science (4 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course involves the study of scientific principles of plant anatomy, morphology, physiology, genetics, reproduction, and evolution. Emphasis is placed on agronomic, horticulture, and forestry crops. Lecture 3 hours/Laboratory 2 hours/Total 5 hours per week. F

AGRI 122 - Natural Resources Management (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
The application of skills and practices needed in the proper management of natural resources to provide maximum use of those resources while protecting them and the environment. Resources studied include soils, water, forestry, and wildlife. Lecture 3 hours per week. F

AGRI 130 - Animal Science (4 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
A general overview of cattle, sheep, swine, and horse industries. Topics include zoological classification, breed identification, selection fundamentals, digestive systems, and disease prevention. Lecture 3 hours/Laboratory 2 hours per week/Total 5 hours per week. F

AGRI 172 - Integrated Pest Management (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course is the study of the management systems in agriculture used to prevent animal and plant pest populations from causing economic injury. Specific topics include pesticide history, chemical and biological controls, safety, machinery calibrations, and regulations. Lecture 3 hours per week. SP

AGRI 232 - Advanced Animal Science (3 cr.)
Prerequisite(s): AGRI 130 or instructor consent.
This course studies livestock nutritional requirements, reproductive cycles, and performance record evaluations. Emphasis is placed on ration formulations, selection tools, and reproductive evaluations of beef, swine, sheep, and horses. Lecture 3 hours per week. SP

AGRI 234 – Equine Science (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course is a general overview of the equine industry. Topics include history and development, breeds, selection fundamentals, health, nutritional and reproductive management strategies, and behavior characteristics. Lecture 3 hours per week. SP

AGRI 240 - Agricultural Economics and Marketing (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course is an introduction to the principles of agriculture economics. Topics include an overview of macroeconomics and microeconomic systems, policies affecting the money supply, business types, competition, supply and demand, futures marketing, and world trade as they relate to agriculture production. Lecture 3 hours per week. F

AGRI 270 - Agriculture Systems Management (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course is an introduction to mechanical and engineering principles and their applications in agriculture. Topics include engine operations, machinery calibrations, electrical and HVAC systems, land descriptions, water runoff, and waste management. Lecture 3 hours per week. SP

AGRI 297 - Agriculture Internship (3 cr.)
Prerequisite(s): Instructor consent.
This course is supervised on-the-job training in selected agricultural business coordinated by College personnel. Student spends 120 clock hours on the job during the entire semester. Variable hours per week. F, SP

Allied Health

ALHE 125 – Medical Terminology (3 cr.)
Prerequisite(s): ENGL 02 and READ 02 or Writing and Reading placement of ENGL 111.
This course provides a comprehensive study of medical terminology utilizing a body system approach. The course focuses on the principles of medical language including the definition, construction, and spelling of medical terms. Lecture 3 hour per week. F, SP, S

ALHE 127 – Body Systems and Function for Healthcare Providers (3 cr.)
Prerequisite(s): Admission to the Practical Nursing Program or Advanced Emergency Medical Technician Program
This course is designed to provide the student with basic knowledge of human anatomy and physiology applicable to practical nursing and prehospital care providers. Lecture 3 hours per week. SP

Art

ARTS 110 - Introduction to Art (3 cr.)
This is an introductory studio course to the field of fine art. The student works with composition in a variety of media. Art processes and techniques in both two- and three-dimensional works are examined. The documentation of work in digital media and development of a portfolio is covered. The student is responsible for materials required for this course. Lecture 1 hour/Laboratory 4 hours/Total 5 hours per week. F, SP, S

ARTS 123 - History and Appreciation of Art (3 cr.)
CORE 42 MOTRANSFER GUARANTEED ***MOTR ART 100***
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This is an introductory course emphasizing the appreciation of the visual arts through the study of the art and architecture of various geographical areas and cultures throughout history from antiquity through contemporary artists. A select number of significant artists, artistic movements, and cultures are covered. The course examines how art reflects and influences cultures throughout history. Lecture 3 hours per week. F, SP, S

ARTS 131 - Drawing I (2 cr.)
CORE 42 MOTRANSFER GUARANTEED ***MOTR PERF 105D***
This is an introductory course providing studio instruction in drawing. Students work in graphite, charcoal, pastels, and other drawing media. Composition, subject matter, rendering, proportion, and perspective are explored. The documentation of work in digital media and development of a portfolio are covered. The student is responsible for materials required for this course. The student is provided an individual studio space. Laboratory 4 hours per week. F, SP, S

ARTS 132 - Drawing II (2 cr.)
Prerequisite(s): ARTS 131.
This is an advanced course providing studio instruction in drawing focusing on the specific interests of the student. The student works in a drawing media of his/her choice, concentrating on a thematic, in-depth development of studio work. Laboratory 4 hours per week. F, SP, S

ARTS 141 - Color and Design I (2 cr.)
This is an introductory studio course to the field of fine art. The student examines the visual element color in both practical application and theory. The interaction of color, color mixing, color impact, digital media, and composition is covered. The student is responsible for materials required for this course. Laboratory 4 hours per week. F, SP, S

ARTS 213 - Water Color (3 cr.)
This is an introductory studio course in watercolor painting. The student explores handling and control of watercolor processes. A variety of materials related to watercolor painting is covered, including paper, water media, and brushes. Composition and subject matter is examined. The development of a portfolio and documentation of work in digital media is covered. Students are responsible for materials required for this course. The student is provided an individual studio space. Laboratory 6 hours per week. F

ARTS 233 - Painting I (3 cr.)
This is an introductory studio course in acrylic painting. The student explores handling and control of acrylic painting processes and techniques. A variety of materials related to painting will be covered, including canvas, stretcher frame construction, paint media, and brushes. Composition and subject matter is examined. The documentation of work in digital media and development of a portfolio are covered. The student is responsible for materials required for this course. The student is provided an individual studio space, easel, and table. Laboratory 6 hours per week. SP

ARTS 243 - Painting II (3 cr.)
Prerequisite(s): ARTS 233.
This is an advanced course providing studio instruction in acrylic painting, focusing on the specific interest of the student. The student works with acrylic painting processes and techniques, concentrating on a thematic, in-depth development of studio work. Composition and subject matter is examined. The documentation of work in digital media and development of a portfolio are covered. The student is responsible for materials required for this course. The student is provided an individual studio space, easel, and table. Laboratory 6 hours per week. F, SP

ARTS 260 – Studio Art Experience I (1 cr.)
This course provides a studio experience for those students wishing to continue studio art interests beyond art courses already completed. The course is also ideal for non-degree-seeking students who wish to pursue personal studio art interests. Students choose one area of concentration for the course – either painting, drawing, or watercolor – and arrange with the instructor to meet with other students enrolled in a course focusing on that area of concentration. A maximum of 4 credits may count toward the Associate of Arts degree. Laboratory 2 hours per week. F, SP

ARTS 261 – Studio Art Experience II (1 cr.)
Prerequisite(s): ARTS 260.
This course provides a studio experience for those students wishing to continue studio art interests beyond art courses already completed. The course is also ideal for non-degree-seeking students who wish to pursue personal studio art interests. Students choose one area of concentration for the course – either painting, drawing, or watercolor – and arrange with the instructor to meet with other students enrolled in a course focusing on that area of concentration. A maximum of 4 credits may count toward the Associate of Arts degree. Laboratory 2 hours per week. F, SP

ARTS 262 – Studio Art Experience III (1 cr.)
Prerequisite(s): ARTS 261.
This course provides a studio experience for those students wishing to continue studio art interests beyond art courses already completed. The course is also ideal for non-degree-seeking students who wish to pursue personal studio art interests. Students choose one area of concentration for the course – either painting, drawing, or watercolor – and arrange with the instructor to meet with other students enrolled in a course focusing on that area of concentration. A maximum of 4 credits may count toward the Associate of Arts degree. Laboratory 2 hours per week. F

ARTS 263 – Studio Art Experience IV (1 cr.)
Prerequisite(s): ARTS 262.
This course provides a studio experience for those students wishing to continue studio art interests beyond art courses already completed. The course is also ideal for non-degree-seeking students who wish to pursue personal studio art interests. Students choose one area of concentration for the course – either painting, drawing, or watercolor – and arrange with the instructor to meet with other students enrolled in a course focusing on that area of concentration. A maximum of 4 credits may count toward the Associate of Arts degree. Laboratory 2 hours per week. SP

ARTS 294 - Special Topics in Art (1-3 cr.)
Prerequisite(s): Instructor Consent.
A variable content course consisting of lectures, demonstrations, studio projects, and/or field trips in variable areas of study in the field of Fine Art, Studio Art, or Art History. Variable hours.

Behavioral Health Support

BHS 206 – Introduction to Behavioral Health Support (3 cr.)
Prerequisite(s): Admission to the Behavioral Health Support program.
Corequisite(s): BHS 208.
This course introduces students to the many roles and functions of behavioral health support workers. Emphasis is placed on the following: history of mental health agencies, current practices of the agencies where behavioral support workers are employed, skills and dispositions needed by behavioral health workers, and common clinical encounters facilitated by behavioral health workers. Lecture 3 hours per week. SP

BHS 208 – Legal and Ethical Issues (3 cr.)
Corequisite(s): BHS 206.
This course examines laws and regulations in Missouri. Topics include ethical standards, personal and professional boundaries, and common legal matters facing individuals with mental health issues. Lectures 3 hours per week. SP

BHS 215 – Wellness Coaching (3 cr.)
Prerequisite(s): BHS 206.
This course introduces students to the process of wellness coaching. Students will learn a set of techniques designed to help future clients achieve and maintain optimal emotional, financial, social, spiritual, occupational, physical, intellectual, and environmental wellness. Lecture 3 hours per week. S

BHS 216 – Systems of Care/Support (3 cr.)
Prerequisite(s): BHS 206.
This course focuses on identifying and building relationships with community resources. Students will learn to identify, coordinate and link community resources with client needs. Students will gain knowledge of services offered by public and private providers as well as funding sources. Students will also learn about how one's culture can impact the receiving and seeking of various services. At the end of the course, students will have a resource portfolio. Lecture 3 hours per week. S

BHS 225 – Substance Use Disorders (3 cr.)
Prerequisite(s): BHS 206.
This course introduces students to concepts of substance use disorders, including the cycle of addiction and recovery. Comprehensive substance use treatment and rehabilitation models in a variety of settings will be examined. Lecture 3 hours per week. F

BHS 227 – Diagnosis of Identified Populations (3 cr.)
Prerequisite(s): BHS 206.
This course will provide a comprehensive overview of common mental health disorders, how symptoms manifest in everyday life, and the risk and protective factors related to these disorders. In addition, students will learn about the instruments used by licensed mental health professionals when making diagnoses. Lecture 3 hours per week. F

BHS 229 – Conflict Resolution (3 cr.)
Prerequisite(s): BHS 206.
This course provides students with conflict resolution skills to be used in their work as behavioral health support workers. Both interpersonal and intrapersonal conflict will be discussed, as well as theories, concepts, and models of mental health crisis intervention. Lecture 3 hours per week. F

BHS 236 – Evidence-Based Treatments (3 cr.)
Prerequisite(s): BHS 206.
This course exposes students to commonly used mental health prevention and intervention approaches. A special emphasis is given to those evidenced-based treatment approaches most commonly used by community behavioral health agencies and substance use treatment facilities. Lecture 3 hours per week. SP

BHS 295 – Behavioral Health Support Clinical Practicum I (3 cr.)
Prerequisite(s): BHS 206.
Students will engage in supervised behavioral health services in a community service agency that serves individuals, families, and communities. The practicum experience provides students the opportunity to integrate and apply theory into their practice. Students must complete 135 hours of practical work experience. F

BHS 296 – Behavioral Health Support Clinical Practicum II (4 cr.)
Prerequisite(s): BHS 295.
The course offers continued applied experience in an agency setting. Students will engage in supervised behavioral health services in a community service agency that serves individuals, families, and communities. The practicum experience provides students the opportunity to integrate and apply theory into their practice. Students must complete 180 hours of practical work experience. SP

Biology

BIOL 100 - Survey of Biological Principles (3 cr.)
MOTR BIOL 100
Prerequisite(s): READ 02 or Reading placement of ENGL 111 and ENGL 02 or Writing placement of ENGL 08 or higher.
This course is a survey of the basic concepts of life science with emphasis on the human cell, tissues, and organ system functions and the relationship between humans and the environment. Lecture 3 hours per week. F, SP, S

BIOL 101 - General Biology (5 cr.)
MOTR BIOL 100L
Prerequisite(s): READ 02 or Reading placement of ENGL 111 and ENGL 02 or Writing placement of ENGL 08 or higher and MATH 02 or placement of MATH 153/161 or higher.
This general education course utilizes scientific inquiry to evaluate bioethical and environmental issues. The relationship between living beings and the physical environment is explored through studies in cell biology, genetics, evolution, plant and animal classification, and ecology. Lecture 4 hours/Laboratory 2 hours/Total 6 hours per week. F, W, SP, S

BIOL 102 - Environmental Science (5 cr.)
MOTR BIOL 100LEV
Prerequisite(s): READ 02 or Reading placement of ENGL 111 and ENGL 02 or Writing placement of ENGL 08 or higher.
This course examines the relationship between man and the environment through studies of ecological principles, human overpopulation, resource depletion, and pollution. The course is recommended for non-science majors to fulfill the General Education requirement for a laboratory science or may be used to fulfill the valuing component of the General Education requirement. Lecture 4 hours/Laboratory 2 hours/Total 6 hours per week. F

BIOL 110 - Human Biology (3 cr.)
MOTR LIFS 100
Prerequisite(s): READ 02 or Reading placement of ENGL 111 and ENGL 02 or Writing placement of ENGL 08 or higher.
This course emphasizes cell, tissue, and organ system function. Discussions focus on a system approach to human health and disease throughout the world. Students explore how biological processes, interacting with psychological and social factors, contribute to human health and disease. This course is designed for non-science majors. Lecture 3 hours per week. F, SP, S

BIOL 113 - Introduction to Process Science for Elementary and Middle School Teachers (1 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111 and ENGL 02 or Writing placement of ENGL 08 or higher.
This course provides elementary and middle school teacher candidates with a working knowledge of the discipline of science, the nature of scientific knowledge, and the process of scientific investigation. Laboratory 1 hour per week. F

BIOL 190 - Biology for Majors (5 cr.)
MOTR BIOL 150L
Prerequisite(s): High school chemistry or CHEM 111 and ENGL 111.
A course designed for biology majors and pre-professionals covering cell structure and function, the molecular basis of genetics, cellular energy systems, taxonomy, evolution, ecosystems, and ecology. Laboratories will include group projects, case studies, and laboratories related to current topics in biology. Lecture 4 hours/Laboratory 2 hours/Total 6 hours per week. SP

BIOL 211 - General Botany (5 cr.)
Prerequisite(s): BIOL 190 or instructor consent and ENGL 111.
This course is a study of the science of plants, including the structure, function, genetics, reproduction, and evolution within the plant kingdom. Lecture 4 hours/Laboratory 2 hours/Total 6 hours per week. SP

BIOL 221 - General Zoology (5 cr.)
Prerequisite(s): BIOL 190 or instructor consent and ENGL 111.
This course is a study of the science of animals, including the structure, function, genetics, reproduction, and evolution within the animal kingdom. Lecture 4 hours/Laboratory 2 hours/Total 6 hours per week. F

BIOL 231 - Anatomy and Physiology I (4 cr.)
MOTR LIFS 100LAP
Prerequisite(s): READ 02 or Reading placement of ENGL 111 and ENGL 02 or Writing placement of ENGL 08 or higher and MATH 02 or placement of MATH 153/161 or higher.
This course is a study of the relationship between the structure and function of the human body encompassing the cell, tissues, integumentary system, skeletal system, muscular system, and nervous system. Lecture 3 hours/Laboratory 2 hours/Total 5 hours per week. F, SP, S

BIOL 232 - Anatomy and Physiology II (4 cr.)

CORE 42 MOTR TRANSFER GUARANTEED ***MOTR LIFS 150LAP***

Prerequisite(s): BIOL 231 and READ 02 or Reading placement of ENGL 111 and ENGL 02 or Writing placement of ENGL 08 or higher.

A study of the relationship between the structure and function of the human body. Systems studied include the circulatory, respiratory, reproductive, renal, digestive, immune/lymphatic, and endocrine. Lecture 3 hours/Laboratory 2 hours/Total 5 hours per week. F, SP, S

BIOL 253 - Microbiology (4 cr.)

Prerequisite(s): ENGL 111, BIOL 101 with a minimum letter grade of C or BIOL 190 with a minimum letter grade of C or BIOL 231 with a minimum letter grade of C.

This course is a study of microorganisms with the main focus on human health and infectious diseases. The areas of study presented include bacteria, fungi, viruses, and parasites that involve microbial structure, growth and nutrition, bacterial metabolism, genetics, and a presentation of infectious diseases by anatomical systems. Bioethical issues involving microorganisms in human and animal health are emphasized. This course is designed for healthcare students and includes the basic role of the human immune system in fighting disease. Lecture 3 hours/Laboratory 2 hours/Total 5 hours per week. F, SP

Business Administration

BUAD 120 – Introduction to Business (3 cr.)

Prerequisite(s): READ 02 or Reading placement of ENGL 111.

This course is a study of the various functions of management such as planning, organizing, leading, and controlling. Emphasis is also placed on sole proprietorships and partnerships and the ethical and socially responsible practices necessary for successful members of the business community. Lecture 3 hours per week. F, SP

BUAD 221 - Fundamentals of Management (3 cr.)

Prerequisite(s): READ 02 or Reading placement of ENGL 111.

This course focuses on the various schools of management thought as they have evolved. Emphasis is placed on basic management functions and their relationship to conflict, leadership, change, and ethical behavior. Lecture 3 hours per week. F, SP

BUAD 230 - Business Statistics (3 cr.)

Prerequisite(s): MATH 163 or MATH 161 with a minimum letter grade of C or placement of MATH 164.

This course is an introduction to the basic concepts of statistics including descriptive measures of location and dispersion, elementary probability distributions, estimation, hypothesis testing, correlation, analysis of variance, and linear regression. In various units of the course, the student utilizes computer statistical software to facilitate the analysis of data. Lecture 3 hours per week. F, SP, S

Business Law

BLAW 221 - Legal and Ethical Environment of Business (3 cr.)

Prerequisite(s): READ 02 or Reading placement of ENGL 111.

This course is a presentation of the basic principles of law as they relate to business. It emphasizes the background of law and the moral and ethical issues created when the law is applied in society. Additional topics include crime, torts, contracts, personal property, consumer protection, and environmental, constitutional, and international law. Lecture 3 hours per week. F, SP

Business Management

BMGT 105 - Career Management (3 cr.)

This course should be completed in the first Fall semester the student attends Three Rivers College. It introduces students to job search techniques by applying organization and time management skills. Students learn to compose cover letters and resumes using success strategies developed in the semester. Students will discuss interviewing styles and techniques. Students are required to attend meetings for the Marketing Management Association (Collegiate DECA), of which students are members. Lecture 3 hours per week. F

BMGT 107 - Hospitality and Tourism (3 cr.)

Prerequisite(s): READ 02 or Reading placement of ENGL 111.

This course is a study of the hospitality and tourism industry. Concepts covered include rail, sea, air, and automobile travel, as well as the operations of the hotel and resort industries. Lecture 3 hours per week. SP

BMGT 108 - Human Resource Management (3 cr.)

Prerequisite(s): READ 02 or Reading placement of ENGL 111.

This course is a study of the business organization emphasizing the interaction among workers and between workers and managers. Concepts covered include management/employee concerns such as pay-for-performance, effective teaming, employee benefits, reducing employee stress, employee rights, and designing selection criteria. Lecture 3 hours per week. F

BMGT 215 - Supervisory Development (3 cr.)

This course is a study of the principles of supervision. The key challenges facing supervisors, including social, demographic, economic, technological, and global challenges, are covered in detail. In addition, students are introduced to the managerial functions of planning, organizing, staffing, leading, and controlling and how these functions are applied in supervisory roles. Lecture 3 hours per week. SP

BMGT 235 – Customer Service Management (3 cr.)

Prerequisite(s): READ 02 or Reading placement of ENGL 111.

This course introduces students to the importance of delivering excellent customer service. Emphasis is placed on building, maintaining, and increasing an organization's customer base. This course provides the guidelines and best practices for providing excellent customer service to enable employees to build, maintain, and increase a loyal customer base. Lecture 3 hours per week. F

BMGT 239 - Entrepreneurship (3 cr.)

