Course Catalog
&
Student Handbook
2014 - 2015

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PDF REGULATORY PAGE

College Catalog

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Academic Programs

Course Descriptions

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Student Handbook Academic Calender

PROGRAMS

BIOLOGICAL SCIENCES-AS

Student Learning Outcomes
This program provides graduates with the courses typically required for pre-professional students during their first
two years of a bachelor's degree program.

This two-year Associate of Science pattern of study isdesigned to transfer to colleges and universities with fouryear
biology degrees.

Students will be able to:
• Communicate the nature of scientific knowledge and the scientific method and how they were developed.
• Associate biological structure and function.
• Relate molecular genetics and cell and organism function.
• Show how organisms are genetically related, interact on a population level, have evolved, and are evolving.

Attendance in Lab Science Courses
The following science courses have labs and are required to be completed for the AS in Biological Sciences:

BIOL 190, BIOL 191, BIOL 251, CHEM 121, CHEM 122, CHEM 241/241L, and CHEM 242/242L.

Each of these courses have required in-person labs. Depending on the course, the 3 hour labs may occur weekly,
on weekends, or at a time from Monday through Friday anytime from 8 a.m.–9:45 pm.

Due to GBC's personnel, equipment, and facilities, courses listed above which have the CHEM prefix have required
labs that are only offered on the Elko and Pahrump campuses. This means that AS in Biological Sciences students will be required to attend lab courses in Elko or Pahrump at least 1–2 days each week and that this is not an online degree.
Please consult an advisor for the AS in Biological Sciences for the availability details of each individual science course.

General Education
Communications and Expressions
Written Communications

(3-5 Credits)
ENG 100 or ENG 101

Oral Communications

(3 Credits)

COM 113, THTR 102, THTR 221

Evidence-Based Communications

(3 Credits)
ENG 102
Fine Arts

(3 Credits)

ART 100, ART 101, ART 107, ENG 205, MUS 101, THTR 100, THTR 105, THTR 121, THTR 204, WELD 200

Logical and Scientific Reasoning

Mathematical Reasoning

(4 Credits)

MATH 181
Scientific Reasoning

(4 Credits)

BIOL 190
Scientific Data Interpretation

(4 Credits)

CHEM 121
Human Societies and Experience
Structure of Societies

(3 Credits)
PSY 101 recommended for pre-medical related students.

ANTH 101, CRJ 104, CRJ 270, ECON 102, ECON 103, GEOG 106, HMS 200, PSY 101,

PSY 208, SOC 101

American Constitutions and Institutions

(3 Credits)
HIST 101/102 (must take both) or PSC 101 (recommended)
Humanities

(3 Credits)

ART 160, ART 260, ART 261, ENG 203, ENG 223, FIS 100, FREN 111, FREN 112, HIST 208, HIST 209, HUM 101, HUM 111, HUM 210, MUS 121, MUS 125, PHIL 101, PHIL 102, PHIL135,

SPAN 111, SPAN 112, SPAN 211

Technological Proficiency

(3 Credits)

GIS 109 or CS 135
Foundations
Mathematics

(3 Credits)

STAT 152
(Minimum 5 total credits mathematics)
Sciences

(4 Credits)

BIOL 191
Total General Education Credits 43-45

Program Requirements
BIOL 251 General Microbiology *(4 Credits)*
CHEM 122 General Chemistry II *(4 Credits)*
CHEM 241 Organic Chemistry I *(3 Credits)*
CHEM 241L Organic Chemistry for Life Sciences Lab I *(1 Credit)*
CHEM 242 Organic Chemistry II *(3 Credits)*
CHEM 242L Organic Chemistry for Life Sciences Lab II *(1 Credit)*
Program Electives (choose with advisor) *(3 Credits)*
Total credits required for Program Requirements 19 Credits
Total credits required for Associate of Science - Biological Sciences 62-64

Recommended electives: sufficient coursework is required to bring the total number of credits in the Associate of Science to 60 credits. Choose courses from the following list:
BIOL 223, 224; CHEM 100; CIT 129; ENV 100; GEOG 103; GEOL 101, 102; MATH 127, 128, 182; PHYS 182.

Note: All students graduating from Nevada institutions of higher education must satisfy the American Constitutions
and Institutions requirement. PSC 101 (3 credits) or HIST 101 and HIST 102 (6 credits).

COURSES BY SUBJECT

ACCOUNTING

ACC 105 Taxation for Individuals 3 Credits
An introduction to federal income taxation emphasizing the preparation of personal tax returns. Fundamentals of income, exclusions, deductions, credits, and tax minimization strategies.

ACC 201 Financial Accounting 3 Credits
Basic accounting principles and procedures with a focus on the corporate form of business organization. Topics include the accounting cycle, journals, ledgers, financial statements, receivables, inventory, fixed assets, current and non-current liabilities, shareholders' equity, and the statement of cash flows.

ACC 202 Managerial Accounting 3 Credits
Basic principles pertaining to the internal accounting procedures of an organization. Topics include job costing, activity-based costing, process costing, cost-volume-profit analysis, short-term decision making, capital budgeting, budgeting, variance analysis, responsibility accounting, statement of cash flows, and performance measurements.

ACC 203 Intermediate Accounting I 3 Credits
An in-depth study of various aspects of financial statements prepared according to generally accepted accounting principles. Topics include a review of basic accounting theory and practice, the development of accounting standards, the conceptual framework of accounting, and the treatment of cash, receivables, prepaid expenses, fixed assets, and intangibles.

ACC 204 Intermediate Accounting II 3 Credits
A continuation of ACC 203, Intermediate Accounting I. Topics include current liabilities and contingencies, long-term liabilities, stockholders' equity, investments, income taxes, compensation (salaries, bonuses, stock plans, post-retirement benefits) changes, correction of errors, and earnings per share.

ACC 220 Microcomputer Acct System 3 Credits
Introduction to actual computerized accounting systems being used in the business world. Emphasis is on the application of basic accounting theory using a case study approach.

ACC 261 Gov Accounting 3 Credits
An introduction to accounting and financial reporting for governmental and not-for-profit entities. Includes a study of fund and budget accounts for state and local governmental units, revenues, appropriations, disbursements, assessments, university, hospital, and other fund applications.