Prerequisite(s): READ 02 or Reading placement of ENGL 111.

This course introduces students to academic skills, management concepts, and practices that are important for entrepreneur needs. Students develop and apply their attitudes, abilities, and goals for entrepreneurial opportunities. Students learn how to compose a business plan. Lecture 3 hours per week. SP

Capstone

CPST 290 - General Education Capstone (1 cr.)

Prerequisite(s): Completion of 36 hours of credit in General Education.

This course is the culminating experience in the 42-hour General Education program at TRC. Students participate in multiple assessments designed to provide evaluation of student learning and of the General Education program. This class should be taken during the student's final semester at Three Rivers, following the completion of a minimum of 36 hours of General Education coursework. Contact the Registrar for eligibility. Lecture 1 hour per week. F, W, SP, S

Chemistry

CHEM 111 - Introductory Chemistry (5 cr.)

MOTR CHEM 100L

Prerequisite(s): READ 02 or Reading placement of ENGL 111 and ENGL 02 or Writing placement of ENGL 08 or higher and MATH 02 or placement of MATH 153.

This course covers basic terminology and principles of chemistry. Topics include chemical equations, mole concept, gas laws, atomic theory, chemical bonding, acid-base theory, solutions, and stoichiometry. Laboratory experiences reinforce the chemical principles presented in class. The course is recommended for non-science majors, Nursing students, and health-related professionals. Lecture 4 hours/Laboratory 2 hours/Total 6 hours per week. F, SP, S

CHEM 121 - General Chemistry I (5 cr.)

MOTR CHEM 150L

Prerequisite(s): CHEM 111 or MATH 163 with a minimum letter grade of C or placement of MATH 164.

This course uses basic chemical principles in order to solve chemical problems. Topics include the atomic theory, stoichiometry, thermochemistry, chemical bonding, kinetic molecular theory, gas laws, solutions, and electrolytes. Laboratory work appropriate to these topics is also covered in the course. The course is recommended for science and engineering majors, Medical Laboratory Technology students and other health-related professionals. Lecture 4 hours/Laboratory 2 hours/Total 6 hours per week. F, SP

CHEM 122 - General Chemistry II (5 cr.)

Prerequisite(s): CHEM 121 with a minimum letter grade of C.

A continuation of CHEM 121. This course includes chemical kinetics, chemical equilibria, ionic equilibria, thermodynamics, electrochemistry, oxidation-reduction, and a survey of groups on the periodic table. Laboratory work appropriate to these topics, including qualitative analysis, also is covered. Lecture 4 hours/Laboratory 2 hours/Total 6 hours per week. SP

CHEM 240 - Basic Organic Chemistry (5 cr.)

Prerequisite(s): CHEM 121 with a minimum letter grade of C or CHEM 111 with a minimum letter grade of B.

This course is an introduction to the nomenclature and reactions of organic chemistry. Topics discussed include the hydrocarbon families, halogenated hydrocarbons, alcohols, aldehydes, ketones, carboxylic acids, amines, amino acids, and various topics selected from biochemistry. Laboratory work pertaining to these topics is covered during the semester. This course is recommended for science majors needing organic chemistry, medical laboratory technicians, and others in allied health medical professions. Lecture 4 hours/Laboratory 2 hours/Total 6 hours per week. F (alternate years)

Civil and Construction

CIVL 116 - Surveying I (3 cr.)

This course focuses on the theory and practice of plane surveying. Students participate in extensive fieldwork using steel tape, level, and Total Station surveying equipment. The course provides a study of the surveying industry with a basic but practical approach to surveying. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F

CIVL 215 - Building Design (4 cr.)

Prerequisite(s): CONS 116

This course is an introduction to building design examining residential and light commercial. Structural and mechanical elements of buildings are considered. Student design presentations comprise a significant portion of coursework. Lecture 2 hours/Laboratory 4 hours/Total 6 hours per week. F

CIVL 216 - Surveying II (3 cr.)

Prerequisite(s): CIVL 116.

This course focuses on the theory and practice of land and construction surveying using modern instrumentation and electronic surveying equipment, such as Total Stations, Data Collectors, and Global Positioning Systems. Application of computer to calculate traverse closures, areas, topographical information, and horizontal and vertical curve information. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F

CIVL 219 - Estimating I (3 cr.)

This course is primarily concerned with the proper practices and procedures necessary to prepare a reliable construction estimate. The methods covered address preparing material estimates for both residential and light commercial construction projects. Estimation of labor costs for construction projects also is addressed. Lecture 3 hours per week. F

CIVL 225 – Construction Management (3 cr.)

This course focuses on information that is necessary for managing the construction process and leading personnel effectively. The project management topics focus on cost estimation, planning/scheduling, procurement, risk management, construction monitoring, and close out. The personnel topics include leadership, motivation, communication, time management, change, diversity, and adversity. Lecture 3 hours per week. SP

CIVL 226 - Legal Principles of Surveying (3 cr.)

Prerequisite(s): CIVL 116 or instructor consent.

This course introduces the student to the history of boundaries; U.S. Public Land systems; ownership, transfer, and description of real property; rules of easements; riparian boundaries; writing and interpreting descriptions; analysis of evidence and procedures for boundary locations; Missouri survey law; and the role of the surveyor. Lecture 3 hours per week. SP

CIVL 229 – Estimating II (3 cr.)

Prerequisite(s): CIVL 219

This course focuses on estimating techniques, including analyzing plans to perform quantity takeoffs and unit pricing. Coursework reinforces proper practices and procedures necessary to prepare a reliable construction estimate. The methods covered address preparing material estimates for both residential and light commercial construction projects. Lecture 3 hours per week. F

CIVL 235 – Construction Planning and Scheduling (3 cr.)

This course addresses methods of organizing work items associated with a construction project into a logical sequence of optimizing efficiency and profitability. Manual and computerized scheduling methods are used in developing project schedules for both real and simulated projects. The course focuses on construction project planning and scheduling principles and practices used by contractors to control time and cost. Lecture 3 hours per week. SP

CIVL 236 - Computers in Surveying (4 cr.)

Prerequisite(s): CIVL 116 or instructor consent.

This course is a study and application of various surveying software programs with emphasis on coordinate geometry, survey adjustments, file transfer, editing raw and coordinate files, horizontal and vertical curves, surface modeling, road layout, applicable drafting techniques, and printing and plotting. Lecture 4 hours per week. SP

Construction

CONS 116 – Construction Print Reading and Layout (4 cr.)

The purpose of this course is to provide training on the job and in the classroom in blueprint reading. Provide training in layout tools and methods for building trades. On-the-job work will consist of building home type structures. Lecture 1 hour/Laboratory 3 hours/Total 4 hours per week. F

CONS 117 – Building Codes and Framing (4 cr.)

The purpose of this course is to provide training on the job and in the classroom in the building trades. On-the-job work will consist of building

mock-ups and home-type structures which, upon completion, will be fully functional. Lecture 1 hour/Laboratory 3 hours/Total 4 hours per week. F

CONS 118 – Electrical Wiring for Construction (4 cr.)
The purpose of this course is to provide Residential and light Commercial wiring on the job and in the classroom in the electrical building trades. On-the-job work will consist of wiring mock-ups and home-type structures which, upon completion, will be fully functional. Lecture 1 hour/Laboratory 3 hours/ Total 4 hours per week. F

CONS 119 – Plumbing in Construction (4 cr.)
The purpose of this course is to provide training on the job and in the classroom in the Plumbing trade. On-the-job work will consist of plumbing mock-ups and home-type structures which, upon completion, will be fully functional. Lecture 1 hour/Laboratory 3 hours/ Total 4 hours per week. F

CONS 126 – HVAC in Construction (4 cr.)
The purpose of this course is to provide training on the job and in the classroom in the HVAC trades. On-the-job work will consist of installation and basic troubleshooting of HVAC units in mock-ups and home-type structures. Lecture 1 hour/Laboratory 3 hours/Total 4 hours per week. F

CONS 127 – Exterior and Interior Coverings (4 cr.)
The purpose of this course is to provide training on the job and in the classroom in Building trades. On-the-job work will consist of building mock-ups and home-type structures. Lecture 1 hour/Laboratory 3 hours/Total 4 hours per week. SP

CONS 128 – Finish Carpentry (4 cr.)
The purpose of this course is to provide training on the job and in the classroom in the Finish Carpentry trades. On-the job work will consist of building mock-ups and home-type structures. Lecture 1 hour/Laboratory 3 hours/Total 4 hours per week. SP

CONS 129 – Flooring, Tilework, and Shower Systems (4 cr.)
The purpose of this course is to provide training on the job and in the classroom in the Floor Laying trades. On-the job work will consist of installing floor coverings and shower systems on mock-ups and home-type structures. Lecture 1 hour/Laboratory 3 hours/Total 4 hours per week. SP

Corrections

CRJC 105 – Corrections Systems and Practices (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course reviews the history of corrections and the ideologies of punishment and rehabilitation in both residential and community-based settings. Current issues in corrections, including intermediate sanctions, the death penalty, offender rights, and juvenile offenders are examined. Lecture 3 hours per week. F

CRJC 129 - Probation and Parole (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course reviews the history of punishment and the development of community-based supervision. The specific techniques used to conduct pre-sentence investigations, manage a caseload, and conduct fieldwork are examined. Lecture 3 hours per week. SP

Criminal Justice

CRJU 115 - Ethics in Criminal Justice (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course includes a discussion of professionalism, ethics, character, misconduct, and corruption within law enforcement. Students examine ethical concepts, review case studies, and participate in discussions concerning ethical dilemmas and discretionary decisions often faced by law enforcement officers. Lecture 3 hours per week. F, W, SP, S

CRJU 128 - Forensic Science and Criminalistics (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course reviews specific principles used by investigators from the scene of the crime to the laboratory analysis of physical evidence. Students demonstrate the techniques of forensic science and the ability to physically collect and preserve evidence from a crime scene. Lecture 3 hours per week. F

CRJU 138 - Patrol Procedures (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
Patrol Procedures provides an in-depth study of the procedures and techniques of police patrol. This course interprets the legal and professional framework of policing. Topics include patrol methods, communication, traffic stops, DWI enforcement, crimes in progress, building searches, preliminary investigations, interviews/interrogations, arrests, officer safety, riot control, and report writing. Lecture 3 hours per week. F

CRJU 148 - Vice and Narcotics (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course reviews the history of vice and narcotics laws and the various impacts these activities have on society. Upon completion of the course, students are able to categorize psychoactive drugs and describe the effects various drugs have on the human body. Lecture 3 hours per week. F

CRJU 158 - Traffic Law and Accident Investigation (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
Traffic Law and Accident Investigation reviews Missouri traffic laws and the techniques used in law enforcement. Students learn to examine collision scenes and gather evidence for the purpose of determining the sequence of events. Mathematical and scientific principles are utilized to calculate vehicle speed and prepare a diagram. Students also learn to complete accident reports. Lecture 3 hours per week. SP

CRJU 185 – Basic Handgun Shooting I (3 cr.)
This course provides an introduction to the safe operation of handguns. Rules of gun safety, handgun operation, ballistics, and fundamentals of shooting are reviewed. Students develop basic handgun shooting skills with the aid of a shooting simulator. Lecture 3 hours per week. SP

CRJU 205 - Officer Safety (3 cr.)
Prerequisite(s): Completion of at least 9 hours of credit in ADJU or CRJU courses.
This course provides a forensic analysis of actual cases of officer-involved shootings and violent encounters. Each case is reviewed in-depth with a focus on tactical considerations and the proper mind-set to prevent or effectively respond to such an encounter. This course provides examples of officer safety, security, and survival tactics. Lecture 3 hours per week. F

CRJU 295 – Law Enforcement Academy I (12 hr.)
This course provides basic training in law enforcement and corrections approved by Peace Officer Standards and Training (P.O.S.T.). Topics covered include those required under Missouri Revised Statutes (Sect. 590.100). Lecture 12 hours per week. F, SP

CRJU 296 – Law Enforcement Academy II (12 hr.)
Prerequisite(s): CRJU 295
This course provides basic training in law enforcement and corrections approved by Peace Officer Standards and Training (P.O.S.T.). Topics covered include those required under Missouri Revised Statutes (Sect. 590.100). Lecture 12 hours per week. F, SP

Cybersecurity

CYS 115 – Introduction to Cybersecurity (3 cr.)
Prerequisite(s): MST 115 and MST 118 with a minimum letter grade of C.
In this course, students learn the basics of Cybersecurity, including the needs for information security, the different types of threats that are faced in Information Technology, and basics of the technologies and processes that have been developed to create secure systems. Lecture 3 hours per week. SP

CYS 116 – Ethics in Information Technology (3 cr.)
Prerequisite(s): ENGL 02 and READ 02 or Writing and Reading placement of ENGL 111.
This course examines the ethical issues that arise whenever Information Technology is present. Cybersecurity, Intellectual property, Freedom of Expression, and Privacy are all examined, as well as the particular roles played by individual users, individual workers, and corporation. Both real-life and hypothetical scenarios are used to encourage student engagement. Lecture 3 hours per week. SP

CYS 215 – Computer Forensics (3 cr.)
Prerequisite(s): CYS 115 with a minimum letter grade of C.
In this course, students learn the methods and tools used in digital forensic investigation. Attention is given to both the technical aspects, such as data recovery and analysis, and procedural aspects, such as chain of evidence. Students learn the difference between public-sector and private-sector investigations and the role of the expert witness. Lecture 3 hours per week. SP

CYS 225 – Information Security Management (3 cr.)
Prerequisite(s): CYS 115 with a minimum letter grade of C.
In this course students learn to apply management principles to information security. Topics such as risk management, contingency planning, and compliance are examined, and students learn to use standard practices to develop a cohesive and effective security plan and policy. Lecture 3 hours per week. SP

CYS 226 – Ethical Hacking (3 cr.)
Prerequisite(s): CYS 115 with a minimum letter grade of C.
In this course, students engage in hands on exercises in learning to perform penetration testing on networks and systems. The course covers social engineering, footprinting, port scanning, enumeration, and other methods of attacking both networks and specific operating systems. Lecture 3 hours per week. SP

CYS 257 – Historical Perspectives In Cybersecurity (3 cr.)
Prerequisite(s): CYS 115 with a minimum letter grade of C.
This course examines various historical cybersecurity incidents. The students address each situation in terms of both remediation and prevention. Some incidents that may be examined include the original Internet Worm (1988) and the "Cuckoo's Egg" espionage case (1989), up through modern data breaches and attacks by Advanced Persistent Threats (APTs). Students analyze root causes and propose organizational and technical preventive methods. Lecture 3 hours per week. SP

Diesel

DESL 115 – Fundamentals of Diesel Mechanics (4 cr.)
This is a course designed to provide review and update of safety procedures; tools and equipment usage; handling, storing, and disposing of hazardous materials; and operating principles of diesel mechanics. Laboratory 4 hours per week. F

DESL 116 – Electrical Systems I (4 cr.)
This is a course designed to provide diagnosis, service, and repair of electrical and electronic systems on diesel engines, includes instruction in general systems diagnosis, starting and charging systems. Laboratory 4 hours per week. F

DESL 117 – Diesel Systems I (4 cr.)
This is a course designed to provide diagnosis, service, and repair of basic engine operating principles, with an emphasis on cylinder head and valvetrain engine block. Laboratory 4 hours per week. F

DESL 118 – Preventive Maintenance and Service (4 cr.)
This is a course designed to provide practice in the preventive maintenance of diesel powered equipment, includes instruction in general preventive maintenance of vehicles and equipment. Laboratory 4 hours per week. F

DESL 125 – Steering, Suspension & Brake Systems (4 cr.)
This is a course designed to provide advanced skills and knowledge related to the operation, maintenance, and repair of heavy duty steering and suspension systems. Includes instruction in steering column and steering gear, powersteering unit, steering linkage, suspension, wheel alignment, related components diagnosis and repair, hydraulic and mechanical systems, power assist units, and antilock braking systems. Laboratory 4 hours per week. SP

DESL 126 – Electrical Systems II (4 cr.)
This is a course designed to provide diagnosis, service, and repair of electrical and electronic systems on diesel engines, includes instruction on lighting systems, gauges and warning devices, and related electrical systems. Laboratory 4 hours per week. SP

DESL 127 – Diesel Systems II (4 cr.)
This is a course designed to provide skills and knowledge related to the diagnosis, service, and repair of lubrication systems, cooling system, and air induction and exhaust systems. Laboratory 4 hours per week. SP

DESL 128 – Power Trains (4 cr.)
This is a course designed to provide diagnosis, service, maintenance, and repair of power train units on transportation equipment, includes instruction on clutch, manual transmissions, drive shafts, and drive axles. Laboratory 4 hours per week. SP

Early Childhood Development

ECD 126 - Child Health, Safety, and Nutrition (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course is designed to emphasize health, safety, and nutrition with young children. Includes preparing safe environments, adequate nutrition, disease prevention, and space regulations. Proper hand washing, good hygiene, and childhood obesity are also addressed. Hybrid blended course. Lecture 3 hours per week. F, SP, S

ECD 202 - Survey of Early Childhood Development and Education (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
An introduction to the field of early childhood including the history, philosophy, and understanding of development related to young children birth through age eight. Focus of the course will be on roles and responsibilities of an early child professional in providing a developmentally appropriate learning environment. Hybrid blended course. Lecture 3 hours per week. F, SP, S

ECD 209 – CDA Competency (5 cr.)
Corequisite(s): ECD 202.
This course provides instruction in completing CDA requirements needed to apply for the Child Development Associate. Course includes a minimum of 30 hours of infant/toddler or preschool classroom observation. The CDA credential is not provided with course completion. Obtaining or providing proof of Pediatric CPR certification is required. Lecture 3 hours/Laboratory 2 hours/Total 5 hours per week. F, SP

ECD 235 - Special Children (3 cr.)
Prerequisite(s): ECD 202.
This course introduces the student to inclusion of children with special needs through theory, philosophy, and best practice. This course is designed to help the student recognize, refer, and help children and families who have special needs. Lecture 3 hours per week. F

ECD 237 - Early Childhood Development (3 cr.)
Prerequisite(s): ECD 202.
Corequisite(s): First Aid and/or CPR card and Criminal Background Check.
This course focuses on the philosophy and implementation of developmentally appropriate practice. Students are required to make a professional commitment to teaching. The course includes 30 hours of observations. Lecture 1 hour/Laboratory 2 hours/Total contact 3 hours per week. F

ECD 245 - Early Childhood Administration (3 cr.)
Prerequisite(s): ECD 202.
This course provides students with organizational and managerial skills appropriate for planning and running a childcare center. The course is designed to prepare students to lead quality programs. Lecture 3 hours per week. SP

ECD 247 - Early Childhood Curriculum (3 cr.)
Prerequisite(s): ECD 202.
This course is designed to prepare the student to be able to implement developmentally appropriate curriculum. The main topics include early childhood environment, science, math, art, language, music and movement, literacy, and social studies. The student will understand how to develop a good curriculum and apply it to any early childhood setting. Lecture 3 hours per week. F

ECD 295 - Early Childhood Practicum I: Infants and Toddlers (3 cr.)
Prerequisite(s): ECD 237.
Corequisite(s): Current First Aid Card or CPR Card and Criminal Background Check.
This course is designed to give the student the opportunity to gain practical experience in the role of child care provider with infants and toddlers. The student is required to document 45 observation hours. Required orientation during the first week of class. Laboratory 3 hours per week. SP

ECD 296 - Early Childhood Practicum II: Preschool (3 cr.)
Prerequisite(s): ECD 237.
Corequisite(s): Current First Aid Card or CPR Card and Criminal Background Check.
This course is designed to give the student the opportunity to gain practical experience in the role of child care provider with preschoolers. The student is required to document 45 observation hours. Required orientation during the first week of class. Laboratory 3 hours per week. SP

Economics

ECON 211 - Principles of Macroeconomics (3 cr.)
MOTR ECON 101
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course is a study of the aggregate or total economy on a national scale. Topics include supply and demand and contemporary socioeconomic issues in the U.S. Lecture 3 hours per week. F, W, SP, S

ECON 212 - Principles of Microeconomics (3 cr.)
MOTR ECON 102
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course is a study of the economizing process in an individual firm or industry. Topics include price and wage determination, costs-output relationships, and various theories regarding competition within an industry. Lecture 3 hours per week. F, W, SP, S