ACC 290 Certified Bookkeeper Course 3 Credits
This is a capstone course that is to be taken in the final semester of the AAS degree in Accounting program. Students focus systematically on mastering the curriculum for national certification as a professional bookkeeper. Specific topics include adjusting entries, correction of errors, payroll, depreciation, inventory, and internal controls.

BIOLOGY

BIOL 100 General Biology/Non Major 3 Credits
Basic biological concepts, interpretation and application of scientific methods, and effects of biological advances on society. Core curriculum science course; cannot be used for credit toward field of concentration in biology.

BIOL 105 Introduction to Neuroscience 3 Credits
An introduction to neuroscience and the impact of neural diseases on society. Same as PSY 105.

BIOL 124 Northeastern Nevada Plant 2 Credits
Study of plant identification, structure, floral adaptations, and plant ecology of native plants in northeastern Nevada.

BIOL 190 Intro Cell/Molecular Biology 4 Credits
Structure and function of cells. Major molecules of life; composition and physiology of cellular organelles; cell metabolism, reproduction, motility, and gene function of both plant and animal cells. Required for biology majors. Concurrent enrollment in a corresponding lab section is required for this course.

BIOL 191 Intro Organismal Biology 4 Credits
The study of the evolution, ecology, and diversity of life, both past and present. Required for biology majors, but will partially satisfy the science requirement for all associate's degrees. Concurrent enrollment in a corresponding lab section is required for this course.

BIOL 223 Human Anatomy & Physiology I 4 Credits
The morphology and physiology of cells, tissues, and the integumentary, skeletal, muscular, and nervous systems in a laboratory and lecture class. Designed for all life science majors but specifically for students in allied health programs. Concurrent enrollment in a corresponding lab section is required for this course.

BIOL 224 Anatomy & Physiology II 4 Credits
A continuation of Biology 223 with consideration of the circulatory, respiratory, digestive, excretory, endocrine, and reproductive systems; increased emphasis on body chemistry. Concurrent enrollment in a corresponding lab section is required for this course.

BIOL 251 General Microbiology 4 Credits
A laboratory and lecture course emphasizing taxonomy, morphology, physiology, infectious diseases, and ecology of microorganisms in addition to skills in aseptic procedures, isolation, and identification. Open to all life science majors and allied health majors.

BIOL 299 Special Topics in Biology 1-4 Credits
Topics of interest emphasizing the natural history of the Great Basin including winter bird watching, hawk watching in the Goshutes, small mammal ecology, and the flowers of the Ruby Mountains. Includes field trips. Unlimited repeatability.

BIOL 300 Principles of Genetics 4 Credits
Study of the basic principles of transmission of traits from one generation to the next. Topics include Mendelian, population, and molecular genetics with an emphasis on gene regulation. Both eukaryotic and prokaryotic systems will be described. Three hours of lecture with three hours of laboratory. It is recommended that student have completed CHEM 241 before enrolling in this course. Concurrent enrollment in a corresponding lab section is required for this course.

BIOL 305 Intro Consrvation Biology 3 Credits
Fundamental topics in conservation biology including biodiversity, invasive and endangered species, reserve design, and environmental legislation. Lecture only.

BIOL 315 Cell Biology 3 Credits
Cell structure and function at the molecular level.

BIOL 320 Invertebrate Zoology 4 Credits
The study of animals that lack a dorsal nerve cord (backbone). This course explores the origin, evolution, taxonomy, physiology, and morphology of invertebrate members of the kingdom of Animalia. The laboratory component of this course emphasizes the similarities and differences of animal phyla and requires examination and dissection of preserved specimens. Concurrent enrollment in a corresponding lab section is required for this course.

BIOL 331 Plant Taxonomy 3 Credits
The study of vascular plant identification, naming, and classification, within an evolutionary context. Evolutionary processes and the history of systematics will be discussed. Laboratory experiences will emphasize angiosperm family characteristics, the collection and preservation of plant specimens, and the identification of the northeastern Nevada flora. The course will require two hours of lecture with three hours of laboratory per week.

BIOL 341 Principles of Ecology 3 Credits
The fundamentals of ecology studied at the levels of population, community, and ecosystems.

BIOL 394 Lab Ecology/Population Biology 2 Credits
Research techniques and investigative approaches in field and laboratory studies.

BIOL 401 Biology Journal Seminar 1 Credits
Survey of periodical literature of biology. Oral and written reports by the student will give experience in searching and interpreting literature. May be repeated up to six credits.

BIOL 410 Plant Physiology 3 Credits
A survey of the basic physiologic processes of plants. Topics include photosynthesis, metabolism, nutrition, growth and development, as well as effect of environment on these processes. It is recommended that student have completed CHEM 241 before enrolling in this course.

BIOL 415 Evolution 4 Credits
Pattern and process in the evolution of life on earth.

BIOL 432 Herpetology 4 Credits
Introduction to the ecology, behavior, and evolution of amphibians and non-avian reptiles. Laboratory emphasizes the study of diagnostic characters for major groups of amphibians and reptiles, as well as field studies of species native to the Great Basin region.

BIOL 434 Mammalogy 4 Credits
The study of mammals. This course explores the origin, evolution, taxonomy, morphology, physiology, biogeography, behavior, and ecology of mammals. Laboratory will stress identification and natural history of mammals native to Nevada.

BIOL 447 Adv Compare Animal Physiology 3 Credits
Comparative physiology provides a detailed understanding of the diverse array of physiological systems evolved to allow animals to function in various environments. The comparative approach is used to understand physiological adaptations to various environments and the evolution of physiological systems. It is recommended that student have completed CHEM 241 before enrolling in this course.

BIOL 496 Advanced Topics in Modern Biol 1-3 Credits
Advanced study in a specialized area of biology. Topics are selected and published in the class schedule. May be repeated up to six credits.

TEST

PDF COURSE LIST

(AC)

AC 101 Intro to Heat/Ventilation/AC 3 Credits
A lecture, demonstration, and laboratory course introducing the basics and theory of heating, air conditioning, and refrigeration. In addition to the basic theory, students will also learn basic tools of the industry and how they are used, basic electricity, circuits, wiring, ohms, amps, watts, and resistance will be covered.

(ACC)

ACC 105 Taxation for Individuals 3 Credits
An introduction to federal income taxation emphasizing the preparation of personal tax returns. Fundamentals of income, exclusions, deductions, credits, and tax minimization strategies.

ACC 201 Financial Accounting 3 Credits
Basic accounting principles and procedures with a focus on the corporate form of business organization. Topics include the accounting cycle, journals, ledgers, financial statements, receivables, inventory, fixed assets, current and non-current liabilities, shareholders' equity, and the statement of cash flows.

ACC 202 Managerial Accounting 3 Credits
Basic principles pertaining to the internal accounting procedures of an organization. Topics include job costing, activity-based costing, process costing, cost-volume-profit analysis, short-term decision making, capital budgeting, budgeting, variance analysis, responsibility accounting, statement of cash flows, and performance measurements.

ACC 203 Intermediate Accounting I 3 Credits
An in-depth study of various aspects of financial statements prepared according to generally accepted accounting principles. Topics include a review of basic accounting theory and practice, the development of accounting standards, the conceptual framework of accounting, and the treatment of cash, receivables, prepaid expenses, fixed assets, and intangibles.

ACC 204 Intermediate Accounting II 3 Credits
A continuation of ACC 203, Intermediate Accounting I. Topics include current liabilities and contingencies, long-term liabilities, stockholders' equity, investments, income taxes, compensation (salaries, bonuses, stock plans, post-retirement benefits) changes, correction of errors, and earnings per share.

ACC 220 Microcomputer Acct System 3 Credits
Introduction to actual computerized accounting systems being used in the business world. Emphasis is on the application of basic accounting theory using a case study approach.

ACC 261 Gov Accounting 3 Credits
An introduction to accounting and financial reporting for governmental and not-for-profit entities. Includes a study of fund and budget accounts for state and local governmental units, revenues, appropriations, disbursements, assessments, university, hospital, and other fund applications.

ACC 290 Certified Bookkeeper Course 3 Credits
This is a capstone course that is to be taken in the final semester of the AAS degree in Accounting program. Students focus systematically on mastering the curriculum for national certification as a professional bookkeeper. Specific topics include adjusting entries, correction of errors, payroll, depreciation, inventory, and internal controls.

(AGSC)

AGSC 110 Intro Agriculture Management 3 Credits
Introduces agriculture management and will focus on the development of personal leadership skills as they relate to agriculture business. Students will investigate, develop, and demonstrate personal leadership skills as related to critical agriculture issues on the regional, state, and national levels.

(AIT)

AIT 120 Basic Electrical for Tech 1-3 Credits
Develop a basic understanding of DC and AC electricity in theory, and as it applies to Welding, Diesel, Industrial Maintenancee Technology, and Electrical Systems Technology.

(AM)

AM 145 American Sign Language I 4 Credits
Development of American Sign Language and its application within the deaf community. Based on the functional, national approach to learning sign language and organizes language around communicative purpose of everyday interaction. Aspects of the course include cultural awareness, grammatical features, vocabulary development, and conversational skills.

AM 146 American Sign Language II 4 Credits
Continuation of AM 145 stressing the development of basic conversational skills.

AM 147 Americn Sign Language III **4 Credits**
Designed to enable students to develop conversational competency in American Sign Language. Grammatical features and sentence structures will be taught and practiced, as well as conversational norms for receptive and expressive language use. Topics relating to deaf history and culture will be discussed as they enable the student to more effectively communicate and associate with ASL users.

AM 148 American Sign Language IV **4 Credits**
The fourth in a series for American Sign Language courses designed for a student to acquire communicative competency in ASL. The course encourages the student to expand his/her command of discourse in ASL on various everyday topics. Linguistic features of ASL are expanded, including inflection, spatialization, movement, redundancy, and use of facial expression and body postures. Class will be conducted in ASL - no voice conversations will be allowed in the classroom. No chewing gum or eating during class.

AM 295 Drill/Pract Amslan **.5-4 Credits**
Practice and drill in American Sign Language. Repeatable up to four credits.

AM 299 Special Topics in Am Sign Lang **3-6 Credits**
Development of Signing Exact English and its application within the deaf community. This process of learning sign language organizes language around communicative purpose of everyday interaction. Aspects of the course include cultural awareness, vocabulary development and conversational skills. May be repeated to a maximum of 18 credits.

(ANTH)

ANTH 400A Indians of No America **3 Credits**
Ethnographic survey of the wide variety of societies found in native North America, including regions such as the Plains, the Arctic, the Southwest, and the Southeast, among others. Course provides an overview of social institutions (i.e., religion, food getting and settlement, kinship, etc.) and changes resultant of European contact and colonization. Satisfies the diversity requirement at UNR.

ANTH 400B Indians of Great Basin **3 Credits**
Study of indigenous cultures of the intermountain region of Western North America including such groups as the Washoe, the Western Shoshone, the Northern Paiute, and the Ute. Course provides an overview of social institutions (i.e., religion, food getting and settlement, kinship, etc.) and changes resultant of European contact and colonization. Satisfies diversity requirement at UNR.

ANTH 440B Archaeology/Great Basin **3 Credits**
Examines the prehistory of the Great Basin region, including the Paleoindian, Archaic periods, and later prehistoric occupations. Explores what kinds of data archaeologists use to construct culture histories and the environmental and social factors that influenced prehistoric patterns.

ANTH 101 Intro Cultural Anthropology **3 Credits**
Study of human cultures across the globe through examination of the basic principles underlying the organization of societies and the ways anthropologists analyze various parts of culture. Students will become familiar with the glue that holds all groups of people together, and how that glue can divide groups of people in profound ways.

ANTH 102 Physical Anthropology **3 Credits**
Introduction to the study of how humans, Homo sapiens, have emerged as a species and come to dominate the planet by examining processes of human biological and cultural evolution. Topics include inheritance, the emergence of primates, fossil hominids, the development of technology, and biological variability among modern humans. Satisfies general education science.

ANTH 201 Peoples & Cultures of the Wrld **3 Credits**
Introduction to the diversity of indigenous, traditional societies in select regions of the world including such groups as herding people in Africa, hunters and gatherers in Australia, farmers in New Guinea, headhunters in Borneo, among others. The course focuses on the ethnographic description of traditional cultures and the impacts of colonization and globalization on those societies.

ANTH 202 Archaeology **3 Credits**
Study of the archaeological patterns found in the Old and New Worlds and how archaeologists study the past. Focuses on topics like the cultural changes throughout the world as early humans began making tools in Africa to the rise of civilizations such as those found in Egypt and Mexico.