Education

EDUC 201 - Teaching Profession with Field Experience (3 cr.)
Prerequisite(s): ENGL 111 with a minimum letter grade of C.
This course includes an introductory, minimum 30 hours of school field experience in accredited P-12 classroom(s) that provide opportunities to observe and contribute to teaching and learning. This course allows pre-service teachers to connect first-hand school experience with an emerging professional knowledge base. The course develops professional knowledge of diverse educational settings through observation, instruction, experience, and reflection. This course is designed to assist students in determining if a career in teaching is an appropriate goal. Requirements for teacher preparation and certification are reviewed. Lecture 1 hour/Laboratory 2 hours/Total 3 hours per week. F, SP

EDUC 210 - Educational Psychology (3 cr.)
Prerequisite(s): EDUC 201 with a letter grade of C or better and PSYC 111 or PSYC 223 or PSYC 233 or PSYC 243.
This course is designed to help students relate theories and principles of educational psychology to teaching, learning, and assessment. This course focuses on the diversity of learners and learning processes, as well as teacher characteristics, classroom strategies, and data analysis in P-12 classrooms. Appropriate strategies for increasing motivation, multidimensional development, and academic achievement for all learners are introduced. Lecture 3 hours per week. F, SP

EDUC 230 - Foundations of Education in a Diverse Society (3 cr.)
Prerequisite(s): EDUC 201 with a minimum letter grade of C.
This course is designed to examine educational practices from diverse historical, philosophical, sociological, economic, and legal perspectives. The course addresses issues of educational equity, sociocultural influences on teaching and learning, and how teachers and schools can contribute to interpersonal and intercultural understanding and respect, social justice, and democratic citizenship. Students explore the nature of school environments, the fundamental goals of education in American public schools, English language learners, the relationship between school and a diverse society, the organization of school curricula, and characteristics of effective schools and instruction in grades P-12. Lecture 3 hours per week. F, SP, S

EDUC 240 – Integration of Art, Music, and Physical Education in the Elementary Education Classroom (3 cr.)
Prerequisite(s): ENGL 111.
Students acquire an understanding of the role of art, music, and physical education on childhood development in a diverse society. Students develop the knowledge and skills necessary for the integration of art education, music education, and physical education in the early childhood and elementary education classroom, connecting students' prior experiences, family, culture, and community. Lecture 3 hours per week. F, SP, S

EDUC 250 – Children's Literature (3 cr.)
Prerequisite(s): ENGL 111.
This course is designed for Education majors in Early Childhood, Elementary, Middle, and Secondary Education. This course assists future teachers in choosing appropriate material to be read in classroom settings, creating activities that assist in literature studies, and allows for confidence for the student to successfully facilitate a classroom of lifelong readers. Lecture 3 hours per week. F, SP, S

EDUC 260 - Education of the Exceptional Learner (3 cr.)
Prerequisite(s): EDUC 201 with a minimum letter grade of C.
This survey course is an introduction to exceptional learners and their education in grades P-12. Students gain a comprehensive understanding of the characteristics of people with special needs in special education settings. Students research and discuss complex issues related to compliance with state and federal education laws, such as Individuals with Disabilities Educational Act (IDEA) and the Americans with Disabilities Act (ADA), as well as learn to navigate special education processes, such as referral, eligibility, re-evaluation, and IEPs. This course requires a 15-hour special education field experience component. Lecture 3 hours per week. F, SP, S

EDUC 270 – Educational Technology (3 cr.)
Prerequisite(s): ENGL 111 with a minimum letter grade of C.
In this course, students learn how to integrate instructional technology into P-12 classrooms. Students will study a variety of software programs, presentation technology, telecommunication tools, and assistive technology. The focus also is on social, ethical, legal, and human issues surrounding the use of technology. Lecture 3 hours per week. F, SP

EDUC 297 - Paraprofessional Educator Practicum (3 cr.)
Prerequisite(s): Instructor consent.
This course gives direct experience with children in a school setting for a 100-hour practicum experience. Student responsibilities include assisting a teacher and implementing curriculum components for children in their classroom. Lecture 3 hours per week. F, SP

Electronics

ELEC 105 – Introduction to Electrical Technology (3 cr.)
This course includes instruction and practice in the areas of general job site safety based on local, state, and national regulations; basic hand and power tool usage; introductory print reading; electrical safety; and simple electrical circuit construction. This course also provides a brief overview of the National Electrical Code (NEC) and the role of an electrician. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F, SP

ELEC 106 – Basic Electricity (3 cr.)
Electrical theory is applied to the duties of an electrician in this course. Fundamental laws of electricity, units of measure, and simple circuit analysis are included. Students study simple DC circuits and continue through single-phase and three-phase AC circuit principles. Laboratory activities include the safe and correct use of electrical testing equipment and basic electrical construction tools. Upon completion, students will have a clear understanding of electrical properties, units of measure in electricity, series circuits, parallel circuits, as well as basic DC and AC circuit characteristics. Lecture 2 hours/Laboratory 2 hours/ Total 4 hours per week. F, SP

ELEC 107 – Electrical Materials and Methods (3 cr.)
This course is an in-depth study of the proper selection of electrical circuit construction materials and correct installation methods. Students become familiar with materials such as electrical wire, conduit, circuit breakers, distribution centers, and many more hardware items used in the electrical construction industry. Methods are taught in a hands-on approach, allowing students to become familiar with basic wire termination and splicing, circuit construction techniques, and the correct selection of materials for the circuit installation and application. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F, SP

ELEC 115 - Applied DC and AC Circuits (3 cr.)
This course is an introduction to fundamental properties in electronics, electronic components, and circuits. Course includes uses of testing equipment, circuit troubleshooting, and circuit repairs. This is a hybrid-blended course. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F, SP

ELEC 117 - Industrial Electrical Controls (3 cr.)
Prerequisite(s): ELEC 115 or instructor consent.
This course is a comprehensive study of control devices, circuits, diagrams, motors, three-phase power systems, and related hardware used in industrial power distribution and machine/process control. This is a hybrid-blended course. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F

ELEC 125 – Blueprint Reading for Electricians (3 cr.)
Prerequisite(s): ELEC 105, ELEC 106, and ELEC 107 or instructor consent.
Electrical diagrams, construction drawings, and related mechanical drawing, reading, and interpretation are presented in this lecture course. Students are presented with standard symbols used throughout the electrical industry, and develop basic drawings for circuit construction in the lab setting. Students acquire the knowledge and skill needed to translate drawings into real-world electrical circuit installations. Emphasis is placed on residential and light commercial print reading. However, industrial diagrams are introduced in this course. Coursework prepares students for applicable SkillsUSA assessment. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. SP, S

ELEC 126 – Residential Circuits (3 cr.)
Prerequisite(s): ELEC 105, ELEC 106, and ELEC 107 or instructor consent.
This course is a comprehensive study of residential electrical installations and the requirements of the applicable standards of the National Electrical Code (NEC). Topics include installation of electrical distribution equipment, lighting, overcurrent protection, conductors, branch circuits, conduit, and other materials and equipment utilized in a residential electrical system. Upon completion, students will have the knowledge and skills required to properly install wiring and electrical distribution equipment associated with residential electrical installations. Coursework prepares students for applicable SkillsUSA assessment. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. SP, S

ELEC 207 - Industrial Electronics Applications (3 cr.)
Prerequisite(s): ELEC 115 or instructor consent.
This course is a study of electronic systems within industrial transducers, process controls, motor drives, motion controls, and other advanced controls. Emphasis is on complete system applications. This is a hybrid-blended course. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F

ELEC 216 - Programmable Controller Systems (3 cr.)
This course is an applications-based study of programmable logic controllers, hardware, operator interfaces, communications networks, and device interfacing as found in manufacturing. This is a hybrid-blended course. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. SP

ELEC 225 – Electrical Systems (3 cr.)
Prerequisite(s): ELEC 105, ELEC 106, and ELEC 107 or instructor consent.
This course is a comprehensive, introductory overview of all electrical wiring installed in residential, commercial, and industrial settings. Students are provided with an introduction to systems such as used for HVAC/R equipment, fire alarm systems, communication wiring, industrial electrical raceways and controls, and other wiring systems used in today's electrical systems. A major emphasis is placed on component identification and an introduction to National Electrical Code (NEC) standards that are applicable to each area. Lab activities include specialty areas such as fire alarm system installation, troubleshooting, and repair. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F, SP

ELEC 226 – Electrical Construction (3 cr.)
Prerequisite(s): ELEC 125, ELEC 126, and ELEC 225 or instructor consent.
This course is designed to provide the skills required to install devices in residential, commercial, and industrial settings. This course advances the student's knowledge and skills in the use of specialized tools and techniques. Examples are use of conduit benders, wire pulling methods, panel installation, and installation of advanced circuit protection devices. All work is referenced to the applicable National Electrical Code (NEC) standards. Coursework prepares students for applicable SkillsUSA assessment. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F, SP, S

ELEC 227 – Commercial and Industrial Electrical Systems (3 cr.)
Prerequisite(s): ELEC 125, ELEC 126, and ELEC 225 or instructor consent.
This course is an introduction to the tools, methods, materials, and equipment unique to commercial and industrial systems. A strong emphasis is placed on topics specific to commercial and industrial electrical installations, allowing students to acquire entry level knowledge and skill in these specialized areas. Basic motor control wiring, overload protection, commercial and industrial lighting, and three-phase systems are included as topics in this course. Applicable National Electrical Code (NEC) standards are presented. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F

Emergency Medical Technician

EMT 105 - Emergency Medical Technician (9 cr.)
Prerequisite(s): READ 02 or placement of ENGL 111.
A study of all phases of basic emergency care, including patient assessment, cardiopulmonary resuscitation, management of medical emergencies, trauma injuries, obstetric emergencies, infant and child emergencies, and ambulance operations. The course is based on the current National Emergency Medical Services Education Standards and The National EMS Scope of Practice Model. Students are required to complete a background check and drug screen and provide proof of immunizations. Lecture 6 hours/Laboratory-Clinical 9 hours/Total 15 hours per week. F, SP

EMT 115 – Advanced EMT (AEMT) (12 cr.)
The Advanced Emergency Medical Technician (AEMT) course is a comprehensive hybrid designed to accommodate the busy EMT who wants to further their career in EMS. The focus of AEMT is to provide a limited advanced care to the sick or injured prehospital patient. The modality is self-directed, module-style, progressive online learning as well as classroom (didactic), affective training, skills labs (psychomotor), clinical (hospital) and field (ambulance) internship. The course adheres to the National EMS Educational Standards and the National EMS Scope of Practice. Lecture 4 hours/Laboratory-Clinical 8 hours/Total 12 hours per week. SP

Engineering

ENGR 110 - Engineering Graphics (3 cr.)
This is a basic course in graphics and design with intensive practice in sketching orthographic and pictorial representation. Problem-solving in perspective and parallel projections, auxiliary and sectional views, dimensioning, tolerances, reproduction, and working drawings utilizing computer aided design systems. Lecture 1 hour/Laboratory 4 hours/Total 5 hours per week. F, SP

ENGR 198 - Workplace Readiness (3 cr.)
This course focuses on preparing students to be successful in a work environment. Topics covered include conducting job searches, preparation of job application materials, preparation, and practice for interviews, identifying basic skills necessary for the work environment, and related concepts. Skills addressed include diversity, accountability, quality, motivation, leadership, conflict, and other related topics. Lecture 3 hours per week. SP

English

ENGL 01 – English As A Second Language (3 cr.)
A class for students whose native language is not English. Learners develop coherent speaking, reading, writing, and listening skills while interacting with peers and the instructor. Learners develop conversational skills through participation in group activities, interviews, and panel discussions. Learners monitor speech for errors in pronunciation, grammar, and discourse. Not acceptable for degree credit or for transfer. Course will be offered as needed.

ENGL 02 – Transitional College Writing (4 cr.)
Prerequisite(s): READ 01 or Placement score of READ 02.
Corequisite(s): ACAD 101.
This course provides computer-assisted instruction in basic grammar and writing, coupled with classroom instruction in the conventions of college-level writing. Special attention is paid to the organization of ideas, the modes of writing, and standard written English. The course is designed to move developmental students quickly toward ENGL 111 and other credit classes. Lecture 4 hours per week. F, SP, S

ENGL 08 – Advanced Transitional Writing (2 cr.)
Prerequisite(s): ACCUPLACER Writing Score of 3 to 4 or ACT English score of 16 to 17.
Corequisite(s): ACAD 101 and ENGL 111 (section identified).
This course provides individualized instruction for transitional students who identify as candidates for an accelerated learning program. Students who enroll in this course must also enroll in a corresponding section of ENGL 111 College Writing. This course emphasizes step-by-step processes of academic writing and revision, planning research, and standard written English parallel to the major assignments of ENGL 111 College Writing. The course is designed to move transitional students into ENGL 111 College Writing and other credit-bearing classes. Lecture 2 hours per week. F, SP

ENGL 111 - College Writing (3 cr.)
MOTR ENGL 100
Prerequisite(s): ENGL 02 and READ 02 or Writing and Reading placement of ENGL 111.
This course introduces students to college-level planning, researching, drafting, and revising of academic writing. Students will learn to conduct library and digital research to obtain professional and scholarly sources. Students will also compose research-based essays adhering to both APA and MLA styles. This course is designed to reinforce essay development for students with college-level writing proficiency and introduce academic writing standards and documentation styles required in a majority of college coursework. Lecture 3 hours per week. F, W, SP, S

ENGL 112 - Advanced College Writing (3 cr.)
MOTR ENGL 200
Prerequisite(s): ENGL 111 with a minimum letter grade of C.
This course prepares students to move forward into a four-year program or a profession by focusing on understanding and applying critical thinking to the improvement and development of the skills such as research, documentation, and argumentation learned in previous college writing courses in the college writing program. Students will apply these skills to argumentative written communication in terms of argument development as well as argument delivery. Students will also learn to differentiate between the knowledge and research related to various disciplines and those skills by using writing techniques also specific to those disciplines. Lecture 3 hours per week. F, W, SP, S

ENGL 140 - Creative Writing (3 cr.)
Prerequisite(s): READ 02 or Reading Placement of ENGL 111. ENGL 02 or Writing Placement of ENGL 08 or Higher.
Beginning creative writers are introduced to the techniques, structures, and basic elements of poetry, short fiction, and drama. Learners examine character, plot, dialog, theme, setting, and voice in fiction. Learners critique works of experienced writers and their peers. With emphasis on preparation, criticism, and revision, learners write poetry, a short story, and a drama. Throughout the semester, students compile a portfolio of their writings. This course does not fulfill the General Education requirement for Humanities but may be used as an elective. Lecture 3 hours per week. F

ENGL 210 - Introduction to Literature (3 cr.)
MOTR LITR 100
Prerequisite(s): ENGL 111 with a minimum letter grade of C.
Learners examine the basic elements of fiction, poetry, and drama and use a variety of critical perspectives to interpret, analyze, and write about various works from literature. Learners study the literature of societies and cultures as representative responses to universal questions relevant to the human experience. Lecture 3 hours per week. F, W, SP, S

ENGL 221 - World Literature to 1600 (3 cr.)
MOTR LITR 200A
Prerequisite(s): ENGL 111 with a minimum letter grade of C.
This course is a survey of the backgrounds of the literature of the Western world from the ancient Near East, Mediterranean, and Western European regions before 1600 A.D. Students apply biographical, cultural, and historical contexts while they conduct literary research and evaluate and analyze literary works. Lecture 3 hours per week. F, SP, S

ENGL 222 - World Literature since 1600 (3 cr.)
MOTR LITR 200M
Prerequisite(s): ENGL 111 with a minimum letter grade of C.
This course is a survey of the development of the literature of the Western world since the Renaissance, including influences from Europe and from colonial Asia and Africa. Students apply biographical, cultural, and historical contexts while they conduct literary research and evaluate and analyze literary works. Lecture 3 hours per week. SP

ENGL 223 - Classical Mythology (3 cr.)
Prerequisite(s): ENGL 111 with a minimum letter grade of C.
Classical Mythology introduces students to the characters, events, and interpretive meanings of classical mythology, as well as the ancient civilizations that comprised the classical world and composed its mythology. With an emphasis on the mythologies of the ancient Mediterranean cultures of Greece and Rome, students identify the common qualities of world mythologies and appraise the influence of classical mythology on contemporary culture. Lecture 3 hours per week. F, W, SP, S

ENGL 231 - English Literature to 1798 (3 cr.)
MOTR LITR 102A
Prerequisite(s): ENGL 111 with a minimum letter grade of C.
This class is a survey of the literature of Great Britain from the Middle Ages through the 18th Century. The class applies biographical, cultural, and historical contexts as students conduct literary research and evaluate and analyze literary works. Lecture 3 hours per week. F

ENGL 232 - English Literature since 1798 (3 cr.)
MOTR LITR 102B
Prerequisite(s): ENGL 111 with a minimum letter grade of C.
This class is a survey of English Literature from the 18th Century through present day. The class applies biographical, cultural, and historical contexts as students conduct literary research, and evaluate and analyze literary works. Lecture 3 hours per week. SP, S

ENGL 241 - American Literature to 1870 (3 cr.)
MOTR LITR 101A
Prerequisite(s): ENGL 111 with a minimum letter grade of C.
This class is a survey of the literature of America from its beginnings through the Civil War. The class applies biographical, cultural, and historical contexts as students conduct literary research, evaluate, and analyze literary works. Lecture 3 hours per week. F, W

ENGL 242 - American Literature since 1870 (3 cr.)
MOTR LITR 101B
Prerequisite(s): ENGL 111 with a minimum letter grade of C.
This class is a survey of American literature from the Civil War through the present. The class applies biographical, cultural, and historical contexts as students conduct literary research, and evaluate and analyze literary works. Lecture 3 hours per week. F, W, SP, S

Fire Science

FIRE 115 - Firefighter I and II (12 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
IS-700, IS-800, ICS-100, and ICS-200 (all courses are available online at no cost at http://training.fema.gov/emi.aspx).
This course is based on the most current NFPA (National Fire Protection Association) 1001, Standard for Firefighter Professional Qualifications. The performance requirements and practical skills necessary to perform the duties of a firefighter are thoroughly covered. Topics include fire service orientation, safety, fire behavior, self-contained breathing apparatus, ropes, hoses, ladders, rescue, ventilation, salvage overhaul, portable fire extinguishers, emergency medical care, fire control, water supply, and fire prevention. Individuals successfully completing this course and meeting the requirements of Missouri Division of Fire Safety will be eligible for certification as Firefighter I and II by the Division of Fire Safety. Lecture 7 hours/Laboratory 5 hours/Total 12 hours per week. SP

FIRE 118 - Hazardous Materials Awareness and Operations (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course is based on the National Fire Protection Association 1072, "Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications," 2017 Edition and 29 CFR 1910-120(g). Course covers both awareness level and operations level hazardous materials training based on a combination of practical skills assessment and course work to prepare students for certification through the Missouri State Fire Marshall, Division of Fire Safety. Students learn to recognize and size up any incident involving hazardous materials or weapons of mass destruction and understand the firefighter's role within the response plan. Lecture 3 hours per week. SP

FIRE 126 – Principles of Emergency Services (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course provides an overview to fire protection and emergency services; career opportunities in fire protection and related fields; culture and history of emergency services; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics; and life safety initiatives. This course follows the National Fire Academy Fire and Emergency Services Higher Education (FESHE) model curriculum for the Associate's core Principles of Emergency Services. Lecture 3 hours per week. F

FIRE 135 - Fire Prevention (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course provides fundamental knowledge relating to the field of fire prevention. Topics covered in the course include history and philosophy of fire prevention; organization and operation of a fire prevention bureau; use and application of codes and standards; plans review; fire inspections; fire and life safety education; and fire investigation. The course follows the National Fire Academy Fire and Emergency Services Higher Education (FESHE) model curriculum for the Associate's core Fire Prevention class. Lecture 3 hours per week. SP

FIRE 215 – Strategy and Tactics (3 cr.)
Prerequisite(s): FIRE 126.
This course provides the principles of fire ground control through utilization of personnel, equipment, and extinguishing agents. Lecture 3 hours per week. F

FIRE 216 – Fire Instruction (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course introduces instructional concepts and prepares the instructor candidate for the responsibilities of developing and teaching fire and emergency service training programs. The material is based on NFPA 1041, Standard for Fire Service Instructor Professional Qualifications. Topics addressed include development of training outlines and course development, using visual aids, presentation skills, and testing procedures. Lecture 3 hour per week. F

FIRE 225 – Fire Service Hydraulics and Water Supply (3 cr.)
Prerequisite(s): FIRE 115.
This course provides a detailed understanding of the physical characteristics of water and its movement as it relates to fire suppression. Topics covered include principles of water flow, calculating required fire flows, types of fire streams, fire service pump design, types of fire streams, fire hose nozzles, and other related topics. Lecture 3 hours per week. SP