ANTH 216 Cultures Through Film **3 Credits**
An exploration of societies, cultures and cultural anthropology through film. Ethnographic and documentary films are shown.

ANTH 307 Ancient Civilizations **3 Credits**
An exploration of the world's first civilizations and states in Africa, Eurasia and the Americas - the general trends in select regions and coverage of key archaeological sites. A review of theoretical perspectives on the rise and collapse of states along with techniques used in archaeology. This course satisfies the requirements for INT 349.

ANTH 332 (De)Constructing Race **3 Credits**
This course examines the concept of race from an anthropological perspective¿it is an exploration of the biological basis for human variation, the construction of racial categories, the nature of social hierarchy and inequality, and the role of race in systemic inequalities (i.e., education, economics, environment, health security, the legal system, the policing system, food security, housing, political organization, and so on) in the United States and elsewhere. This course satisfies the requirements for INT 349.

ANTH 406 Art in Small-Scale Societies **3 Credits**
This course focuses on the 'traditional' production and meaning of art in small-scale societies as well as the changes that occur with colonization and globalization among select groups from locations such as Africa, New Guinea, Australia, North and South America, and the Pacific Islands.

ANTH 423 Indigenous Identities **3 Credits**
The complexities of decolonization involve many facets of behavior as indigenous people work to upend the multigenerational impacts of colonization to achieve equity and challenge the domination of nation-states. These processes involve an assertion of indigenous identities and values related to human, cultural and land rights, and environmental and social justice. This course will examine the ways select groups are engaged in these processes.

ANTH 439 Select Top in Cultural Anthro **3 Credits**
Topic to be selected by the instructor and will reflect student needs. May be repeated to a maximum of six credits.

ANTH 458 Origins of Inequality **3 Credits**
This course explores the nature of social inequality in multiple cultural contexts including how inequality emerged in human history across time and space, and how it is expressed in different contemporary cultural contexts.

ANTH 459 Sel Topics Archaeology **3 Credits**
Topic to be selected by the instructor and will reflect student needs. May be repeated to a maximum of six credits.

(ART)

ART 100 Visual Foundations **3 Credits**
A beginning art class that includes a survey of art and the basic components of design. The class explores visual concepts as they relate to the history of art through class presentations, discussions, and a variety of media. Students should plan for three hours of studio work outside the class.

ART 101 Drawing I **3 Credits**
A disciplined foundation in drawing concepts based on visual observation skills.

ART 102 Drawing II **3 Credits**
A continuation of ART 101.

ART 106 Jewelry I **3 Credits**
Techniques of various metal construction for jewelry. Emphasis on design and craftsmanship.

ART 107 Design Fundmntls I (2-D) **3 Credits**
Explores the fundamentals of design using various media focusing on 2-D design.

ART 108 Design Fund II (3-D) **3 Credits**
Creative design with emphasis on volume and space relationships in a variety of materials.

ART 111 Beginning Ceramics **3 Credits**
Introductory and intermediate course in beginning ceramics. May repeat course up to six credits.

ART 115 Beginning Clay Sculpture **3 Credits**
Introduction to design and creation of sculpture with clay.

ART 124 Introduction to Printmaking **3 Credits**
Introduction to the traditional printmaking processes. [S/U]

ART 127 Watercolor I **3 Credits**
Introduction to watercolor techniques and concepts. Requires three hours of studio practice weekly.

ART 135 Photography I **3 Credits**
Analytical and critical approaches to the creative possibilities of photography including basic photographic techniques and materials.

ART 141 Intro to Digital Photography **3 Credits**
An introduction to the aspects of digital photography. Explores how to improve photographic skills and integration of photography and the digital media.

ART 142 Intro Digital Photo II **3 Credits**
A continuation of Digital Photography. Employs further investigation of the digital media and current version of Photoshop. Repeatable up to six credits.

ART 160 Art Appreciation **3 Credits**
Introduction to the visual arts, illustrating the place of art in its social and cultural setting.

ART 201 Life Drawing I **3 Credits**
Introduction to drawing from live models.

ART 206 Jewelry II **3 Credits**
Continued exploration of creating jewelry using various techniques.

ART 211 Ceramics I **3 Credits**
A beginning studio course in construction and decoration of clay. Slab, coil, and wheel-thrown techniques will be taught.

ART 212 Ceramics II **3 Credits**
Continuation of ART 111 with emphasis on development of individual expression in clay.

ART 216 Sculpture I **3 Credits**
Introduction to sculpting techniques and concepts.

ART 227 Watercolor II **3 Credits**
Continued exploration of watercolor techniques and concepts.

ART 231 Painting I **3 Credits**
Exploration of various painting media and concepts.

ART 232 Painting II **3 Credits**
Continuation of exploration of painting techniques and concepts.

ART 235 Photography II **3 Credits**
Lecture/study with emphasis on improving basic and intermediate skills. Explores the use of photography as a personal expression.

ART 243 Digital Imaging I **3 Credits**
Introduction to computer based imaging.

ART 260 Survey of Art History I **3 Credits**
Presentation of the historical context of major and minor works of art from the ancient world to the Renaissance, art analysis, and criticism.

ART 261 Survey of Art History II **3 Credits**
A continuation of Survey of Art History I presenting major and minor works of art from the Renaissance to the present, art analysis, and criticism.

ART 297 Field Study **1-3 Credits**
A study of art in its cultural and historical setting. May repeat course up to six credits.

ART 299 Special Topics in Studio Art **.5-3 Credits**
Consideration of special topics and issues in art. Selection will depend upon current interests and needs. May repeat course up to 12 credits. [S/U]

(AST)

AST 101 General Astronomy **3 Credits**
An introductory examination of the solar system, stellar systems, and stellar and galactic evolution according to currently accepted concepts. Introduces astronomical instruments and light theory.

(BCH)

BCH 400 Introductory Biochemistry **4 Credits**
A comprehensive overview of the three major areas in Biochemistry. Structure and function of Biomolecules, Metabolism, and Molecular Biology.

(BIOL)

BIOL 100 General Biology/Non Major **3 Credits**
Basic biological concepts, interpretation and application of scientific methods, and effects of biological advances on society. Core curriculum science course; cannot be used for credit toward field of concentration in biology.