FIRE 235 - Fire Protection Systems (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course provides information relating to the features of design and operations of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection, and portable fire extinguishers. This course follows the National Fire Academy Fire and Emergency Services Higher Education (FESHE) model curriculum for the Associate's core Fire Protection Systems class. Lecture 3 hours per week. F

FIRE 239 - Search and Rescue (3 cr.)
Prerequisite(s): FIRE 115 or instructor consent.
This course provides the information necessary to meet the Operations-Level requirements under NFPA Standard 1670, Standard on Operations and Training for Technical Search and Rescue Incidents. Topics include search and rescue incident management, rescue vehicles and equipment, rope rescue,

confined space search and rescue, wilderness search and rescue, plus many other search and rescue scenarios. Lecture 3 hours per week. SP

FIRE 245 - Fire Codes and Inspection (3 cr.)
Prerequisite(s): FIRE 115 or instructor consent.
This course provides fire and emergency services personnel and civilian inspectors with the basic information necessary to meet the job performance requirements (JPRs) of NFPA 1031 (2014) for Level 1 and Level II Inspectors. Lecture 3 hours per week. F

FIRE 246 – Occupational Safety and Health for Emergency Services (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course introduces the basic concepts of occupational health and safety as it relates to emergency service organizations. Topics include risk and hazard evaluation and control procedures for emergency service organizations. Lecture 3 hours per week. SP

FIRE 255 – Fire Officer I & II (3 cr.)
Prerequisite(s): FIRE 115 or instructor consent.
This course covers the training required of Company Officers according to NFPA 1021 Standard for Fire Officer Professional Qualifications, 2014 Edition. The topics covered include leadership, supervision, ethics, decision-making, legal responsibilities and liabilities, interpersonal communications, organizational structure, records management, safety and health issues, and other related material. Lecture 3 hours per week. SP

Forestry

FRST 115 – Introduction to Forestry (3 cr.)
Prerequisite(s): READ 02 ore Reading placement of ENGL 111.
This course is an introduction to the multiple use aspects in the overall field of forestry. Emphasis is placed on management policies at the local and national levels, forestry ecological systems, and the interrelationships of forestry to other disciplines. Lecture 3 hours per week. SP

FRST 117 - Introduction to Dendrology (3 cr.)
Prerequisite(s): READ 02 ore Reading placement of ENGL 111.
This course involves field and lab identification of native and exotic trees and woody vines using leaves, twigs, bark, and fruit characteristics. Lecture 3 hours per week. F

FRST 119 - Forest Measurements (3 cr.)
Prerequisite(s): READ 02 ore Reading placement of ENGL 111.
This course is an introduction to forest measuring techniques, including measuring equipment, log scaling practices, forest product measurements, cruising, and inventory techniques. Lecture 3 hours per week. F

FRST 215 - Forest Management Practices (3 cr.)
Prerequisite(s): FRST 117 and FRST 119.
This course is an introduction to forest management practices, including governmental roles with the emphasis on local and regional regulations, principles of the ecosystem, sustainable forest concepts, and multiple use management. Lecture 3 hours per week. F

FRST 217 - Silviculture and Ecology (3 cr.)
Prerequisite(s): FRST 117.
This course is a detailed study of the concepts and techniques utilized in the silvicultural treatment of forests. Lecture 3 hours per week. SP

FRST 219 – Wildlife Management (3 cr.)
This course is an introduction to the ecological principles and how those principles are applied in the conservation, management, and control of wildlife. Information presented will prepare students for careers in applied ecology, conservation, and management. Lecture 3 hours per week. SP

General Studies

GNST 100 - New Student Orientation (1 cr.)
This course will give students an overview of Three Rivers College including history, programs offered, required technology, and College policies. The students will be provided the opportunity to use Three Rivers College's technology to participate in courses, use their student email, and plan their degree path. Emphasis will be placed on deciding the correct transfer pathway or career program for student's educational goal. Lecture 1 hour per week. F, SP, S, W

GNST 104 - Career Exploration (1 cr.)
In this course, students explore career opportunities and prepare for seeking employment after graduation. This course combines 8 weeks of independent study with 8 weeks of lecture and discussion. Lecture 1 hour per week. F, SP

Geographic Information Systems

GIS 110 – Introduction to Mapping Principles (3 cr.)
This course addresses skills and knowledge necessary to read, analyze, and interpret maps. Topics include mapping basics such as scale, spatial reference systems and projection, data acquisition and organization, thematic mapping, and the principles of map design. Lecture 3 hours per week. F, SP

GIS 120 - Introduction to Geographic Information Systems (3 cr.)
This course provides an introduction to geographic information systems and methods of creating, maintaining, and displaying geospatial data and imagery using ArcGIS software. The course includes a broad survey of applications. Course topics include elements of GIS, analysis of spatial information, map creation and analysis, GIS data types, map projections and coordinate systems, and other related topics. Lecture 2 hours/Lab 2 hours/Total 4 hours per week. Lecture 3 hours per week. F

GIS 140 - Geographic Information Systems II (3 cr.)
Prerequisite(s): GIS 120.
This course, combined with GIS 120, provides students with a solid foundation in GIS concepts and the use of GIS. Students gain necessary skill and knowledge to use GIS concepts and software to solve problems. Emphasis is on hands-on applications. Topics covered include data models, data acquisition, spatial data editing, attribute management, vector and raster data analysis, spatial interpolation, and other related concepts. Lecture 2 hours/Lab 2 hours/Total 4 hours per week. SP

GIS 210 – WEB-Based GIS (3 cr.)
Prerequisite(s): GIS 120.
This course addresses delivery of geographical data via the Internet. Students compose maps using mapping services available online. The course introduces the use of markup language to customize Web-based GIS applications for a specific use. Lecture 3 hours per week. F, SP

GIS 220 - Introduction to Remote Sensing (3 cr.)
Prerequisite(s): GIS 120.
This course provides an introduction to remote sensing. The topics covered include image processing techniques used for remote sensing, applications of remote sensing, and the relationships between GIS image processing and remote sensing. Case studies and hands-on exercises are used to illustrate various remote sensing and image processing applications in practice. Lecture 3 hours per week. F, SP

GIS 230 – Spatial Analysis in GIS (3 cr.)
Prerequisite(s): GIS 120.
This course builds problem-solving and analysis skills. Course topics cover various spatial analysis techniques that are used to provide support for decision-making in solving problems in a variety of fields. Students develop skills through project and lab activities. Lecture 2 hours/Lab 2 hours/Total 4 hours per week. SP

GIS 240 - Applications in GIS (3 cr.)
Prerequisite(s): GIS 120.
This course provides an introduction to applications of GIS using ArcView. Emphasis of the course is on solving problems with GIS. Students complete projects in their field of study. Topics covered include data sources and accuracy, manipulation of databases, creation of charts and graphs, and presentation of data in map layouts. Other related topics are also addressed. Lecture 3 hours per week. F

GIS 250 – Advanced GIS (3 cr.)
Prerequisite(s): GIS 120.
This course introduces students to more of the advanced capabilities of ArcGIS. Topics covered include designing geodatabases for use, working with data, optimizing workflow, and other related concepts. Students develop skills through hands-on activities and projects. Lecture 2 hours/Lab 2 hours/Total 4 hours per week. F

Geography

GEOG 101 - Cultural Geography (3 cr.)
Prerequisite(s): READ 02 or Reading Placement of ENGL 111. ENGL 02 or Writing Placement of ENGL 08 or higher.
Course designed to familiarize students with geographic studies including the relationship between humans and the natural environment as well as spatial patterns of human activities. The course addresses different techniques and approaches to geographic interpretation. The course examines diverse cultures, languages, and religions while approaching the course through a multidisciplinary approach of history, politics, and economics. Lecture 3 hours per week. F, SP

Government & Political Science

GOVT 121 - National and State Government (3 cr.)
CORE 42 MOTRANSFER GUARANTEED ***MOTR POSC 101***
Prerequisite(s): READ 02 or Reading Placement of ENGL 111. ENGL 02 or Writing Placement of ENGL 08 or higher.
This course is a survey of the federal government and the political system of the United States through its organization and function from colonial institutions through its present-day powerful development. This course satisfies the state legislative requirement for graduation. Lecture 3 hours per week. F, W, SP, S

GOVT 220 - Missouri Government (1 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course is for students who transferred a course equivalent to GOVT 121 but have not had the Missouri Constitution/government component as mandated by the state legislature. This course is designed to meet that mandate. GOVT 220 is not a substitute for GOVT 121. Lecture 1 hour per week. F, SP, S

GOVT 233 - International Relations (3 cr.)
CORE 42 MOTRANSFER GUARANTEED ***MOTR POSC 201***
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course is the study of basic factors governing international relationships among nations and how those factors figure in current world problems. Lecture 3 hours per week. SP

GOVT 290 – Missouri Higher Education Civics Achievement Exam (0 cr.)
The exam shall consist of between 50 and 100 questions and will be administered online. In addition, the exam shall be similar to the United States citizenship exam including questions covering the United States Constitution, the United States Bill of Rights, governmental institutions, historical manifestations of federalism, and history of constitutional interpretation and amendments. MO HB1528 requires any student attending a public or private institution of higher education to pass the Missouri Higher Education Civics Achievement Examination as a condition of graduation. F, W, SP, S

Heating, Ventilation, Air Conditioning/Refrigeration

HVAC 105 – Safety for HVAC/R Profession (3 cr.)
Course provides instruction and application in the safe use and care of hand tools, specialized tools, materials, and equipment used in HVAC/R installation, troubleshooting, maintenance, and repair. The course addresses all applicable state, local, and national safety regulations and proper compliance. Orientation to job entry specification and occupational opportunities is included in this course. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F, SP

HVAC 106 – Electricity for HVAC/R Technicians (3 cr.)
This course is a practical study of electricity, electrical hardware, and electrical test instruments used in the heating, air conditioning, and refrigeration industry. Coursework includes instruction and practical application in basic electricity, troubleshooting circuits, interpreting schematics, power distribution systems, electrical control components, and motors. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F, SP

HVAC 107 – Heating, Ventilation, Air Conditioning, and Refrigeration I (3 cr.)
This course is an introduction to the operation of HVAC/R systems. The course includes an introduction to the equipment used in systems for heating, ventilation, air conditioning, and refrigeration. Students acquire a working knowledge of the most common system designs. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F, SP

HVAC 115 – Heating, Ventilation, Air Conditioning, and Refrigeration II (3 cr.)
Prerequisite(s): HVAC 105, HVAC 106, and HVAC 107 or instructor consent.
This course is an introduction to the operation of HVAC/R systems. Course includes an introduction to the equipment used in systems for heating, ventilation, air conditioning, and refrigeration. Students acquire a working knowledge of the most common system designs. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F, SP, S

HVAC 116 – HVAC/R Motors and Controls (3 cr.)
Prerequisite(s): HVAC 105, HVAC 106, and HVAC 107 or instructor consent.
This course is a concentration in the study of control circuitry found in all forms of HVAC/R equipment. Students learn to interpret electrical diagrams, become familiar with common control devices, and electronic control systems will be introduced. Practical troubleshooting techniques for HVAC/R motors and controls are the primary emphasis of this course. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F, SP, S

HVAC 215 – Residential Heating, Air Conditioning, and Refrigeration (3 cr.)
Prerequisite(s): HVAC 105, HVAC 106, and HVAC 107 or instructor consent.
This course involves an in-depth study of residential systems. Students gain the knowledge and skills required for proper installation and servicing of residential systems. Refrigerant and cooling gas handling and reclaiming methods are included in this course to permit students to become certified in this area. Course emphasizes HVAC Excellence Certification. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F, SP

HVAC 216 – Commercial Heating, Ventilation, and Cooling (3 cr.)
Prerequisite(s): HVAC 115, HVAC 116, and HVAC 215 or instructor consent.
This course involves an in-depth study of commercial systems to include ventilation but exclude refrigeration. Students gain the knowledge and skill required for proper installation and servicing of commercial systems. Course emphasizes HVAC Excellence Certification. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F, S

HVAC 217 – Commercial Refrigeration (3 cr.)
Prerequisite(s): HVAC 115, HVAC 116, and HVAC 215 or instructor consent.
This course is designed to provide students with coursework exclusive to commercial systems. Commercial refrigerant-flow diagrams, commercial symbol diagrams, commercial electrical schematics, hermetic and semi-hermetic systems, and commercial system applications are studied. This includes the study of commercial freezers and walk-in units, commercial refrigeration equipment, water coolers, and ice makers. Course emphasizes

HVAC Excellence Certification. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F, S

Health, Physical Education, and Recreation

PROFESSIONAL COURSES

HPER 110 - Lifetime Wellness (2 cr.)
This course is designed to assist the student in recognizing psychosocial and physiological health issues in order to assess health status. In addition, the student is encouraged to explore attitudes about health-related matters and make informed decisions about health-enhancing behaviors. Lecture 2 hours per week. F, W, SP, S

HPER 113 - History and Principles of Physical Education (2 cr.)
This course is an introductory study of the history, principles, and philosophy of modern physical education and sports. Recommended for students majoring or minoring in physical education. Lecture 2 hours per week. F, SP

HPER 123 - First Aid (2 cr.)
This course offers the student preparation in first aid care and life-saving emergency concepts. Emphasis is placed on caring for sprains, strains, and breaks; as well as various emergency responses. American Red Cross First Aid and CPR certification is obtained upon successful completion of the course. Lecture 2 hours per week. SP

HPER 151 - Foundations of Fitness (1 cr.)
This course provides current information about the beneficial effects of and how to implement and live a healthy lifestyle through lecture, cardio exercises, and weight workouts. General topics covered include diet and exercise, cardiovascular fitness, and weight training. Students participate in activities designed to increase strength, flexibility, and cardiovascular endurance. Individualized program are developed by the student. Students meet in the class for the first 8 weeks of the course and then continue with their individualized program for the next 8 weeks with the coach tracking their progress. Lecture .5 hour/Laboratory 1 hour/Total 1.5 hours per week. F, SP

HPER 152 - Fitness Center I (1 cr.)
Prerequisite(s): HPER 151.
This course provides instruction in the development of fitness planning, fitness goal setting, and personal health and wellness. This is an introductory course where students gain the knowledge of a wide variety of fitness equipment. Students participate in activities designed to increase strength, flexibility, and cardiovascular endurance. Students will meet with an instructor during first week and last week of classes. Lecture .5 hour/Laboratory 1 hour/Total 1.5 hours per week. F, SP

HPER 213 - Basketball Coaching Techniques (2 cr.)
This course is designed to teach the fundamentals of coaching organized basketball to all age groups. Recommended for all students whose major or minor is in physical education. Lecture 2 hours per week. SP

HPER 214 - Baseball Coaching Techniques (2 cr.)
This course involves development of a baseball team, selection of players by position, team drills, offensive and defensive strategies, scouting, and player management. Lecture 2 hours per week. F

HPER 243 - Sports Officiating (2 cr.)
This course allows students to become acquainted with and knowledgeable of the rules and techniques of officiating in the fields of basketball, baseball, and volleyball. Lecture 2 hours per week. F

HPER 251 - Fitness Center II (1 cr.)
Prerequisite(s): HPER 152.
This course provides instruction in the development of fitness planning, fitness goal setting, and personal health and wellness. Students participate in activities designed to increase strength, flexibility, and cardiovascular endurance. Students meet with an instructor during the first week and last week of classes. Lecture .5 hour/Laboratory 1 hour/Total 1.5 hours per week. F, SP

HPER 252 - Athletic Fitness (1 cr.)
Prerequisite(s): HPER 151.
Corequisite(s): HPER 2691-2693; HPER 2791-2793; HPER 2891-2896; or HPER 2991-2996.
This course focuses on continued implementation of personal fitness plan with emphasis on improving strength through use of weights. Lecture .5 hour/Laboratory 1 hour/Total 1.5 hours per week. SP

ACTIVITY COURSES

Students are limited to 2 activity and/or varsity courses per semester for credit. Students may not repeat activity courses. Students of either sex may register for any course. Laboratory 2 hours per week for all courses.
HPER 131 - Beginning Golf (1 cr.)

VARSITY SPORTS

HPER 2491-2496 - Varsity Rodeo (1 cr.)
Prerequisite(s): Coach consent.
This course is designed for the experienced athlete and participation is restricted to students who are on the rodeo team. New team members are selected on a yearly basis. Members are required to attend practices, scheduled rodeos, and other team events. Members improve skills within their event. One hour of physical education credit is granted for each full semester the student competes on the team. F, SP

HPER 2591-2596 - Spirit Squad (1 cr.)
Prerequisite(s): Coach consent.
This course is designed for the experienced athlete and participation is restricted to students who are on the spirit squad. Tryouts are held each year. Members are required to attend practices, scheduled games, and other team events. Members of the squad develop tumbling skills, vocal projection, and crowd participation cheers and/or chants in practice and game situations. One hour of physical education credit is granted for each full semester the student competes on the team. F, SP

HPER 2691-2693 - Women's Varsity Softball (1 cr.)
Prerequisite(s): Coach consent.
This course is designed for the experienced athlete and participation is restricted to students who are on the softball team. Tryouts are held each year. Players are required to attend daily practices, scheduled games, and other team events. Players develop hitting, fielding, throwing, pitching, and team strategy skills in practice and game situations. One hour of physical education credit is granted for each full semester the student competes on the team. F, SP

HPER 2791-2793 - Men's Varsity Baseball (1 cr.)
Prerequisite(s): Coach consent.
This course is designed for the experienced athlete and participation is restricted to students who are on the baseball team. Tryouts are held each year. Players are required to attend daily practices, scheduled games, and other team events. Players develop hitting, fielding, throwing, pitching, and team strategy skills in practice and game situations. One hour of physical education credit is granted for each full semester the student competes on the team. F, SP

HPER 2891-2896 - Women's Varsity Basketball (1 cr.)
Prerequisite(s): Coach consent.
This course is designed for the experienced athlete and participation is restricted to students who are on the women's basketball team. Tryouts are held each year. Players are required to attend daily practices, scheduled games, and other team events. Players develop shooting, passing, dribbling, defensive, and rebounding skills in practice and game situations. One hour of physical education credit is granted for each full semester the student competes on the team. F, SP

HPER 2991-2996 - Men's Varsity Basketball (1 cr.)
Prerequisite(s): Coach consent.
This course is designed for the experienced athlete and participation is restricted to students who are on the men's basketball team. Tryouts are held each year. Players are required to attend daily practices, scheduled

games, and other team events. Players develop shooting, passing, dribbling, defensive, and rebounding skills in practice and game situations. One hour of physical education credit is granted for each full semester the student competes on the team. F, SP

History

HIST 111 - American History to 1877 (3 cr.)

MOTR HIST 101

Prerequisite(s): READ 02 or Reading Placement of ENGL 111. ENGL 02 or Writing Placement of ENGL 08 or higher.

A general survey of the history of the United States from discovery and exploration through the Civil War and Reconstruction, emphasizing political, economic, social, and cultural factors. Lecture 3 hours per week. F, SP, S

HIST 112 - American History since 1877 (3 cr.)

MOTR HIST 102

Prerequisite(s): READ 02 or Reading Placement of ENGL 111. ENGL 02 or Writing Placement of ENGL 08 or higher.

A general survey of the history of the United States from the period of the growth of big business following the Civil War to the present day, emphasizing political, economic, social, and cultural factors in the growth of America. Lecture 3 hours per week. F, W, SP, S

HIST 121 - World Civilization to the Renaissance (3 cr.)

MOTR HIST 201

Prerequisite(s): READ 02 or Reading Placement of ENGL 111. ENGL 02 or Writing Placement of ENGL 08 or higher.

This course is designed to provide the student with the essential information relating to the history of human civilization, how civilizations form, how they develop, and how they decline, and, possibly, cease to exist. In the process of this, the student demonstrates a level of competency relating to specific features of the civilizations, both those that rose to dominance and those that functioned in a less prominent role that have influenced humanity, past and present. Lecture 3 hours per week. F, SP, S

HIST 122 - World Civilization since the Renaissance (3 cr.)

MOTR HIST 202

Prerequisite(s): READ 02 or Reading Placement of ENGL 111. ENGL 02 or Writing Placement of ENGL 08 or higher.

This course is designed to provide the student with the essential information relating to the history of human civilization, how civilizations form, how they develop, and how they decline, and, possibly, cease to exist. In the process of this, the student demonstrates a level of competency relating to specific features of the civilizations, both those that rose to dominance and those that functioned in a less prominent role that have influenced humanity, past and present. Lecture 3 hours per week. SP

Honors

HNRS 110 - Honors Inquiry Seminar (1 cr.)

Prerequisite(s): Honors Program Coordinator consent.

This course provides an opportunity for academic inquiry across the disciplines through seminars based on topics of intellectual significance. Students will evaluate and synthesize as they study. Three Rivers Honors Program students must complete three inquiry seminars. Lecture 1 hour per week. F, SP

HNRS 120 - Honors Leadership Seminar (3 cr.)

Prerequisite(s): Completion of at least one hour of HNRS 110 and Honors Program Coordinator consent.

This course emphasizes discussion of leadership styles based on acquiring an understanding of problem-solving, working with diversity, managing change, conflict, and networking. Drawing upon experiences in a guided service learning project, each student develops a personal philosophy of leadership. Three Rivers Honors Program students must take Honors Leadership Seminar. Lecture 3 hours per week. F, SP

HNRS 200 - Honors Independent Study (1-3 cr.)

Prerequisite(s): Completion of at least one hour of HNRS 110 and Honors Program instructor and the Honors Program Coordinator consent.

This is an independent study that allows the student to work at an honors level on a project or paper that addresses a topic not studied in-depth or contained in the regular curriculum. F, SP

HNRS 220 - Honors Multi-Disciplinary Seminar (3 cr.)

Prerequisite(s): Completion of at least one hour of HNRS 110 and seminar instructors and the Honors Program Coordinator consent.

This course focuses on a topic of cultural and societal significance that guides students to a richer understanding of a particular time, place, or phenomenon. Examining various ideas and images, students study ways in which individuals and groups have attempted to understand the world. This course uses a range of documents, recordings, films, television programs, and music as appropriate to the particular topic and draws upon honors program instructors as seminar mentors. Lecture 3 hours per week.

Information Systems Technology

IST 100 - Computer Applications (3 cr.)

Prerequisite(s): READ 02 or Reading Placement of ENGL 111.

This course is designed to teach students how to use application software to improve their personal productivity. This course expands students' skills in word processing, spreadsheet applications, database, and presentation software. Using these software applications, students create documents, letters, forms, tables, and create charts and graphs, build tables, queries, forms, reports, and organize, manage, and secure a database; and use presentation software to create and modify graphic presentations. The course prepares students to use College and public resources to manage coursework and conduct research. It also discusses the importance of computer and web security. Lecture 3 hours per week. F, W, SP, S

IST 126 - Word Processing Applications (3 cr.)

Prerequisite(s): IST 100.

This course instructs students in the theories and practical applications of one of the most popular word processing programs—Microsoft Word. This course is designed to help students create, format, customize, modify, and organize various documents from scratch and pre-formatted arrangements. Lecture 3 hours per week. F, SP, S

IST 148 - Office Procedures (3 cr.)

A study of the practices and procedures of current office concepts with emphasis on human relations and personality development, employment opportunities, telecommunications, word and data processing, filing and records management, and communications skills. Lecture 3 hours per week. SP

IST 225 - Medical Billing and Coding I (3 cr.)

Corequisite(s): ALHE 125

This course is designed to introduce individuals to clinical classification systems, reimbursement methodologies, health records, and data content. Individuals will develop skills necessary to advance to IST 226 Medical Billing and Coding II. Individuals will develop skills necessary to obtain employment in a physician's office, hospital, or healthcare facility. Lecture 3 hours per week. F

IST 226 – Medical Billing and Coding II (3 cr.)

Prerequisite(s): IST 225

This course is designed to further develop an individual's skills in clinical classification systems, reimbursement methodologies, health records, and data content. Individuals will develop skills necessary to advance to IST 275 Advanced Medical Billing & Coding I. Individuals will develop skills necessary to obtain employment in a physician's office, hospital, or healthcare facility. Lecture 3 hours per week. F

IST 268 - Spreadsheet Applications (3 cr.)
Prerequisite(s): IST 100 and ENGR 106 or MATH 02 or placement of MATH 153 or higher.
In this course students demonstrate the ability to use Microsoft Excel for basic and advanced functions. Lecture 3 hours per week. F, SP, S

IST 275 - Advanced Medical Billing and Coding I (3 cr.)
Prerequisite(s): IST 226.
This course is designed to introduce individuals to health records, data content, compliance, information technologies, confidentiality, and privacy requirements. Individuals will develop skills necessary to obtain employment in a physician's office, hospital, or health care facility. Individuals will develop skills necessary to advance to IST 276 Advanced Medical Billing and Coding II. Lecture 3 hours per week. SP

IST 276 – Advanced Medical Billing and Coding II (3 cr.)
Prerequisite(s): IST 275
This course is designed to further develop individuals toward compliance, information technologies, confidentiality, and privacy requirements. Individuals will learn to code a health claim linking the correct CPT and ICD 10-CM codes for reimbursement of insurance carriers and government entities. The course explains adjustments to patient billing and procedures for denial or rejection of claims. Specialty coding, coding levels, and billing software are completed in the course. Individuals will develop skills necessary to obtain employment in a physician's office, hospital, or healthcare facility. Lecture 3 hours per week. SP

IST 296 – Office Administrative Applications (3 cr.)
Prerequisite(s): IST 126, IST 268, IST 269.
Corequisite(s): IST 197.
This course concentrates on the most important advanced business applications using office applications, including word processing, presentation graphics, spreadsheets, and databases. Emphasis is on hands-on practice to produce mailable and professional integrated office projects. Lecture 3 hours per week. SP

Information Technology Specialist

MST 115 – IT Essentials (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111 and ENGL 02 or Writing placement of ENGL 08 or higher.
IT Essentials introduces students to the fundamentals of computer hardware and software, mobile devices, security and networking concepts, and the responsibilities of an IT professional. Lecture 3 hours per week. F

MST 117 – Linux Essentials (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111 and ENGL 02 or Writing placement of ENGL 08 or higher.
This course provides the fundamental knowledge and concepts for choosing an operating system, basic information on open source software and licenses, basic understanding of scripting, and learning how to use command lines. Lecture 3 hours per week. SP

MST 118 – Networking I (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111 and ENGL 02 or Writing placement of ENGL 08 or higher.
Networking I introduces the architecture, structure, functions and components of the Internet and other computer networks. Students are provided a basic knowledge of network operation and building simple local area networks (LANs), performing basic configurations for routers and switches, and implementing Internet Protocol (IP). Lecture 3 hours per week. F

MST 128 – Networking II (3 cr.)
Prerequisite(s): MST 118 with a minimum letter grade of C.
Networking II reinforces knowledge of the architecture, components, and operations of routers and switches in small networks and introduces wireless local area networks (WLAN) and security concepts. Students learn configuration of routers and switches for advanced functionality using security best practices and troubleshooting to resolve common issues with protocols in both IPv4 and IPv6 networks. Lecture 3 hours per week. SP

MST 135 – IT Customer Service and Support (3 cr.)
This course covers topics such as customer service, working in an Information Technology department, writing technical reports and presentations, and creating schematic designs for networks. Lecture 3 hours per week. F, SP

MST 217 - Network Security (3 cr.)
This course is designed to expand networking student's basic network and operating system skills to include planning, implementing, and auditing of a system's security. The course covers various aspects of designing and implementing a secure network for both home and office. Lecture 3 hours per week. F

MST 218 – Server Administration I (3 cr.)
Corequisite(s): MST 128.
Server Administration I provides an in-depth and hands-on examination of the processes required to install, configure, and manage a modern server operating system. Topics include installation and monitoring of the operating system, storage and file systems, virtualization, and high-availability solutions. Lecture 3 hours per week. SP

MST 219 - Server Administration II (3 cr.)
Prerequisite(s): MST 218 with a minimum letter grade of C.
Server Administration II provides in-depth coverage of the skills needed to configure identity services such as Active Directory, user and computer accounts, Group Policy, and Certificate Services in a modern server operating system. Students examine diverse facets of server identity management, including Active Directory OUs and accounts, Group Policy and preferences, domain controller and Active Directory management, Certificate Services, and advanced identity solutions. Lecture 3 hours per week. F

MST 220 – Server Administration III (3 cr.)
Prerequisite(s): MST 128 and MST 219 with a minimum letter grade of C.
Server Administration III provides in-depth coverage of the skills required to configure network services in a modern server operating system. Students examine topics at the intersection of Networking and Server Administration, including TCP/IP Addressing, DNS configuration, DHCP configuration, remote access, distributed file-sharing solutions, and advanced network features configuration. Lecture 3 hours per week. SP

MST 227 - Introduction to Programming (3 cr.)
Prerequisite(s): MATH 161 or MATH 163 with a minimum grade of C.
In this first programming course, students construct programs to solve problems and explore program development in a graphical environment. Lecture 3 hours per week. F

MST 228 – Networking III (3 cr.)
Prerequisite(s): MST 128 with a minimum letter grade of C.
Networking III emphasizes the architecture, components, operations, and security in scaling for large, complex networks, including wide area networks (WAN) technologies. The course emphasizes network security concepts and introduces network virtualization and automation. Students learn to configure, troubleshoot, and secure enterprise network devices and discover how application programming interfaces (API) and configuration management tools enable network automation. Lecture 3 hours per week. F

MST 235 – IT Practicum and Survey (3 cr.)
Prerequisite(s): Completion of MST 219 with a minimum letter grade of C.
In this course, students solve various IT issues utilizing skills covered throughout the IT Specialist program. Emphasis for this course will be network design, implementation, and maintenance. Lecture 3 hours per week. SP

MST 297 - Coordinated Internship Project (3 cr.)
Prerequisite(s): Completion of MST 115 and MST 118 with a minimum grade of C.
This course is a supervised on-the-job training course that provides practical experience in a microcomputer support system or closely related area for graduating students. Students work in a 120-hour training cycle during which he/she will work with direct supervision from an employer and indirect supervision from an instructor from the Business/IST department in an approved business organization or professional environment. This is the final internship for the AAS IT Specialist degree program. Variable hours per week. SP

Manufacturing Technology

MAFT 119 – Robotics I (3 cr.)
Corequisite(s): ELEC 115.
This course provides an introduction to industrial robotics and applications. The student is introduced to the basics of robotics programming, robot safety, the multi-axis coordinate system, the teaching pendant, robot commands, robotic vision, and robot simulation software. The course focuses on the use of robots in an industrial setting. This is a hybrid-blended course. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F

MAFT 215 – Mechatronics Capstone (3 cr.)
Prerequisite(s): ELEC 216, MAFT 119.
Corequisite(s): MAFT 219.
This project-based course enables students to apply knowledge and skills acquired in previous semesters. Through integration of technologies, students plan, design, construct, program, test, evaluate, and improve industrial control systems to include robotics and process controls. Students are required to incorporate electricity and electronics systems, fluid power systems, mechanical systems, motor controls and motor drives, programmable controller systems, as well as robotics in capstone projects. Lecture 3 hours per week. SP

MAFT 219 – Robotics II (3 cr.)
Prerequisite(s): MAFT 119.
This course is a continuation of Robotics I and includes a study of the use of robotic technologies integrated with fluid power, industrial electronics, and programmable logic controllers technologies. The student is introduced to the advanced robotics programming, with emphasis on the integration and coordination of robotic programming and motion with other control circuits and technologies found in many emerging manufacturing and industrial facilities. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. SP

MAFT 228 - Quality Assurance Fundamentals (3 cr.)
This course provides an introduction to management of quality control systems. Course includes study of recordkeeping, standards, sampling, and cost as related to quality control applications. Different techniques used in quality control will be covered. Use of computers for data collection, analysis, and reporting is emphasized. Fundamental aspects of quality control with an emphasis on basic statistics will be included. Lecture 2 hours/Lab 2 hours Total 4 hour per week. F

MAFT 255 - Hydraulics and Pneumatics (3 cr.)
This introductory course defines the core concepts of fluid power systems. Fluid power circuit symbols and identification of components along with their function are addressed in the course. Development of skills necessary for interpreting fluid power circuits and analyzing circuit function are a focus for student learning. Lecture 3 hours per week. SP

MAFT 267 - Automated Manufacturing Systems (3 cr.)
Corequisite(s): ELEC 216 or instructor consent.
This course is a software-based study of advanced manufacturing processes and systems, including computer integrated manufacturing. Key activities include PLC software applications and product manufacture by computer simulation. This is a hybrid-blended course. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. SP

Marketing

MKTG 115 - Principles of Marketing (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course is a study of the marketing process in a dynamic environment. The course focuses on the needs of consumers and their buying behavior based on the marketing mix and the process of distribution. The course further identifies the various advertising media and how these mediums are used to promote products and services and the ethical consequences of marketing in the economy. Lecture 3 hours per week. SP

MKTG 118 - Retail Merchandising (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course is a study of general retailing principles, procedures, and mathematical computations for retail buying and merchandising. Concepts covered include an in-depth study of the components of a budget, retail financial planning, and channel operations. Lecture 3 hours per week. F

MKTG 119 - Advertising (3 cr.)
In this course, students will learn the essential components of advertising and promotion. This will include the creative, planning, and budgetary processes that help businesses prepare an advertising strategy that positions their organizations for growth. The course is project focused to enable students to have hands on experience in the creative processes of developing advertisement and in learning the strategy behind it with the creation of a business advertising plan for a local business. Lecture 3 hours per week. SP

MKTG 128 - Professional Selling (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course is a study of the marketing competencies for professional selling. Concepts covered include selling as a profession, the steps in the selling process, relationship selling, and the relationship selling process. Lecture 3 hours per week. SP

MKGT 297 - Internship (3 cr.)
Prerequisite(s): BMGT 105 and a minimum of 24 semester hours of credit in the Business Management degree program.
This course is a study of generally accepted professional work behavior. Concepts covered include recognizing individual strengths and weaknesses, resume and cover letter writing, and interviewing techniques. Each student enrolled in this class is required to complete a 180-hour internship, which provides an opportunity to develop occupational skills through on-the-job work experience. Students are encouraged to attend bimonthly Collegiate DECA Meetings. Variable hours per week. F, SP

Mass Communication

MCOM 101 - Mass Communication and Society (3 cr.)
CORE 42 MOTRANSFER GUARANTEED ***MOTR SBSC 100***
Prerequisite(s): READ 02 or reading placement of ENGL 111.
This course provides an interdisciplinary overview of the nature, evolution, and influence of mass communication in our society at personal, local, national, and global levels. Students will discuss history, developments, and challenges related to mass media as an economic industry and as agents of societal change. Purpose and content within print, chemical, electronic, and digital channels of media will be examined. The effects that media have on culture, politics, law, globalization, and ethics are also addressed. The course aims to help students become more knowledgeable consumers of media content and improve their own media literacy skills. Lecture 3 hours per week. SP

Mathematics

MATH 02 – Transitional Math (4 cr.)
Prerequisite(s): READ 01 or Reading placement of READ 02 and appropriate math placement.
Corequisite(s): ACAD 101.
A course designed to develop the student's knowledge of fundamental operations with integers, fractions, decimals, percentages, ratios, and proportions. Students learn to interpret graphs, simplify algebraic expressions, solve equations, and perform unit conversions. Lecture 4 hours per week. F, SP, S

MATH 153 – Intermediate Algebra (4 cr.)
Prerequisite(s): MATH 02 with a minimum letter grade of C or placement of MATH 153 and READ 01 or Reading placement of READ 02 or higher.
A course designed to teach students how to perform basic operations on polynomials, rational expressions, and roots. Students learn to solve polynomial equations by factoring along with techniques for solving equations containing rational expressions and roots. Students will apply basic techniques for solving and graphing linear equations. Lecture 4 hours per week. F, SP, S

MATH 161 – Mathematical Reasoning and Modeling (3 cr.)
MOTR MATH 120
Prerequisite(s): MATH 02 with a minimum grade of C or placement of MATH 161 an READ 01 or Reading placement or Read 02 or higher.
The purpose of this course is to provide a comprehensive overview of the skills required to navigate the mathematical demands of modern life and prepare students for a deeper understanding of information presented in mathematical terms. Emphasis is placed on improving students' ability to draw conclusions, make decisions, and communicate effectively in mathematical situations that depend upon multiple factors. Lecture 3 hours per week. F, SP, S

MATH 162 – Mathematics for the Elementary Teachers (4 cr.)
Prerequisite(s): MATH 02 with a minimum grade of C or placement of MATH 162.
An introduction to the structure of mathematics, properties of each subset of the real number system, elementary number theory, probability and statistics, and other numeration systems intended for the Elementary Education Teacher. Lecture 4 hours per week. F, SP, S

MATH 163 – College Algebra for Calculus (3 cr.)
MOTR MATH 130
Prerequisite(s): MATH 103 or 153 with a minimum letter grade of C or placement score of MATH 163 and READ 01 or Reading placement of READ 02 or higher.
A calculator-oriented course concerned with the properties of the various numbers systems, equations, inequalities, functions, and relations. This course is intended to prepare students for fields of study that require a high level of algebraic reasoning or calculus. Lecture 3 hours per week. F, W, SP, S

MATH 164 – Trigonometry (3 cr.)
Prerequisite(s): MATH 163 with a minimum letter grade of C or currently enrolled in Math 163 or placement of MATH 164.
This course is concerned with the six trigonometric functions and identities associated with them. The student learns how to prove or derive an identity, as well as how to solve a conditional trigonometric equation. One component of the course deals with solving right triangles. Another aspect is the conversion of degrees into radians and vice versa. Some applied problems are considered. Lecture 3 hours per week. F, SP

MATH 171 – Analytic Geometry & Calculus I (5 cr.)
Prerequisite(s): MATH 163 and MATH 164 or placement MATH 171.
This course is concerned with how to find the derivative or integral of a function. The process of finding the limit of a function is used to derive the derivative of a function and the definite integral of a function. Limits are also considered in their own right. Applications of differentiation and integration are considered. This course is the first course of a 3-course sequence dealing with calculus and plane analytic geometry. Lecture 5 hours per week. SP, S

MATH 223 – Probability and Statistics (3 cr.)
Prerequisite(s): MATH 161 or MATH 163 with a minimum letter grade of C or placement of MATH 164.
Introduction to the basic concepts of statistics including descriptive measures of location and dispersion, elementary probability distributions, estimation, hypothesis testing, correlation, analysis of variance, and linear regression. In various units of the course, the student utilizes computer statistical software to facilitate the analysis of data. Lecture 3 hours per week. F, SP, S

MATH 271 – Analytic Geometry & Calculus II (5 cr.)
Prerequisite(s): MATH 171 with a minimum letter grade of C.
This course is the second course of a 3-course sequence in calculus and analytic geometry. This course deals with transcendental functions, integration techniques, infinite sequences, infinite series, parametric equations, and polar coordinates. The course considers determining the convergence or the divergence of an infinite series using special mathematical tests, such as the Ration Test. The student learns how to integrate virtually any function that can be integrated. Special integration techniques, like integration by parts, are used to do this. This class also deals with differentiation and integration of functions that are not rational functions. These include trig functions, logarithmic functions, and exponential functions. Lecture 5 hours per week. F

MATH 272 – Analytic Geometry & Calculus III (5 cr.)
Prerequisite(s): MATH 271 with a minimum letter grade of C.
This course is the third course in a 3-course sequence covering calculus and analytic geometry. This course involves the study of differentiation and integration of functions of more than one independent variable. That is, partial derivatives are studied, along with multiple integration. Operations on vectors both in the xy plane and outside the plane are studied. These operations include the dot product and the cross product. Differentiation and integration of vector-valued functions are also looked at. Lecture 5 hours per week. SP

Mechanical Drafting

MEDR 135 - Blueprint Reading and Gauging (3 cr.)
An introduction to blueprint reading through a study of the fundamental skills and concepts involved in reading, sketching, and interpreting drawings. Also time is spent in proper use of the basic measuring instruments. This is a hybrid-blended course. Lecture 2 hours/Lab 2 hours/Total 4 hours per week. F, SP

MEDR 246 - Computer Aided Machining I (3 cr.)
This is an introduction to CAM (computer-aided-machining) and machining systems to prepare students to operate the system and understand applications of CAM to industrial standards. Students apply use of interactive computer machine tool language to develop CNC part programs, storage, and retrieval of programs and related information. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. SP

Medical Laboratory Technician

MLT 150 – Introduction to Laboratory Science Methods (2 cr.)
Prerequisite(s): Admission into the MHPC MLT Program.
This course orients the student to the concepts encompassed in the laboratory environment, to include safe specimen handling, testing procedures, reporting results, basic quality control, laboratory organization, and professionalism. Lecture 2 hours per week. F