BIOL 105 Introduction to Neuroscience **3 Credits**
An introduction to neuroscience and the impact of neural diseases on society. Same as PSY 105.

BIOL 124 Northeastern Nevada Plant **2 Credits**
Study of plant identification, structure, floral adaptations, and plant ecology of native plants in northeastern Nevada.

BIOL 190 Intro Cell/Molecular Biology **4 Credits**
Structure and function of cells. Major molecules of life; composition and physiology of cellular organelles; cell metabolism, reproduction, motility, and gene function of both plant and animal cells. Required for biology majors. Concurrent enrollment in a corresponding lab section is required for this course.

BIOL 191 Intro Organismal Biology **4 Credits**
The study of the evolution, ecology, and diversity of life, both past and present. Required for biology majors, but will partially satisfy the science requirement for all associate's degrees. Concurrent enrollment in a corresponding lab section is required for this course.

BIOL 223 Human Anatomy & Physiology I **4 Credits**
The morphology and physiology of cells, tissues, and the integumentary, skeletal, muscular, and nervous systems in a laboratory and lecture class. Designed for all life science majors but specifically for students in allied health programs. Concurrent enrollment in a corresponding lab section is required for this course.

BIOL 224 Anatomy & Physiology II **4 Credits**
A continuation of Biology 223 with consideration of the circulatory, respiratory, digestive, excretory, endocrine, and reproductive systems; increased emphasis on body chemistry. Concurrent enrollment in a corresponding lab section is required for this course.

BIOL 251 General Microbiology **4 Credits**
A laboratory and lecture course emphasizing taxonomy, morphology, physiology, infectious diseases, and ecology of microorganisms in addition to skills in aseptic procedures, isolation, and identification. Open to all life science majors and allied health majors.

BIOL 299 Special Topics in Biology **1-4 Credits**
Topics of interest emphasizing the natural history of the Great Basin including winter bird watching, hawk watching in the Goshutes, small mammal ecology, and the flowers of the Ruby Mountains. Includes field trips. Unlimited repeatability.

BIOL 300 Principles of Genetics **4 Credits**
Study of the basic principles of transmission of traits from one generation to the next. Topics include Mendelian, population, and molecular genetics with an emphasis on gene regulation. Both eukaryotic and prokaryotic systems will be described. Three hours of lecture with three hours of laboratory. It is recommended that student have completed CHEM 241 before enrolling in this course. Concurrent enrollment in a corresponding lab section is required for this course.

BIOL 305 Intro Consrvation Biology **3 Credits**
Fundamental topics in conservation biology including biodiversity, invasive and endangered species, reserve design, and environmental legislation. Lecture only.

BIOL 315 Cell Biology **3 Credits**
Cell structure and function at the molecular level.

BIOL 320 Invertebrate Zoology **4 Credits**
The study of animals that lack a dorsal nerve cord (backbone). This course explores the origin, evolution, taxonomy, physiology, and morphology of invertebrate members of the kingdom of Animalia. The laboratory component of this course emphasizes the similarities and differences of animal phyla and requires examination and dissection of preserved specimens. Concurrent enrollment in a corresponding lab section is required for this course.

BIOL 331 Plant Taxonomy **3 Credits**
The study of vascular plant identification, naming, and classification, within an evolutionary context. Evolutionary processes and the history of systematics will be discussed. Laboratory experiences will emphasize angiosperm family characteristics, the collection and preservation of plant specimens, and the identification of the northeastern Nevada flora. The course will require two hours of lecture with three hours of laboratory per week.

BIOL 341 Principles of Ecology **3 Credits**
The fundamentals of ecology studied at the levels of population, community, and ecosystems.

BIOL 394 Lab Ecology/Population Biology **2 Credits**
Research techniques and investigative approaches in field and laboratory studies.

BIOL 401 Biology Journal Seminar **1 Credits**
Survey of periodical literature of biology. Oral and written reports by the student will give experience in searching and interpreting literature. May be repeated up to six credits.

BIOL 410 Plant Physiology **3 Credits**
A survey of the basic physiologic processes of plants. Topics include photosynthesis, metabolism, nutrition, growth and development, as well as effect of environment on these processes. It is recommended that student have completed CHEM 241 before enrolling in this course.

BIOL 415 Evolution **4 Credits**
Pattern and process in the evolution of life on earth.

BIOL 432 Herpetology **4 Credits**
Introduction to the ecology, behavior, and evolution of amphibians and non-avian reptiles. Laboratory emphasizes the study of diagnostic characters for major groups of amphibians and reptiles, as well as field studies of species native to the Great Basin region.

BIOL 434 Mammalogy **4 Credits**
The study of mammals. This course explores the origin, evolution, taxonomy, morphology, physiology, biogeography, behavior, and ecology of mammals. Laboratory will stress identification and natural history of mammals native to Nevada.

BIOL 447 Adv Compare Animal Physiology **3 Credits**
Comparative physiology provides a detailed understanding of the diverse array of physiological systems evolved to allow animals to function in various environments. The comparative approach is used to understand physiological adaptations to various environments and the evolution of physiological systems. It is recommended that student have completed CHEM 241 before enrolling in this course.

BIOL 496 Advanced Topics in Modern Biol **1-3 Credits**
Advanced study in a specialized area of biology. Topics are selected and published in the class schedule. May be repeated up to six credits.

(BUS)

BUS 101 Introduction to Business **3 Credits**
A one-semester survey course covering business organization, operation, and management, designed to orient the student to the field of business.

BUS 102 Intro to Entrepreneurship **3 Credits**
Course serves as the foundation for the GBC Associate of Applied Science--Entrepreneurship Emphasis degree program. Introduces techniques, principles, and challenges facing today's entrepreneurs using practical examples.

BUS 110 Human Relations Employmnt **1-3 Credits**
Introduces students to the principles and skills of effective communication in business and professional settings. It provides information on how to communicate with superiors, co-workers, subordinates, clients, and customers. Three-credit course includes a computation component. Repeatable up to a total of three credits.

BUS 117 Business Calculations/Methods **3 Credits**
Fundamental arithmetic processes applied to business activities and applications. Including discounts, markups, payroll, interest, annuities, present value of money, depreciation, tax computations, business statistics, and general application of mathematics for planning and problem solving using algebraic equations/graphics and other basic forecasting techniques.

BUS 198 Special Topics in Business **1-3 Credits**
Selected business topics offered for general interest and the business community. Not a required course. May be repeated for credit if topics are different.