MLT 210 – Immunology (3 cr.)
Prerequisite(s): Admission into the MHPC MLT Program.
This course consists of the principles and theories of antigen and antibody reactions and the immune system as related to diagnostic serologic procedures. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F

MLT 220 – Clinical Chemistry and Urinalysis (5 cr.)
Prerequisite(s): Admission into the MHPC MLT Program.
This course introduces the student to methods of analysis of chemical components found in the human body, the testing methodologies for those constituents and the results as applied to normal and abnormal disease states. Lecture 4 hours/Laboratory 2 hours/Total 6 hours per week. S

MLT 250 – Hematology and Coagulation (5 cr.)
Prerequisite(s): Admission into the MHPC MLT Program.
This course studies the cellular structures in blood, normal and abnormal cell development, alterations present in disease, and the mechanisms of coagulation. Lecture 4 hours/Laboratory 2 hours/Total 6 hours per week. F

MLT 260 – Phlebotomy (2 cr.)
Prerequisite(s): Admission into the MHPC MLT Program.
This course covers various procedures in performing venipuncture and other specialized collection techniques in addition to laws and regulations for safe phlebotomy practices. Lecture 1 hour/Laboratory 2 hours/Total 3 hours per week. F

MLT 270 – Immunohematology (5 cr.)
Prerequisite(s): Admission into the MHPC MLT Program.
This course consists of concepts, applications, and discrepancies of blood group testing, screening and crossmatch procedures, and identifying unexpected antibodies. Lecture 4 hours/Laboratory 2 hours/Total 6 hours per week. SP

MLT 280 – Clinical Microbiology (4 cr.)
Prerequisite(s): Admission into the MHPC MLT Program.
This course consists of the role of pathogenic bacteria and other microorganisms which will include bacterial culturing, differentiation and identification of human normal flora and disease-causing microorganisms. Lecture 3 hours/Laboratory 2 hours/Total 5 hours per week. SP

MLT 290 – Parasitology, Mycology, Virology (1 cr.)
Prerequisite(s): Admission into the MHPC MLT Program.
This course introduces the student to parasites, fungus, and viruses and their role in human health and disease. Lecture 1 hour per week. SP

MLT 291 – Hematology and Coagulation Practicum (2 cr.)
Prerequisite(s): Admission into the MHPC MLT Program.
Supervised clinical practice coordinated by the Consortium, in the hematology lab of selected clinical affiliates. Laboratory 4 hours per week. F

MLT 292 – Clinical Chemistry Practicum (2cr.)
Prerequisite(s): Admission into the MHPC MLT Program.
Supervised clinical practice coordinated by the Consortium in the clinical chemistry lab of selected clinical affiliates. Laboratory 4 hours per week. S

MLT 293 – Clinical Microbiology Practicum (2 cr.)
Prerequisite(s): Admission into the MHPC MLT Program.
Supervised clinical practice coordinated by the Consortium, in the clinical microbiology lab of selected clinical affiliates. Laboratory 4 hours per week. SP

MLT 294 – Immunohematology Practicum (2 cr.)
Prerequisite(s): Admission into the MHPC MLT Program.
Supervised clinical practice coordinated by the Consortium, in the clinical immunohematology lab of selected clinical affiliates. Laboratory 4 hours per week. SP

Music

MUSC 01-08 - Recitals and Concerts (0 cr.)
Students gain listening skills and musical knowledge through attendance at approved recitals and concerts. All applied music students (MUSP) are required to enroll concurrently each semester in this course. F, SP

MUSC 110 - Brass Techniques (1 cr.)
Prerequisite(s): Instructor consent.
Students develop the knowledge and skills necessary for teaching the trombone, French horn, euphonium, and tuba in a beginning instrumental program. Laboratory 2 hours per week. SP

MUSC 120 - Percussion Techniques (1 cr.)
Prerequisite(s): Instructor consent.
Students develop the knowledge and skills necessary for teaching the percussion instruments in a beginning instrumental program. Laboratory 2 hours per week. F

MUSC 123 - History and Appreciation of Music (3 cr.)
CORE 42 MOTRANSFER GUARANTEED ***MOTR MUSC 100***
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
An introductory course designed to enhance the ability to appreciate Western art music. This course includes basic elements of music and artistic characteristics of composers, as well as listening to musical selections in order to identify composers and relevant historical trends. Students assess the cultural and musical content of an approved live musical performance. Lecture 3 hours per week. F, W, SP, S

MUSC 130 - String Techniques (1 cr.)
Prerequisite(s): Instructor consent.
Students develop the knowledge and skills necessary for teaching the string instruments in a beginning instrumental program. Laboratory 2 hours per week. SP

MUSC 131 - Aural Skills I (1 cr.)
Corequisite(s): MUSC 141.
This course is an aural study of simple and compound meters, intervals, triads, and melodies with harmonic progressions. Singing melodies and counting rhythms. Lecture 1 hour/Laboratory 1 hour/Total 2 hours per week. F

MUSC 132 - Aural Skills II (1 cr.)
Prerequisite(s): MUSC 131 and MUSC 141 or instructor consent.
Corequisite(s): MUSC 142.
This course is a continuation of MUSC 131. Lecture 1 hour/Laboratory 1 hour/Total 2 hours per week. SP

MUSC 140 - Woodwind Techniques (1 cr.)
Prerequisite(s): Instructor consent.
Students develop the knowledge and skills necessary for teaching the saxophone, oboe, bassoon, and flute in a beginning instrumental program. Laboratory 2 hours per week. SP

MUSC 141 - Theory I, Harmony (3 cr.)
CORE 42 MOTRANSFER GUARANTEED ***MOTR MUSC 101***
Corequisite(s): MUSC 131.
Theory I, Harmony is an introductory course in reading music, learning major and minor scales and key signatures, writing and identifying intervals, knowing what time signatures represent and how that is notated, writing and analyzing major, minor diminished, and Augmented triads, and learning what to expect in common harmonic motion in both major and minor keys. Lecture 3 hours per week. F

MUSC 142 - Theory II, Harmony (3 cr.)
Prerequisite(s): MUSC 141 or instructor consent.
Corequisite(s): MUSC 132
This course is a written study of four-part diatonic harmony, inversion, harmonic motion, and normal progression. Lecture 3 hours per week. SP

MUSC 150 - Functional Piano I (1 cr.)
Prerequisite(s): Instructor consent.
This course is a course focusing on basic piano skills to enable the musician to function in the classroom and studio. Laboratory 2 hours per week. F

MUSC 153 - Functional Piano II (1 cr.)
Prerequisite(s): MUSC 150 or instructor consent.
This course is a continuation of the development of basic functional piano skills. Laboratory 2 hours per week. SP

MUSC 170 - Guitar Techniques (1 cr.)
Prerequisite(s): Instructor consent.
Students develop the knowledge and skills necessary for incorporating the guitar into the elementary music classroom or to implement a beginning guitar program at the secondary level. Laboratory 2 hours per week. F

MUSC 180 - Trumpet Techniques (1 cr.)
Prerequisite(s): Instructor consent.
Students develop the knowledge and skills necessary for teaching the trumpet in a beginning instrumental program. Laboratory 2 hours per week. F

MUSC 190 - Clarinet Techniques (1 cr.)
Prerequisite(s): Instructor consent.
Students develop the knowledge and skills necessary for teaching the clarinet in a beginning instrumental program. Laboratory 2 hours per week. F

MUSC 210 - Diction for Singers (2 cr.)
Prerequisite(s): MUSP 1111 or MUSP 1121 or instructor consent.
This is a fundamental course designed to acquaint the student with the International Phonetic Alphabet and its application in the vocal music setting. Focus will be on English, Italian, French, and German diction as demonstrated through both speaking and singing. Lecture 2 hours per week. SP

MUSC 220 - Basic Conducting (2 cr.)
Prerequisite(s): Instructor consent.
This is an introduction to basic conducting techniques both with and without a baton. Emphasis is on acquiring skills necessary to elicit the desired musical response from a conducted ensemble. For vocal and instrumental majors. Lecture 2 hours per week. F

MUSC 221 - Music Literature I (3 cr.)
MOTR MUSC 103
Prerequisite(s): MUSC 141 or instructor consent.
A survey of music literature in Western civilization from the Middle Ages to the Baroque era with emphasis on form and style. Designed for music major and minors. Lecture 3 hours per week. F

MUSC 222 - Music Literature II (3 cr.)
MOTR MUSC 104
Prerequisite(s): MUSC 141 or instructor consent.
A survey of music literature in Western civilization from the Classical to the 20th century with emphasis on form and style. Designed for music majors and minors. Lecture 3 hours per week. SP

MUSC 231 - Aural Skills III (1 cr.)
Prerequisite(s): MUSC 132 and MUSC 142 or instructor consent.
Corequisite(s): MUSC 241.
Aural study of simple and compound meters, melodic and harmonic intervals, and triads and melodies with harmonic progressions. Singing major and minor melodies with skips in the tonic, dominant, and dominant seventh chords, and counting simple and compound rhythms, including borrowed beat divisions, syncopation, subdivided beats, and beats of the half and eighth note. Laboratory 2 hours per week. F

MUSC 232 - Aural Skills IV (1 cr.)
Prerequisite(s): MUSC 231 and MUSC 241 or instructor consent.
Corequisite(s): MUSC 242.
Aural study of simple and compound meters, melodic and harmonic intervals, and triads and melodies with harmonic progressions. Singing major and minor melodies with skips in the dominant, subdominant, supertonic and dominant seventh chords, modal melodies and melodies with chromatic alterations, and counting rhythms including hemiola, asymmetrical meters and mixed meters. Lecture 1 hour/Laboratory 1 hour/Total 2 hours per week. SP

MUSC 241 - Theory III, Harmony (3 cr.)
Prerequisite(s): MUSC 142 or instructor consent.
Corequisite(s): MUSC 231.
The course is a continuation of Music Theory I and II. The content includes a study of musical form through analysis of cadences, phrases, and periods, as well as written study of four-part harmonic motions in root position and inversion, including all diatonic seventh chords, secondary triads, part writing from a figured bass, shift of mode, tonicization and modulation. Lecture 3 hours per week. F

MUSC 242 - Theory IV, Harmony (3 cr.)
Prerequisite(s): MUSC 241 or instructor consent.
Corequisite(s): MUSC 232.
This course covers harmonic analysis of selected music literature from the Baroque, Classical, and Romantic periods, augmented sixth chords, the Neapolitan triad, and an introduction to analytical techniques as applied to 20th century music. Lecture 3 hours per week. SP

MUSC 250 - Functional Piano III (1 cr.)
Prerequisite(s): MUSC 153 or instructor consent.
This course is a continuation of the development of basic functional piano skills. Laboratory 2 hours per week. F

MUSC 253 - Functional Piano IV (1 cr.)
Prerequisite(s): MUSC 250 or instructor consent.
This course is a continuation of the development of basic functional piano skills. Laboratory 2 hours per week. SP

MUSC 1011-1018 - Three Rivers Symphonic Band (1 cr.)
MOTR PERF 1020
Prerequisite(s): Audition with instructor.
Instrumental ensemble emphasizing performance of all types of wind ensemble music. Membership is open to all TRC students and community members regardless of major. Performance scholarships are available by audition. Laboratory 3.5 hours per week. F, SP

MUSC 1021-1028 - Three Rivers Jazz and Pep Band (1 cr.)
MOTR PERF 102B
Prerequisite(s): Audition with instructor.
Students enrolled in jazz/pep band gain practical musical experience working in various instrumental combinations and styles and acquire training in jazz musicality, phrasing, improvisation, and ensemble playing primarily as it has to do with important composers from the jazz realm (but also rock, funk, Afro-Cuban, Afro-beat, etc.). Members are assessed through the rehearsal and public performance of both newly written and classic works for large and small jazz ensemble. Laboratory 3 hours per week. F, SP

MUSC 1031-1038 - Three Rivers Chorus (1 cr.)
MOTR PERF 102C
The non-auditioned choir is open to all students with musical ability and/or prior choral experience. The group presents at least one public performance each semester comprised of music in variety of styles from different historical periods. Laboratory 3 hours per week. F, SP

MUSC 1041-1048 - Three Rivers Swingsations (1 cr.)
Prerequisite(s): Audition with instructor.
The auditioned choir is open to students with demonstrated musical ability and prior choral experience. The group presents at least one public performance each semester comprised of music in variety of styles from different historical periods. Laboratory 3 hours per week. F, SP

MUSC 1131-1138 - Small Ensemble (1 cr.)
Prerequisite(s): Instructor consent.
Small Ensemble emphasizes performance of all types of ensemble music. F, SP

MUSIC–PRIVATE INSTRUCTION
MUSP courses are offered as private lessons by arrangement with the instructor. Consent of instructor is a prerequisite for all private instruction music courses. One 25-minute lesson a week is offered for one credit hour per semester; one 50-minute lesson a week is offered for two credit hours per semester. Private lessons cost $115 per credit hour plus maintenance fees. This is a nonrefundable fee. A minimum of five practice hours per week per semester hour credit and performance on an examination recital are required. Music majors may apply a maximum of 8 credit hours of private instruction toward the Associate of Arts degree. Non-music majors will be limited to 4 credit hours of private instruction toward the Associate of Arts degree. May be repeated for credit. F, SP

MUSP 1011-1018	Private Piano (1 cr.)
MUSP 1021-1028	Private Piano (2 cr.)
MUSP 1111-1118	Private Voice (1 cr.)
MUSP 1121-1128	Private Voice (2 cr.)
MUSP 1211-1218	Private Guitar (1 cr.)
MUSP 1221-1228	Private Guitar (2 cr.)
MUSP 1311-1318	Private Organ (1 cr.)
MUSP 1321-1328	Private Organ (2 cr.)
MUSP 1411-1418	Private Woodwind (1 cr.)
MUSP 1421-1428	Private Woodwind (2 cr.)
MUSP 1511-1518	Private Brass (1 cr.)
MUSP 1521-1528	Private Brass (2 cr.)
MUSP 1611-1618	Private Percussion (1 cr.)
MUSP 1621-1628	Private Percussion (2 cr.)
MUSP 1711-1718	Music Composition (1 cr.)
MUSP 1721-1728	Music Composition (2 cr.)
MUSP 1811-1818	Electronic Music (1 cr.)
MUSP 1821-1828	Electronic Music (2 cr.)

Nursing

NURS 108 - RN Bridge (4 cr.)
Prerequisite(s): Admission to the RN Bridge Program
This course transitions the qualified health professional into the Associate Degree Nursing Program. Students gain understanding of the role of the professional nurse. This course focuses on the development of critical thinking and clinical reasoning strategies. Students build upon previously learned knowledge and skills while learning introductory medical surgical concepts. Lecture 4 hours per week. F, SP

NURS 116 - Foundations of Nursing (9 cr.)
Prerequisite(s): MATH 161, ENGL 111, BIOL 231, and GOVT 121.
In this course, the student is introduced to the basic concepts of nursing that create the foundation of the art and science of nursing practice. Emphasis is placed on the middle to older adult patient by introducing basic knowledge, skills, and attitudes. The student begins to utilize critical thinking in the clinical setting to safely care for the middle to older adult patient. Lecture 5.25 hours/Laboratory-Clinical 3.75.25 hours/Total 9 hours per week. F, SP

NURS 128 - Mental Health Nursing (3 cr.)
Prerequisite(s): NURS 109, NURS 116, and BIOL 232.
This course provides students with an introduction to concepts related to mental health. A focus is placed on providing evidence-based care to promote health of clients with mental disorders. Strategies for safe and therapeutic care are applied in the clinical setting. Lecture 2.25 hours/Clinical 2.25 hours/Total 4.5 hours per week. F, SP

NURS 129 - Medical Surgical Nursing I (6 cr.)
Prerequisite(s): NURS 109, NURS 116, and BIOL 232.
In this course students build upon previously learned knowledge and skills while learning introductory medical surgical concepts. Students use the nursing process to provide safe care for the patient with alterations in introductory medical surgical concepts. Students gain an understanding of the various roles in the healthcare team. Lecture 3.5 hours/Laboratory-Clinical 7.5 hours/ Total 11 hours per week. F, SP

NURS 135 – Pharmacology for Nurses (3 cr.)
Prerequisite(s): NURS 109, NURS 116, and BIOL 232.
In this course students establish a knowledge base of major drug classifications. The course focuses on pharmacotherapeutics with an emphasis on drug action, therapeutic effect, indications, contraindications, potential adverse reactions, and nursing implications for administration. Lecture 3 hours per week. F, SP

NURS 218 - Maternal and Child Health Nursing (3 cr.)
Prerequisite(s): NURS 128, NURS 129, and NURS 135.
This course focuses on the nurse's role in the care of the family, encompassing sexuality, reproduction, and development. The student utilizes the nursing process in assisting patients and their families to achieve or maintain their optimal level of wellness. The student applies pharmacological principles, focusing on safe dose medication ranges for the pediatric patient. Lecture 2.25 hours/Laboratory-Clinical 2.25 hour/Total 3 hours per week. F, SP

NURS 219 - Medical Surgical Nursing II (7 cr.)
Prerequisite(s): NURS 128, NURS 129, and NURS 135.
In this course students build upon previously learned knowledge and skills while learning advanced medical surgical concepts. Students use the nursing process to manage safe care for the patient with alterations in advanced medical surgical concepts. Students demonstrate an understanding of various roles in the healthcare team. Lecture 4.75 hours/Laboratory-Clinical 6.75/Total 11.5 hours per week. F, SP

NURS 238 - Medical Surgical Nursing III (5 cr.)
Prerequisite(s): NURS 218, NURS 219, and PSYC 243.
Corequisite(s): NURS 245.
In this course students build upon previously learned knowledge and skills while learning additional advanced medical surgical concepts. Students evaluate care and predict responses for patients with alterations in advanced medical surgical concepts. Students learn to be an effective member of the healthcare team. Lecture 4 hours/Clinical 6 hours/Total 10 hours per week. F, SP

NURS 239 – Preceptor in Nursing (3 cr.)
Prerequisite(s): NURS 218 and NURS 219.
This course incorporates previous knowledge, skills, clinical decision-making, and professional behaviors students have acquired throughout their nursing education. In this course, the student is provided the opportunity to synthesize new knowledge, apply previous knowledge, and gain experience managing the workflow in complex nursing situations through a variety of settings. Clinical 9 hours per week. F, SP

NURS 245 – Transition into Professional Nursing (4 cr.)
Prerequisite(s): NURS 218 and NURS 219.
Corequisite(s): NURS 238.
In this course, concepts are covered that assist students to transition into their role as professional nurses. The focus is placed on leadership and recognizing the nurse's role in improving quality processes that affect patient outcomes in the healthcare system. The course also prepares the student for success on the NCLEX-RN examination. At the completion of this course, the student will participate in a live NCLEX-RN review session. Lecture 4 hours per week. F, SP

Occupational Therapy

OTA 200 – Foundations of Occupational Therapy (3 cr.)
Prerequisite(s): One-Year Certificate Pre-Occupational Therapy Assistant; accepted admission into OTA program with a minimum GPA of 2.5.
This course presents an introduction to occupational therapy; including history, philosophical base, values, ethics, practice framework, and clinical reasoning. Students will learn selected theories and frames of reference as they pertain to interventions in mental health, physical disabilities, pediatrics, and community practice areas. An overview of the occupational therapy process, including assessment, treatment planning, treatment implementation, and discontinuation of intervention will be presented. Role delineation and collaboration of the occupational therapy assistant with other occupational therapy and healthcare personnel are discussed. Lecture 3 hours/Total 3 hours per week. F

OTA 205 – Medical Conditions in Occupational Therapy (3 cr.)
Prerequisite(s): One-Year Certificate Pre-Occupational Therapy Assistant; accepted admission into OTA program with a minimum GPA of 2.5.
This course will provide a framework for students to learn about common medical conditions seen by occupational therapy practitioners and to facilitate learning of these conditions from an occupational therapy perspective. It is not intended to emphasize treatment of a *diagnosis*, however students will learn about specific factors unique to given conditions that may impact an individual's occupational roles and functions. These factors must be understood and analyzed regarding the relative impact on the individual's occupational performance. The knowledge gained from this course is a necessary prerequisite to *Physical Disabilities Practice*. Lecture 3 hours per week. F

OTA 210 – Activity Analysis and Therapeutic Media in Occupational Therapy (3 cr.)
Prerequisite(s): One-Year Certificate Pre-Occupational Therapy Assistant; accepted admission into OTA program with a minimum GPA of 2.5.
This course is designed to foster occupations or activities used as therapeutic interventions in occupational therapy. Emphasis on awareness of activity demands, contexts, adapting, grading, and safe implementation of occupations or activities. This course also provides knowledge and use of tools, equipment, and basic techniques of therapeutic media. Emphasis is given to analysis and instruction of activities frequently used as occupational therapy media in multiple community and clinical settings. Lecture 2 hour/Laboratory 3 hours/Total 5 hours per week. F