BUS 201 Entrepreneurship II **3 Credits**
Extends techniques, principles, and challenges facing today's aspiring entrepreneurs using practical examples. The major project for the course is the preparation of a useful business plan, instructions on acquiring financing, and explanations of other business startup activities, especially, setting up marketing programs and strategic/tactical plans. Recommended prerequisite: BUS 102 or MGT 103.

BUS 273 Business Law I **3 Credits**
A study of the origin, philosophy, and nature of law and procedures including court systems, contracts, agency, partnerships, sales, criminal law, and torts.

BUS 274 Business Law II **3 Credits**
A continuation of BUS 273. Includes a study of corporation law, property, secured transactions, negotiable instruments, insurance, and bankruptcy.

BUS 275 Foundations of Int'l Business **3 Credits**
Introduces students to the impact of geography, the Internet, and different environments in which international business is conducted and the uncontrollable forces at work in all business environments. Topics discussed will include the importance of international organizations, the international monetary system, and the relevance of certain aspects of international business to managers and business people.

(CADD)

CADD 121 CAD for Land Surveyors **3 Credits**
The use of computer-aided drafting (CAD) software to create survey plats and topographic maps. The first ten weeks of instruction will focus on learning basic CAD commands. The remaining five weeks will focus on the production of typical survey plats and topographic maps.

CADD 245 Solid Model/Parametric Design **3 Credits**
Provides training and instruction in using parametric solid modeling software to create solid model parts, assemblies and working drawings. Students will have the opportunity to acquire the CSWA certificate for Solidworks.

CADD 421 Advanced CAD for Land Surveyor **3 Credits**
The use of computer-aided drafting (CAD) software to create survey plats and topographic maps. Instruction will focus on learning COGO tools, the Command Prompt, traverse with Carlson SurvNet, use deed data to create a deed file, perform deed correlation with field data, create and edit lots and areas and generate lots and setbacks, setup Field to Finish codes and generate 2D and 3D geometry, and utilize various critical coordinate file utilities.

(CHEM)

CHEM 241L Organic Chemistry Lab I **1 Credits**
Laboratory exercises in introductory organic chemistry. Stereochemistry, separation and purification techniques, micro-scale organic reaction procedures.

CHEM 242L Organic Chemistry Lab II **1 Credits**
Laboratory exercises in intermediate organic chemistry with continued emphasis on micro-scale organic reaction procedures. Introduction to the identification of organic compounds using chemical and instrumental means (qualitative analysis).

CHEM 100 Molecules/Life Modrn Wrld **3 Credits**
Introduction to chemistry in its many forms and applications, physical and organic, with consideration of environmental and social issues. Includes laboratory activities.

CHEM 121 General Chemistry I **4 Credits**
Fundamentals of chemistry including reaction stoichiometry, atomic structure, chemical bonding, molecular structure, states of matter, and thermochemistry.

CHEM 122 General Chemistry II **4 Credits**
Fundamentals of chemistry including solutions, kinetics, equilibria, thermodynamics, electrochemistry, nuclear chemistry, and properties of inorganic and organic compounds. Also, introduction to qualitative analysis.

CHEM 241 Organic Chemistry I **3 Credits**
Intensive introduction to the theory of carbon chemistry with particular emphasis on understanding the relationship between the structure and behavior of organic molecules.

CHEM 242 Organic Chemistry II **3 Credits**
Continuation of CHEM 241 with emphasis on complex reactions and mechanisms, and introduction to advanced approaches for the synthesis of organic molecules.

CHEM 292 Selected Topics in Chemistry 1-3 Credits
Independent study of a special problem, research and/or assigned reading in chemistry. May be repeated up to six credits.

CHEM 392 Special Topics in Chemistry 1-3 Credits
Laboratory or lecture course in area not covered in other courses. May be repeated up to six credits.

CHEM 492 Advanced Topics in Chemistry 1-2 Credits
Selected topics from the various disciplines of chemistry not covered by any other course offerings and of current interest to students and faculty. May be repeated up to four credits.

(CIT)

CIT 110 A+ Hardware 3 Credits
Techniques of personal computer hardware maintenance and installation. Course covers hardware and software diagnostics, system troubleshooting, and methods of achieving effective system upgrades to enhance capabilities or improve system performance.

CIT 112 Network + 3 Credits
Course covers computer network infrastructure, network uses, and basic network management issues. CIT 112 has no prerequisite but assumes that students are familiar with computer hardware, have a basic understanding of stand-alone operating systems, and can use applications software.

CIT 129 Intro to Programming 3 Credits
A first course in programming. Offers an introductory course on computer program design and development. Emphasizes identification and solution of business problems through the use of logic development tools and scripting languages.

CIT 130 Beginning Java 3 Credits
Java is a general-purpose, object-oriented programming language best known for, but not limited to, creating applets to run on the Internet. This course will include applet creation, but the primary emphasis will be on general purpose object-oriented programming.

CIT 151 Beginning Web Development 3 Credits
Create and maintain web pages using HTML. Build interactive web pages using dynamic HTML. Topics include images, tables, frames, CSS styles, forms, FTP, and site maintenance.

CIT 152 Web Script Language Prog 3 Credits
A continuation of CIT 151, Beginning Web Development. This programming class creates interactive web pages using technologies such as Javascript, SQL, and server-side programming language.

CIT 173 Linux Install/Configure 3 Credits
Course covers Linux installation, configuration, and workstation operating system concepts.

CIT 174 Linux System Admin 3 Credits
Covers concepts required for Linux server system administration and common networking services configuration, operation, and management. There is no formal prerequisite, however, CIT 173 or a basic understanding of either the UNIX or Linux workstation environment is recommended.

CIT 180 Database Concepts and SQL 3 Credits
This class is targeted for people with little or no SQL knowledge. The objective of this class is to familiarize students with database concepts that will be needed by programmers as well as professionals maintaining data management systems in such as those used in GIS. The class is accented with hands-on learning in Structured Query Language (SQL) and SQL procedures. CIT 129 recommended but not required.