OTA 215 – Mental Health and Geriatric Practice (4 cr.)
Prerequisite(s): One-Year Certificate Pre-Occupational Therapy Assistant; accepted admission into OTA program with a minimum GPA of 2.5.
This course presents the role of the Occupational Therapy Assistant in the psychosocial area as well as the Geriatric population of Occupational Therapy practice. Students will learn selected frames of reference, and explore the effects of psychosocial dysfunction on areas of occupation. Students will learn skills necessary to assess, implement and document intervention in a variety of mental health settings and Geriatric setting. Client factors, including culture and diversity, therapeutic interactions and methods are studied. Students will develop skills in administering individual and group interventions, professional communication, conflict negotiation, and advocacy. This course integrates the Occupational Therapy process and collaboration with the Occupational Therapist through its review of advanced, appropriate select Occupational Therapy therapeutic interventions and techniques used to enhance functional ability and independence in daily life tasks and occupation for the Geriatric and Mental Health populations. The Student incorporates knowledge of the influences of environment, individual, family, culture and access to Occupational Therapy services on occupational performance. Lab activities, in-class activities, and level I fieldwork opportunities will enable students to participate in and apply psychosocial and Geriatric principles to practice. Lecture 3 hours/Lab 4 hours/Total 7 hours per week. F

OTA 220 – Pediatric and Adolescent Practice (4 cr.)
Prerequisite(s): One-Year Certificate Pre-Occupational Therapy Assistant; accepted admission into OTA program with a minimum GPA of 2.5.
Treatment of pediatric and adolescent conditions. Normal and delayed development of the infant, child, and adolescent are explored. The lab component incorporates theoretical principles and provides opportunities for students to develop assessment, intervention planning and implementation, and documentation skills to address a range of childhood sensory-motor, cognitive, and psychosocial performance deficits. Students will learn to adapt the environment, tools, materials, and occupations to meet the self-care, work/play, and leisure needs of the pediatric and adolescent population. Lab activities, site visits, and Level I fieldwork opportunities will enable students to participate in and apply pediatric and adolescent treatment principles to practice. Lecture 3 hours/Laboratory 3 hours/Clinical 4 hours/Total 10 hours per week. F

OTA 250 – Functional Kinesiology (2 cr.)
Prerequisite(s): OTA 200, OTA 205, OTA 210, OTA 215, and OTA 220.
In this course, students use and apply their knowledge of anatomy and physiology to study muscle groups and their function relative to performing various activities. Analysis of functional movement patterns required for work, self-care, play, and leisure activities is emphasized. Principles and techniques of manual muscle testing and range of motion are practiced, specifically as they relate to the impact on daily activities. Principles of energy conservation, joint protection, and work simplification are presented. Prevention, health maintenance, and safety procedures relevant to functional activities are reviewed. Lecture 1 hour/Laboratory 3/Total 4 hours per week. SP

OTA 255 – Physical Disabilities Practice (4 cr.)
Prerequisite(s): OTA 200, OTA 205, OTA 210, OTA 215, and OTA 220.
This course provides in-depth opportunities for students to develop assessment, intervention planning, intervention, and documentation skills to address a wide range of adult and geriatric physical disabilities and conditions typically treated by occupational therapy and occupational therapy assistants. Topics include, but are not limited to, stroke, spinal cord injury, fractures and joint replacement, head injury, and cardiopulmonary disorders. The use of splinting, orthotics, modalities, and assistive technology in treatment will also be presented. Students will learn to adapt the environment, tools, materials, and occupations to meet the self-care, work, play, and leisure needs of the adult and geriatric population. Lab activities and Level I fieldwork opportunities will enable students to participate in and apply physical disabilities treatment principles to practice. Lecture 3 hours/Laboratory 3 hours/Clinical 4 hours/Total 10 hours per week. SP

OTA 260 – Community Practice and Emerging Practice in Occupational Therapy (3 cr.)
Prerequisite(s): OTA 200, OTA 205, OTA 210, OTA 215, and OTA 220.
Students will learn the basic roles and functions of an occupational therapy practitioner and the role of occupational therapy in medical, educational, and community models, as well as emerging areas of practice that are predicted to grow in the future. Students explore a variety of work settings, and/or types of practice including OT role delineations in community based and non-traditional settings. The student will study specialty areas through case discussion, enhancement of treatment techniques, review of literature, and current trends. Site visits and volunteer opportunities will enable students to participate in and apply occupational therapy assessment and intervention principles to a wide range of community settings including vocational, vocational rehabilitation, home health, and emerging community practice areas. Emphasis will be on community settings in the students' state and geographic region. Lecture 3 hours/Clinical 3 hours/Total 6 hours per week. SP

OTA 265 – Ethics, Management, and Leadership (3 cr.)
Prerequisite(s): OTA 200, OTA 205, OTA 210, OTA 215, and OTA 220.
This course focuses on the OTA role in managing and directing occupational therapy services. It covers ethical provision of services, departmental operations, program development, supervisory requirements, personnel development and supervision, professional team building, quality assurance, compliance with regulations, reimbursement, and national and state credentialing requirements. Techniques for developing a resume and job interview skills are practiced. The importance and responsibility for ongoing OTA professional development, ethical practice, contributing to research and evidence based practice, attention to emerging practice issues and areas, and international perspectives are explored. Lecture 3 hours per week. SP

OTA 270 – Professional Skills (3 cr.)
Prerequisite(s): OTA 200, OTA 205, OTA 210, OTA 215, and OTA 220.
This course is designed to foster practical professional skills in critical thinking, using literature to make evidence-based practice decisions and recommendations, and using theory to guide practice, all through the completion of a professional portfolio. Lecture 3 hours per week. SP

OTA 290 – Level II Fieldwork A (8 cr.)
Prerequisite(s): OTA 250, OTA 255, OTA 260, OTA 265, and OTA 270.
Full-time clinical fieldwork experience in mental health, physical disabilities, geriatric, pediatric and/or community-based practice working under the supervision of an OTR and/or COTA. Focus is on achieving entry-level competence in planning and implementing interventions. S

OTA 295 – Level II Fieldwork B (8 cr.)
Prerequisite(s): OTA 250, OTA 255, OTA 260, OTA 265, and OTA 270.
Full-time clinical fieldwork experience in mental health, physical disabilities, geriatric, pediatric, and/or community-based practice working under the supervision of an OTR and/or COTA. Focus is on achieving entry-level competence in planning and implementing interventions. S

Paramedic

PARA 210 – Paramedic I (12 cr.)
Prerequisite(s): Admission to the Paramedic program.
Corequisite(s): PARA 215.
The course is based on the current National Emergency Medical Services Education Standards and The National EMS Scope of Practice Model. This course is organized to cover the Preparatory, Airway Management, Patient Assessment, and medical portion of the National Curriculum. The class time includes both didactic, psychomotor, and affective training of the EMS skills needed. Hybrid-blended course. Lecture 10 hours/Laboratory-Clinical 6 hours/Total 16 hours per week. F

PARA 215 – Paramedic Internship I (2 cr.)
Prerequisite(s): Admission to the Paramedic program.
Corequisite(s): PARA 210.
The course is based on the current National Emergency Medical Services Education Standards and The National EMS Scope of Practice Model. This course includes a scheduled hospital clinical experience during which the paramedic student will utilize the knowledge and skills learned in the classroom and College lab. The student is evaluated by hospital staff while performing intravenous access and/or fluid and medication administration, basic and advanced airway management, and patient care in the hospital setting. The course is based on the current National Emergency Medical Services Education Standard Curriculum. Clinical 6 hours per week, Total 90 hours. F

PARA 220 – Paramedic II (12 cr.)
Prerequisite(s): PARA 210 and PARA 215.
Corequisite(s): PARA 225.
This course is based on the current National Emergency Medical Services Education Standards and the National EMS Scope of Practice Model. Students build upon previous knowledge and skills to provide advanced life support pre-hospital care to the medical, trauma, and special consideration patient. Hybrid-blended course. Lecture 10 hours/Laboratory-Clinical 6 hours/Total 16 hours per week. SP

PARA 225 – Paramedic Internship II (4 cr.)
Prerequisite(s): PARA 210 and PARA 215.
Corequisite(s): PARA 220.
The course is based on the current National Emergency Medical Services Education Standards and the National EMS Scope of Practice Model. This is a scheduled hospital clinical experience during which the student will use the knowledge and skills learned in the classroom and College lab. The student is evaluated by hospital staff while performing the advanced skills in intubation, suctioning, venipuncture, IV insertion, mixing IV additives, medication administration, dysrhythmia interpretation defibrillation, and management of medical/traumatic emergencies. Clinical 9 hours per week. SP

PARA 230 – Paramedic III (2 cr.)
Prerequisite(s): PARA 220 and PARA 225.
Corequisite(s): PARA 235.
The course is based on the current National Emergency Medical Services Education Standards and The National EMS Scope of Practice Model. It is a continued in-depth study of advanced life support techniques with a focus on leadership and recognizing the student's role in critical patient care and EMS operations. This course is also to prepare the student for National Registry exam. Laboratory-Clinical 6 hours per week. S

PARA 235 – Paramedic Internship III (6 cr.)
Prerequisite(s): PARA 220 and PARA 225.
Corequisite(s): PARA 230.
The course is based on the current National Emergency Medical Services Education Standards and The National EMS Scope of Practice Model. It is a scheduled internship on advanced life support, ambulances providing Team lead, and skill performance opportunities under the direct supervision of a trained preceptor. The student is evaluated by trained preceptors in the pre-hospital treatment of the sick or injured and the performance of skills learned in the College lab. Lecture 18 hours per week. S

Philosophy and Religion

PHIL 200 – Introduction to Philosophy (3 cr.)
MOTR PHIL 100
Prerequisite(s): ENGL 111.
Introduction to Philosophy provides an introduction to the basic concepts of metaphysics, ethics, consciousness, freedom, and knowledge based on selections from written works of notable philosophers. Students apply philosophical principles in a personal worldview and discuss a variety of philosophical ideas and viewpoints. Lecture 3 hours per week. F, SP, S

PHIL 233 – Ethics (3 cr.)
MOTR PHIL 102
Prerequisite(s): ENGL 111.
Ethics is an introductory survey of the major philosophers and theories in the field of ethics. Students, through reading, writing, and group discussion, demonstrate how ethical philosophies apply to contemporary ethical situations, evaluate the possible outcomes of different ethical choices, and compose a personal ethical worldview. Lecture 3 hours per week. SP

PHIL 243 – Religions of the World (3 cr.)
MOTR RELG 100
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
Religions of the World provides students with an introduction to today's five major religions: Hinduism, Buddhism, Islam, Judaism, and Christianity. Through reading, writing, and discussion, students recognize the importance of religion in human culture; identify the history, teachings, writings, and theologies of the selected religions; compare religions in terms of their comprehensive theologies; and demonstrate a critical appreciation of each faith studied. Lecture 3 hours per week. F, W, SP, S

Physics

PHYS 100 – Survey of Physics (3 cr.)
MOTR PHYS 100
Prerequisite(s): MATH 02 or ENGR 106 or placement of MATH 153.
This course provides a study of the technical principles and applications of the basic laws of physics. Key terms and concepts applicable to physics are addressed. Problem-solving skills are also a focus for the course. This course is not open to students with credit in PHYS 101. Lecture 3 hours per week. F, SP

PHYS 101 - Physical Science (5 cr.)

MOTR PHYS 110L

Prerequisite(s): MATH 02 or placement of MATH 153 and READ 02 or Reading placement of ENGL 111.

Corequisite(s): Intermediate Algebra (MATH 153) or instructor consent.

The course provides a study of basic concepts of physics, chemistry, astronomy, geology, and meteorology and their interrelation in the physical world. The course includes a laboratory experience. The course is intended for non-science majors only. The course requires a basic understanding of elementary algebra. Lecture 4 hours/Laboratory 2 hours/Total 6 hours per week. F, W, SP, S

PHYS 150 - Environmental Geology (4 cr.)

MOTR GEOL 100

This course provides an introduction to the relationship between geology, life, and society. The course explores the fundamental concepts of environmental geology, which includes Earth's systems, hazardous Earth processes, scientific knowledge and values, human population growth, and sustainability. Lecture 3 hours per week. F, SP

PHYS 211 - General Physics I (5 cr.)

MOTR PHYS 200L

Prerequisite(s): MATH 171.

Corequisite(s): MATH 271.

This course is the first of a rigorous 2-course sequence in calculus-based physics for all science and engineering majors expecting to transfer to a four-year college or university. It may also be taken to transfer to other college or university programs requiring introductory physics. It covers the topics of properties of matter, mechanics, oscillation, and waves. The course requires prior completion of an introductory course in differential and integral calculus. Lecture 4 hours/Laboratory 2 hours/Total 6 hours per week. F

PHYS 212 - General Physics II (5 cr.)

Prerequisite(s): PHYS 211.

Corequisite(s): MATH 272.

This course is the second of a rigorous 2-course sequence in calculus-based physics for all science and engineering majors expecting to transfer to a four-year college or university. It may also be taken to transfer to other college or university programs requiring introductory physics. It covers the topics of waves, light, electricity, and magnetism. The course requires prior completion of an introductory course in differential and integral calculus. Lecture 4 hours/Laboratory 2 hours/Total 6 hours per week. SP

Plumbing

PLUM 105 – Basic Plumbing (3 cr.)

Fundamentals of plumbing are explored in this course. Study of the industry survey, occupational information, and career information. Occupational hazards, along with health and safety practices as they relate to applicable local, state, and national regulations are studied. This course develops knowledge and skills in the fundamentals of plumbing, mathematics, and elementary drawings for beginners. Instruction is given in the principles and design of water supply and distribution. Course is designed to assist students in preparing for related portion of NOCTI exam. Lecture 3 hours/Laboratory 2 hours/Total 5 hours per week. F, SP

PLUM 106 – Plumbing Materials and Methods (3 cr.)

This course emphasizes principles of sizing and layout of hot and cold water systems, sanitary waste and vent systems, selection and specification of fixtures, and plumbing system accessory devices. Instruction is given in layout procedures involving applied mathematics concerning the plumbing trades. Instruction is given in both layout and design criteria. This course covers introductory fabrication and erection of plumbing systems. Course is designed to assist students in preparing for related portion of NOCTI exam. Lecture 3 hours/Laboratory 2 hours/Total 5 hours per week. F

PLUM 107 – Plumbing Construction (3 cr.)

This course provides students with practical experience in the safe installation of drain, waste, and vent piping systems, residential plumbing fixtures, and appliances. This course provides students with the technical understanding and skills in blueprint reading needed by plumbers. Topics include drawing interpretation, isometric sketches of piping installations, and sketching mechanical plans of piping for residential construction. Course is designed to assist students in preparing for related portion of NOCTI exam. Lecture 3 hours/Laboratory 2 hours/Total 5 hours per week. F, SP

PLUM 115 – Plumbing II (3 cr.)

Prerequisite(s): PLUM 105, PLUM 106, and PLUM 107 or instructor consent.

This course provides students with the technical knowledge and skills for completing copper and crossed-linked polyethylene (PEX) piping procedures. Topics include safety, appropriate usage, properties of copper/PEX, sizes and weights of pipe, tubing, and fittings including flared and compression types, soldering and brazing techniques for copper pipe-work and PEX crimp fittings. Additionally, this course provides students with an understanding and skills for completing plastic piping procedures. Topics include safety, joining drainage, waste, vent, water, and distribution piping, chemical usage, and applicable codes for plastic piping procedures. Course is designed to assist students in preparing for related portion of NOCTI exam. Lecture 3 hours/Laboratory 2 hours/Total 5 hours per week. SP

PLUM 116 – Basic Electrical Technology for Plumbing (3 cr.)

Prerequisite(s): PLUM 105, PLUM 106, and PLUM 107 or instructor consent.

This course provides students with knowledge and skill in the areas of electrical safety, electrical terminology, and the use of a meter to measure voltage, current, and resistance. This course also covers types of wire, wire sizing, wiring methods, and problem-solving with Ohm's Law. Instruction is provided in sizing wire, proper grounding methods, single-phase and three-phase circuits, circuit breakers, and fuses. Students practice methods of stripping, splicing, and terminating wires for installation of common appliances requiring electricity, such as a garbage disposal or water heater. Course is designed to assist students in preparing for related portion of NOCTI exam. Lecture 3 hours/Laboratory 2 hours/Total 5 hours per week. SP

PLUM 215 – Plumbing III (3 cr.)

Prerequisite(s): PLUM 105, PLUM 106, and PLUM 107 or instructor consent.

This course includes basic pipe-fitting projects, including proper assembly, measurement, and testing of all piping systems. Lab activities include fixture installations such as wall-hung lavatories, water closets, bathtub installations, and kitchen sink installations. This course also provides students with skills for completing steel pipe and corrugated stainless steel gas pipe procedures. Topics include appropriate usage, fittings, safety, tools, equipment, and skill development in cutting, threading, fabricating steel piping systems, and termination of corrugated stainless steel piping. Course is designed to assist students in preparing for related portion of NOCTI exam. Lecture 3 hours/Laboratory 2 hours/Total 5 hours per week. SP

PLUM 216 – Plumbing System Service and Repair (3 cr.)

Prerequisite(s): PLUM 115, PLUM 116, and PLUM 215 or instructor consent.

This course focuses on proper methods of repairing all forms of plumbing piping, fixtures, and some appliances. Students are trained in preparing for the repair job and estimating the cost of the job. Emphasis placed on the integration of new materials, methods, and equipment in existing plumbing systems. Remodeling of existing plumbing is also presented in this course. Course is designed to assist students in preparing for related portion of NOCTI exam. Lecture 3 hours/Laboratory 2 hours/Total 5 hours per week. S

PLUM 217 – Advanced Plumbing Systems (3 cr.)

Prerequisite(s): PLUM 115, PLUM 116, and PLUM 215 or instructor consent.

Energy conservation, water conditioning, and the latest innovations in appliances and accessories are covered in this overview course. Students study tankless water heaters, water softening systems, sump pumps, and other appliances and accessories in use in both residential and commercial building systems. Course is designed to assist students in preparing for related portion of NOCTI exam. Lecture 3 hours/Laboratory 2 hours/ Total 5 hours per week. S

Practical Nurse

PNRS 105 - Personal and Vocational Concepts (3 cr.)
Prerequisite(s): Admission to the Practical Nursing Program.
This course is designed to help the adult learner adjust to the role of a student and to understand the role of the practical nurse. The course includes strategies to promote student success and focuses on practical nursing concepts that are required by the Missouri State Board of Nursing. Lecture 3 hours per week. F, SP

PNRS 115 - Fundamentals of Nursing (12.25 cr.)
Prerequisite(s): Admission to the Practical Nursing Program.
This course teaches fundamental nursing knowledge and basic nursing skills needed to provide safe nursing care. Nursing skills are taught in the laboratory setting. Students will apply knowledge and learned skills in the clinical setting. Lecture 10 hours/Laboratory 5 hours/Clinical 4 hours/Total 19 hours per week. F, SP

PNRS 116 - Pediatric Nursing (3 cr.)
Prerequisite(s): PNRS 115.
This course focuses on nursing care of children from infancy through adolescence. Nursing care and interventions are discussed for selected pediatric diseases and conditions. Clinical experience is included in this course. Lecture 2.8 hours/Clinical .8 hours/Total 3.6 hours per week. F, SP

PNRS 117 - Intravenous Therapy (.75 cr.)
Prerequisite(s): Admission to the Practical Nursing Program.
This course prepares the student to become IV-certified as a practical nurse in accordance with the Missouri Rule 20 CSR 2200-6.030. Lecture .75 hours per week. F, SP

PNRS 118 - Medical Surgical Nursing I (7 cr.)
Prerequisite(s): PNRS 115.
This course builds upon previously learned knowledge and skills. The course focuses on nursing care of the client with alterations in health. Specific focus is placed on immunity; fluid and electrolytes; surgical care; digestive; skin; urologic; musculoskeletal; eyes, ears, nose, and throat disorders. Clinical experience is included in this course. Lecture 6 hours/Clinical 4 hour/Total 10 hours per week. F, SP

PNRS 119 Medical Surgical Nursing II (7 cr.)
Prerequisite(s): PNRS 115.
This course builds upon previously learned knowledge and skills. The course focuses on nursing care of the client with alternations in health. Specific focus is placed on cardiovascular; neurological; respiratory; shock, cancer, and endocrine disorders. Clinical experience is included in this course. Lecture 6 hours/Clinical 4 hour/Total 10 hours per week. F, SP

PNRS 125 - Maternal/Newborn Nursing (3 cr.)
Prerequisite(s): PNRS 115.
This course focuses on safe nursing care for the maternal and newborn client. The student will learn about maternal care, conception through delivery, and newborn care. Clinical experience is included in this course. Lecture 2.8 hours/Clinical .8 hours/Total 3.6 hours per week. F, SP

PNRS 126 – Pharmacology (4 cr.)
Prerequisite(s): PNRS 115.
This course provides the student with knowledge of basic pharmacological principles. Lessons are categorized by pharmacological classifications with representative medications. Focus is placed on safe nursing care related to pharmacological therapy. Lecture 4 hours per week. F, SP

PNRS 127 - Mental Health (3 cr.)
Prerequisite(s): Admission to the Practical Nursing Program.
This course is designed to provide the student with the basic mental health concepts. Focus is placed on care of clients with common mental health illnesses. Mental health issues throughout the lifespan are discussed. Clinical experience is included in this course. Lecture 2.8 hours/Clinical .8 hour/Total 3.6 hours per week. F, SP

PNRS 128 - Leadership and Management (3.5 cr.)
Corequisite(s): PNRS 119.
This course focuses on the role of a Licensed Practical Nurse as a part of the dynamic healthcare system. Preceptor clinical experience is included in this course. In addition, the course will prepare the student to take the NCLEX-PN. Lecture 2 hours/Clinical 6 hours/Total 8 hours per week. F, SP

Psychology

PSYC 111 - General Psychology (3 cr.)
MOTR PSYC 100
Prerequisite(s): READ 02 or Reading Placement of ENGL 111. ENGL 02 or Writing Placement of ENGL 08 or higher.
General psychology addresses the basics of human development. The course analyzes psychological concepts and the various types of learning. Students will assess the relationship between brain development and behavior as it relates to psychological concepts. Lecture 3 hours per week. F, W, SP, S

PSYC 112 - Psychology of Personal Adjustment (3 cr.)
Prerequisite(s): PSYC 111.
Psychology of Personal Adjustment continues from General Psychology by completing the discussion on the basics of behavior and mental processes of organisms. The course reviews thinking, motivation, emotion, stress, personality, and psychological disorders. Students assess the relationship between behavior and mental processes as it relates to psychological concepts. Lecture 3 hours per week. SP

PSYC 223 - Child Psychology (3 cr.)
Prerequisite(s): ENGL 111.
Child Psychology looks at the physical, cognitive, and social development of the child through adolescence. The course reviews the major theories of child and adolescent development. This course also examines the child through adolescence in the context of the family, school, media, culture, and/or psychopathy. Lecture 3 hours per week. F, SP, S

PSYC 233 - Adolescent Psychology (3 cr.)
Prerequisite(s): ENGL 111.
Adolescent Psychology looks at the physical, cognitive, and social development of the adolescent. The course reviews the major theories of adolescent development. This course also examines the adolescent in the context of the family, school, media, culture, and/or psychopathy. Lecture 3 hours per week. F

PSYC 243 - Human Development Across the Life Span (3 cr.)
MOTR PSYC 200
Prerequisite(s): READ 02 or Reading Placement of ENGL 111. ENGL 02 or Writing Placement of ENGL 08 or higher.
Human Development Across the Lifespan defines the systematic changes and continuities that fall into three broad domains: physical development, cognitive development, and psychosocial development. The course reviews the major theories of human development. This course also examines the individual in the context of the family, school, media, culture, and/or psychopathy. Lecture 3 hours per week. F, W, SP, S

PSYC 255 – Abnormal Psychology (3 cr.)
Prerequisite(s): BHS 206 and PSYC 111.
Abnormal Psychology emphasizes terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion of this course, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques. Lecture 3 hours per week. SP

Reading

READ 01 – Transitional College Reading I (4 cr.)
Corequisite(s): ACAD 101, if course requirement has not previously been met.
This course is the first of 2 courses to assist students in developing the skills required for college-level reading. With emphasis on building vocabulary, improving reading comprehension, and increasing reading rate, this course aims to empower students with independent learning techniques and effective study skills. Lecture 3 hours per week. F, SP, S

READ 02 – Transitional College Reading II (4 cr.)
Prerequisite(s): READ 01 or placement score of READ 02.
Corequisite(s): ACAD 101, if course requirement has not previously been met.
This course specifically focuses on advancing skills such as vocabulary, main idea, supporting details, inferences, organization, and textbook annotation. In addition, digital literacy, critical reading, and critical thinking skills are developed, specifically through the use of contextualized reading passages from a wide variety of disciplines and sources. Lecture 3 hours per week. F, SP, S

Social Work

SWRK 100 - Social Work (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
Social Work 100 introduces students to the discipline of social work (its origins, career potential, practice settings, and future trends) and provides a broad-based knowledge of social work generalist practice in diverse settings. Lecture 3 hours per week. F

SWRK 201 - Social and Economic Justice (3 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course introduces students to the concepts and issues of social and economic justice as they relate to the field of social work. Lecture 3 hours per week. SP

SWRK 221 - Interviewing Skills for Generalist Practice (3 cr.)
Prerequisite(s): SWRK 100 or BHS 206.
This course provides an introduction to basic interviewing skills for generalist social work practice. Lecture 3 hours per week. SP

Sociology

SOCI 111 - General Sociology (3 cr.)
MOTR SOCI 101
Prerequisite(s): READ 02 or Reading Placement of ENGL 111. ENGL 02 or Writing Placement of ENGL 08 or higher.
Sociology is the scientific study of human groups, throughout time and across cultures. This course teaches students to examine the underlying perspectives about the foundations of society, social inequality, social institutions, and social change at both national and international levels. At its core, it provides students with key questions that can be used throughout their lives to question the roots of inequality, interconnectedness, and social complexity. Lecture 3 hours per week. F, W, SP, S

SOCI 221 - Race and Ethnicity (3 cr.)
Prerequisite(s): READ 92 ir Reading Placement of ENGL 111. ENGL 02 or Writing Placement of ENGL 08 or higher.
Race and Ethnicity examines marginalized group experiences in American society and on a global scale. Intersections of race, gender, class, and identity will be examined. The sociocultural history, immigration, patterns of intergroup relations, and current status of various groups are explored. Lecture 3 hours per week. SP

SOCI 223 - Marriage and the Family (3 cr.)
Prerequisite(s): SOCI 111.
This course is an examination of various aspects of current family systems with an emphasis on their strengths and diversity. Five significant aspects are examined: the social context of intimate relationships, development and dynamics of intimate relationships, stages of marriage and family life, and challenges and opportunities facing families. Lecture 3 hours per week. F

SOCI 230 - Criminology (3 cr.)
Prerequisite(s): ENGL 111.
Criminology offers an introductory look at crime, crime patterns, crime causation, and societal reactions to crime. A multidisciplinary approach is used to examine crime from biological, psychological, and sociological theoretical perspectives. Lecture 3 hours per week. SP, S

SOCI 234 - Social Problems (3 cr.)
Prerequisite(s): SOCI 111.
The social problems course is designed to stimulate thinking about the issues facing society in the era of globalization. It explores multiple sociological perspectives and reframes the "problems" as "puzzles" – examining how we are interconnected, the power dynamics involved in global stratification, and the complexities of potential root causes and solutions. Lecture 3 hours per week. F, SP

Spanish

SPAN 101 - Elementary Spanish I (3 cr.)
MOTR LANG 103
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This is an introductory course in the Spanish language. Students learn beginning vocabulary and develop basic listening, speaking, reading, and writing skills in the present tense in Spanish. Students are given the opportunity to actively communicate in Spanish as much as possible. They also gain knowledge about Spanish-speaking countries and culture. Lecture 3 hours per week. F, SP, S

SPAN 102 - Elementary Spanish II (3 cr.)
MOTR LANG 104
Prerequisite(s): SPAN 101 with a minimum letter grade of C.
Students learn more common vocabulary and continue to develop listening, speaking, reading, and writing skills in the present, future, and past tenses in Spanish. In-class exposure to Spanish is increased and opportunities to communicate in Spanish are more extensive. They obtain further knowledge of Hispanic cultures, as well. Lecture 3 hours per week. SP, S

SPAN 201 - Intermediate Spanish I (3 cr.)
Prerequisite(s): SPAN 102 or equivalent.
While students continue to learn vocabulary and culture relevant to life in the 21st century Spanish-speaking world, they also learn methods of communication in the past in Spanish, including the preterite, imperfect, and present perfect tenses. In addition, they are given more frequent opportunities to carry on conversations in role-plays in order to increase their oral confidence and fluency. Lecture 3 hours per week. F

SPAN 202 - Intermediate Spanish II (3 cr.)
Prerequisite(s): SPAN 201 or equivalent.
Students learn vocabulary and culture relevant to health, professions, and tourism. Methods for utilizing Spanish persuasively are given and exercised as students learn the imperative and subjunctive moods, as well as the conditional and future tenses. They are again given opportunities to converse in role-plays. Students will be able to further their Spanish subsequently either at the 300 level at university or by traveling abroad. Lecture 3 hours per week. SP

Speech Communication

SCOM 101 - Human Communication (3 cr.)

MOTR COMM 100

Prerequisite(s): READ 02 or Reading Placement of ENGL 111. ENGL 02 or Writing Placement of ENGL 08 or higher.

This course is designed to introduce students to both the theories and application of oral communication. Students are instructed in interpersonal, group, organizational, and public communication contexts. A variety of exercises give students the opportunity to recognize and advance basic communication skills. Lecture 3 hours per week. SP, S

SCOM 110 - Public Speaking (3 cr.)

MOTR COMM 110

Prerequisite(s): READ 02 or Reading Placement of ENGL 111. ENGL 02 or Writing Placement of ENGL 08 or higher.

This course is designed to introduce students to both the theories and application of oral communication. Students are instructed in the areas of purpose, content, organization, and presentation. In addition, instruction is provided in general concepts, including, but not limited to, interpretation, critical listening, evaluation, ethics, and nonverbal communication. A variety of learning exercises are employed to assist students in developing and enhancing public speaking skills accordingly. Lecture 3 hours per week. F, W, SP, S

SCOM 125 - Communication in the Workplace (3 cr.)

A study in communication concepts, strategies, and rules that govern human interaction in the workplace. Lecture 3 hours per week. F

SCOM 210 - Interpersonal Communication (3 cr.)

MOTR COMM 120

Prerequisite(s): READ 02 or Reading Placement of ENGL 111. ENGL 02 or Writing Placement of ENGL 08 or higher.

A study in the theory and practice of interpersonal communication within a variety of contexts. This course is designed to promote awareness and understanding of how human communication processes impact perception, understanding, and the assignment of meaning. Students explore and participate in principles of self-realization, behavioral communication, effective listening, conflict management, climates, and gender and cultural implications on communication. Lecture 3 hours per week. F

SCOM 243 - Argumentation and Debate (3 cr.)

MOTR COMM 220

Prerequisite(s): SCOM 110 with a minimum grade of C.

This is a basic course that introduces students to the principles and foundations of argumentation. The course is centered on argumentative analysis, evidence, reasoning, and presentation. Students will develop skills in the construction, delivery, and evaluation of arguments. Lecture 3 hours per week. SP

Surgical Technology

SURG 106 – Fundamentals of Surgical Technology (7 cr.)

Prerequisite(s): Instructor Consent

This course introduces the student to the organization of healthcare and the operating room. This course includes introductory knowledge and technical skills that will serve as the foundation upon which the student will build to become a competent entry-level surgical technologist. Lecture 3 hours/Lab 4 hours per week Total 7 hours. SP

SURG 107 – Pharmacology Surgical Tech (1 cr.)

Prerequisite(s): SURG 107

Corequisite(s): SURG 115 and SURG 116

In this course, the student will learn safe use of medications and solution handling in the surgical environment. Lecture 1 hour per week. F

SURG 115 – Surgical Technology I (7 cr.)

Prerequisite(s): SURG 106

Corequisite(s): SURG 107 and SURG 116

This course integrates prior knowledge and skills with new concepts to allow the student to expand their role and provide a more comprehensive approach to caring for surgical patients in a variety of general and specialty procedures. Lecture 3 hours/Lab 4 hours/Total 7 hours per week. F

SURG 116 – Surgical Technology Practicum I (5 cr.)

Prerequisite(s): SURG 106

Corequisite(s): SURG 107 and SURG 115

This course provides clinical experience with a variety of perioperative assignments to build upon skills learned in SURG 106 and SURG 115. Emphasis is on the scrub and circulating roles of the surgical technologist, including aseptic technique and basic case preparation for selected surgical procedures. Clinical 5 hours per week. F

SURG 207 – Professional Practice (5 cr.)

Prerequisite(s): SURG 107, SURG 115, and SURG 116

Corequisite(s): SURG 215 and SURG 216

The student will gain an understanding of the importance of continuing education certification, and professional development while learning to participate in risk management and ethical, legal, and moral issues. Lecture 1 hour per week. SP

SURG 215 – Surgical Technology II (5 cr.)

Prerequisite(s): SURG 107, SURG 115, and SURG 116

Corequisite(s): SURG 207 and SURG 216

This course will integrate previously learned skills and knowledge with new concepts as well as develop current skills and knowledge in order to perform safely in unexpected surgical scenarios. The student will also explore more diverse roles and concepts within the procedural setting. Lecture 4 hours/Lab 1 hour/Total 5 hours per week. SP

SURG 216 – Surgical Technology Practicum II (1 cr.)

Prerequisite(s): SURG 107, SURG 115 and SURG 216

Corequisite(s): SURG 207 and SURG 215

This course will allow the student to perform clinical proficiencies discussed in SURG 106, SURG 107, SURG 116, and SURG 215. The students will be expected to perform safely in the primary scrub, second-assist, and circulating surgical technologist roles. Clinical 5 hours per week. SP

Theatre Arts

THEA 120 - History and Appreciation of Theatre (3 cr.)

MOTR THEA 100A

Prerequisite(s): READ 02 or Reading placement of ENGL 111.

This course examines the development of theatre and its cultural significance throughout history. The course study includes the artistic and technical elements of theatre, significant movements in the history of theatre, different styles and genres of plays, and theatre criticism. Lecture 3 hours per week. F, SP

THEA 122 - History and Appreciation of Film (3 cr.)

MOTR FILM 100

Prerequisite(s): READ 02 or Reading placement of ENGL 111.

This course examines the development of motion pictures as an art form throughout its history. The course study includes the artistic elements of cinema, domestic and international cinema, significant movements in cinema's history, and different styles, forms, and genres of cinema. Lecture 3 hours per week. F, SP, S

Transportation

TRNS 105 – Commercial Driving (6 cr.)
Prerequisite(s): READ 02 or Reading placement of ENGL 111.
This course provides instruction in Commercial Driving. Topics include road conditions and restrictions, laws and regulations, documentation and planning, and the safe operation of a commercial vehicle in preparation for the Missouri Commercial Driving Permit written examination. The technical skills portion of the course will include pre-trip inspections, shifting, acceleration, parallel parking, 90-degree angle and alley dock, offset parking, straight-line backing maneuvers, and safe driving techniques for operations of a tractor-trailer. Upon successful completion, students may obtain a Missouri Class A Commercial Driving License to prepare students for employment in the transportation industry. The course is forty hours per week for five consecutive weeks. Students are required to pass a Department of Transportation (DOT) medical examination and drug test, scheduled by the instructor, with a licensed medical examiner prior to taking the Missouri Commercial Driving Permit written examination. Lecture 2 hours/Laboratory 4 hours/Total 6 hours per week. F, SP, S

Welding

WELD 156 – Introduction to SMAW (Shielded Metal Arc Welding) (4 cr.)
This introductory course is designed to develop knowledge, skills, and behaviors in welding safety, operation of welding power sources, and accessories, and using the Arc welding process. Lecture 2 hours/Laboratory 4 hours/Total 6 hours per week. F, SP

WELD 157 – Introduction to GTAW (Gas Tungsten Arc Welding) (4 cr.)
This introductory course is designed to develop knowledge, skills, and behaviors in welding safety, gas cylinder usage, and storage. The course covers welding power sources, accessories, and welding positions. Lecture 2 hours/Laboratory 4 hours/Total 6 hours per week. F, SP

WELD 158 – Introduction to GMAW (Gas Metal Arc Welding) (4 cr.)
This introductory course is designed to develop knowledge, skills, and behaviors in welding safety, gas cylinder usage, and storage. The course covers Gas Metal Arc Welding fundamentals, equipment set up, adjustment, and metal transfer with shielded gases. Lecture 2 hours/Laboratory 4 hours/Total 6 hours per week. F, SP

WELD 159 – Introduction to FCAW (Flux Cored Arc Welding) (4 cr.)
This introductory course is designed to develop knowledge, skills, and behaviors in welding safety, gas cylinder usage, and storage. This course covers use of semi-automatic flux core welding machine power sources, equipment, and accessories, machine adjustments, and recognition of weld quality. The student develops skills to make multi-pass welds in all welding positions. Lecture 2 hours/Laboratory 4 hours/Total 6 hours per week. F, SP

WELD 165 – Welding Blueprint Reading (3 cr.)
This advanced level course is designed to reinforce concepts such as welding safety, gas cylinder usage and storage, and equipment maintenance. Best practices in the advanced techniques of GMAW (Gas Metal Arc Welding) including operation of welding machine power sources with accessories, material information, and selection of welding fillet gauge is studied. The student develops the ability to make welds in positions 1F – 4F, on fillet and butt joints using hard MIG wire. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F, SP

WELD 167 – Thermal Cutting (2 cr.)
This course is designed for the student to learn a variety of cutting techniques using an oxygen and acetylene torch, plasma torch, track torch, pipe torch, and arc gouge. Lecture 1 hour/Laboratory 2 hour/Total 3 hours per week. F

WELD 169 – Pipe Fitting (3 cr.)
This course is designed to develop the skills for pipe fitting. The student will learn to cut, prep, and fit pipe, and develop skills to fabricate a fit up in most positions in additions to tacking the pipe to prepare it for the welder. Lecture 1 hour/Laboratory 4 hours/Total 5 hours per week. SP

WELD 175 – Introduction to Metallurgy (2 cr.)
Recognize fundamental principles related to welding metallurgy. This includes identifying stress and distortion and how to correct distortion with stainless, aluminum, and carbon steel. Lecture 1 hour/Laboratory 2 hours/Total 3 hours per week. SP

WELD 256 – Advanced SMAW (Shielded Metal Arc Welding) (4 cr.)
Prerequisite(s): WELD 156.
This advanced level course is designed to apply welding skills to construct multi-pass fillet welds on inside corner joints, flat lap, butt joints, and stringer, and weave beads in all welding positions using various diameter electrodes. Lecture 2 hours/Laboratory 4 hours/Total 6 hours per week. F, SP

WELD 257 – Advanced GTAW (Gas Tungsten Arc Welding) (4 cr.)
Prerequisite(s): WELD 157.
This course is designed to learn proper skills in welding safety, gas cylinder usage and storage, and to develop deeper skills with gas tungsten metal arc welding, operation of welding power sources, and mechanical accessories. Metallurgy principles, proper heat and wire speed selection for a variety of material will be taught. Lecture 2 hours/Laboratory 4 hours/Total 6 hours per week. F

WELD 258 – Advanced GMAW (Gas Metal Arc Welding) (4 cr.)
Prerequisite(s): WELD 158.
This advanced level course is designed to apply knowledge, skills, and behaviors in the advanced techniques of GMAW welding. This course covers material information, selection of welding fillet gauge, weld in all welding positions on fillet and butt joints. Lecture 2 hours/Laboratory 4 hours/Total 6 hours per week. F, SP

WELD 259 – Advanced FCAW (Flux Cored Arc Welding) (4 cr.)
Prerequisite(s): WELD 159.
This course is designed to deepen the knowledge of the student with regard to welding safety, gas cylinder usage, and storage. The course will cover welding power sources, accessories, and welding positions. Lecture 2 hours/Laboratory 4 hours/Total 6 hours per week. SP

WELD 265 – Welding Fabrication (3 cr.)
This course is a comprehensive study of welding technology and applications. The course covers welding and cutting processes, welding assemblies, fabrication cutting, metallurgy, material conformity, measurement, and layout. Lecture 2 hours/Laboratory 2 hours/Total 4 hours per week. F, SP