CIT 198 Special Topics in CIT 1 Credits
Various short courses and workshops covering a variety of subjects in computer and information technology. The course will be variable credit depending on the class content and number of hours required to cover that content. No prerequisites, but various skills may be recommended depending on class content, see syllabus for any such recommendations. Unlimited repeatability. [S/U]

CIT 201 Word Certification Prep 3 Credits
A hands-on course building on the foundation laid in COT 151 and continuing on to sophisticated manipulation of word processing software. Topics include tables, graphic boxes, clip art, desktop publishing, fonts, macros, styles, and spreadsheets. Recommend: COT 151.

CIT 202 Excel Certification Prep 3 Credits
In-depth exploration of Excel spreadsheets. Topics include advanced functions, importing and exporting data, multiple tables and workbooks, pivot tables, macros, and VBA. Team and student projects are conducted.

CIT 203 Access Certification Prep 3 Credits
In-depth exploration of Access database management. Topics include tables, relationships, queries, forms, and reports. Macros, VBA modules, and web pages are created. Team and student projects are conducted in building and maintaining a database. Access 2007 required.

CIT 212 Microsoft Networking II 3-5 Credits
Introduces students to computer network server administration and management using MSMCSE II. CIT 211 or an advanced understanding of a Windows desktop environment is recommended.

CIT 217 Security + 3 Credits
Prepares professionals with some networking experience and who possess a thorough knowledge of TCP/IP to take and pass the CompTIA Security + certification exam. Topics will include general security basics of cryptography and operational/ organizational security. Working knowledge and network servers or associated certifications would be considered essential.

CIT 240 Python for Data Analysis 3 Credits
This course is designed to equip students with the essential skills for effective data handling using Python. It covers data analysis fundamentals, including collection, cleaning, transformation, statistical methods, and data visualization, leveraging Python libraries like pandas, numpy, matplotlib, seaborn, and scikit-learn. Practical case studies in business and sports analytics provide real-world applications, guiding students through data lifecycles and predictive modeling. Additionally, the course incorporates ChatGPT Prompt Engineering, allowing students to master the art of formulating prompts for AI language models, enhancing their data analysis capabilities.

CIT 242 R for Data Analysis 3 Credits
This course serves as an introduction to data analysis using the R programming language, a powerful open-source tool for statistical computing. It provides a solid foundation in R programming, covering key aspects such as data manipulation, data visualization, and statistical analysis. Practical, real-world data analysis projects will offer hands-on experience, and by the course's end, students will be proficient in conducting data analysis and visualization with R.

CIT 252 Web Database Development 3 Credits
Interactive web pages will be built to accomplish store front applications. Storefront software will be used to produce shopping cart applications with product display, shopping cart, check out, and confirmation web pages along with several databases.

CIT 261 VBA Programming/MS Office 3 Credits
Visual Basic for applications involves programming inside Microsoft Office, Word, Excel, and Access. This is the most common type of programming in today's work world and creates more interactivity in the office software.

CIT 263 Project Management 3 Credits
The purpose of this course is to help students gain the knowledge required to effectively plan, implement, and complete IT projects across the organization. Topics will include business practices, interpersonal skills, and management process.

CIT 264 Operating System Security 3 Credits
Covers a full range of security concepts, techniques, and applications as required by server operating systems and networks. This will include VPNs, authentication, encryption, and patching. It will culminate in discussions of monitoring, auditing, and disaster recovery. Recommended prerequisite: CIT 212 or CIT 173.

CIT 280 Intro to Blockchain Concepts 3 Credits
Introduction to Blockchain is a course building the foundations to blockchain technology, which is a type of distributed ledger technology: what blockchain is, how blockchain was developed, how blockchain works, and the primary issues, challenges, and opportunities blockchain faces. Students will engage in hands-on work, such as contextualized coding exercises, to lay a strong foundation for post-secondary education in blockchain development.

CIT 303 Intermediate Survey Computing 3 Credits
This course surveys essential concepts in a wide range of computing fields including database management, GIS, graphic communications, networking, and programming required by managers of computing systems and departments. This class assumes students understand at least one area of computing well then builds on that understanding to provide them with a survey of additional computing technologies that IT managers could reasonably be expected to facilitate and supervise.

CIT 361 TCP/IP: Manage Netwk Resources 3 Credits
Course provides in-depth coverage of TCP/IP concepts, protocols, and programming including IPv6.

CIT 454 E Commerce 3 Credits
eCommerce concepts and topics will be examined. Working eCommerce sites will be developed on the Internet.

CIT 480 SQL Database Design/Implmnt 3 Credits
This course covers concepts required to design, implement, and administer a database management system for use in a modern organization. The emphasis will be on database structures, logical and physical data organization, the relational database model, development of stored programs, and database administration.

(CMI)

CMI 350 Ultrasound Physics/Instrument 4 Credits
Principles of acoustical physics, Doppler Ultrasound and ultrasound instrumentation.

CMI 351 Abdominal Ultrasound 3 Credits
Recognition and identification of the sonographic appearance of normal anatomical structures, disease processes, pathology, and pathophysiology of the abdomen.

CMI 352 Obstetric Ultrasound 3 Credits
Recognition and identification of the sonographic appearance of normal maternal, embryonic, and fetal anatomical structures and obstetric disease processes, pathology, and pathophysiology.

CMI 353 Gynecologic Ultrasound 3 Credits
Recognition and identification of the sonographic appearance of normal anatomical structures of the female pelvis and gynecological disease processes, pathology and pathophysiology.

CMI 354 Vascular Ultrasound 1-3 Credits
Students will learn basic anatomy, physiology, pathophysiology and Doppler patterns of the human vascular system as it relates to basic sonographic vascular imaging.

CMI 366 Abdominal Ultrasound II **2 Credits**
Continue development of skills in recognition and identification of the sonographic appearance of normal anatomic structures, disease processes, pathology, and pathophysiology of the abdomen.

CMI 376 Sectional Anatomy in MI **3 Credits**
This online course will cover transverse, coronal, and sagittal anatomy of the head, neck, thorax, abdomen, pelvis, and extremities. Areas of discussion include skeletal, muscular, circulatory, respiratory, nervous. lymphatic, and visceral anatomic relationships.

CMI 378 Small Parts Ultrasound **1 Credits**
Recognize and identify sonographic appearance of normal anatomic structures, disease processes, pathology, and pathophysiology of anatomic small parts including, thyroid, scrotum, breast and other.

CMI 400 Intro to Clinic Imaging Exp **2 Credits**
Students will be oriented to the clinical site and begin participating in basic sonographic scanning procedures under sonographer supervision. 120 hours of clinical experience will be required at an assigned clinical site.

CMI 486 Diag Med Image Clinic Exp I **9 Credits**
Clinical applications of instrumentation, quality control, patient care and performance of diagnostic medical sonography procedures under the direction or observation of a clinical sonographer.

CMI 487 Diag Med Image Clinic Exp II **7 Credits**
Continuation of clinical hours to build clinical applications of instrumentation, quality control, patient care and performance of diagnostic medical sonography procedures under the direction or observation of a clinical sonographer.

CMI 488 Diag Med Image Clinic Exp III **10 Credits**
Continuation of clinical hours to build clinical applications of instrumentation, quality control, patient care and performance of diagnostic medical sonography procedures under the direction or observation of a clinical sonographer.

CMI 491 Sonography Review Topics **1 Credits**
Review sonographic concepts, scanning techniques, imaging procedures, anatomy, pathology and pathophysiology.

CMI 492 Comp Medical Imaging Capstone **3 Credits**
This course utilizes knowledge and experience gained from comprehensive medical imaging and general education courses to develop links between scholastic and professional experiences. This course will emphasize leadership, fiscal and personal responsibilities, and prepare students for a successful transition into the professional workforce.

(COM)

COM 101 Public Speaking **3 Credits**
Introduction to the fundamentals of effective speaking. Develops the vocal and intellectual skills required for effective and powerful speaking in conversation and before an audience.

COM 113 Fund Speech Communication **3 Credits**
Principles and theories of speech communication. Participation in public speaking and interpersonal communication activities.

COM 159 Writing Radio/Television **3 Credits**
An introduction to basic script formats, terminology, style, and writing techniques for radio, television, and other electronic media. Topics include commercials, promotions, public relations, instruction/training, corporate video, and teleplays. Develops the ability to write aurally as well as visually.

(COT)

COT 101 Computer Keyboarding I **3 Credits**
Learn the keyboard by touch using computers. Course covers alphabet keys, number keys, and symbol keys. Emphasis on keyboarding techniques, speed, and accuracy.

COT 151 Intro Microsoft Word **3 Credits**
An introduction to Microsoft Word, a word processing software, ruler, toolbars, dialog boxes, cut, copy, and paste, autocorrect, spell check, template documents, columns, outlines, merge, clip art, graphics, text art, and tables. Recommended: COT 101 or 30 words per minute keyboarding skill.

COT 198 Special Topics in COT **1-6 Credits**
Various short courses and workshops covering a variety of subjects. The class will be variable credit of one to six depending on the class content and number of hours required. No prerequisite, but various skills recommended, depending on class content. Unlimited repeatability.

COT 204 Using Windows **3 Credits**
The fundamentals necessary to operate the Windows system, how to customize the Windows environment, and how to use the various accessories.

COT 240 Exec Office Procedures **3 Credits**
Introduces skills and knowledge to meet the challenges of the electronic office. Topics include public relations, written and oral communications, telephone techniques, travel and conference arrangements, records management, meeting planning, and job-seeking/selection.

COT 241 Medical Office Procedures 3 Credits
Introduces medical office administrative procedures. Topics include appointment processing, written and oral communications, ethics, confidentiality, HIPAA, medical records, patient orientation and safety. Upon completion, students should be able to perform basic administrative skills within the medical environment. Emphasis on developing human relations and customer service skills.

COT 290 Internship Computer Technology 1-6 Credits
A course designed wherein students will apply knowledge and skills to real on-the-job situations in a program designed by a company official and a faculty advisor to maximize learning experiences. Available to students who have completed most Core and Major requirements and have a 2.5 GPA. Contact the instructor for the application, screening, and required skills evaluation. Up to six semester hour credits may be earned on the basis of 75 hours of internship for one credit. This course may be repeated for up to six credits

COT 301 Database Mgt Essentials 1 Credits
A working overview of Access database. The main emphasis will be on analyzing previously established data, using table searches, queries, and reports. Excel will be used for further data analysis. A discussion of table design will be included. Students will start work on individual portfolios of their achievements during this degree program. [S/U]

COT 490 Digital Communications 3 Credits
A capstone seminar covering the common theme of data communications among the BAS in Digital Information Technology courses. Relationships between data organization, digital multimedia, data presentation, data security, and data communications will be covered. Students will finalize the digital portfolio of their accomplishments while completing this degree program.

(CPD)

CPD 116 Subs Abuse-Fund Facts 3 Credits
An introduction to various issues relating to alcohol, tobacco, and other drugs in society. Students will gain knowledge of the physical effects of various drugs of abuse. Sociological, cultural, family impact, and prevention issues will be addressed. No prerequisite.

(CRJ)

CRJ 104 Intro to Admin of Justice 3 Credits
American criminal justice system, its development, components, and processes. Includes consideration of crime and criminal justice as a formal area of study.

CRJ 105 Correctn Operate/Jail Mgt 3 Credits
Investigations will be made into the court structures, constructive and punishment-oriented correctional institution programs, and the present day correctional officers' roles. Jail and prison life and adjustment will be discussed along with ways in which the correctional institution climate can be enhanced.

CRJ 106 Intro to Corrections 3 Credits
History and development of corrections. Current practices and problems of the correctional system. Recommend: CRJ 104.

CRJ 110 Intro Nev Law Inforcement 3 Credits
This course provides a systematic approach to examination of criminal justice in the State of Nevada. It will also include an overview of the major subsystems: police, prosecution, defense, courts, corrections, and juvenile justice. Designed for students who will be attending the Law Enforcement Training Academy.

CRJ 111 Firearms I 3 Credits
Laws of arrest, search, and seizure; moral, legal, and ethical aspects of the use of deadly force; firearm handling and safety, range nomenclature, marksmanship, and qualification. [S/U]

CRJ 112 Criminal Justice Org/Admin 3 Credits
Theory of management and motivation, bureaucracy, labor laws and relations, financial administration, and criminal justice agency administration. An in-depth study of the goals, policies, and functions of the criminal justice agency. Recommend: CRJ 104

CRJ 114 Firearms II 2 Credits
Course includes advanced range qualification, precision marksmanship, defensive measures, counter ambush procedures, combat shooting, robbery in progress, building searches, and shotgun use.

CRJ 120 Community Relations 3 Credits
Analyzes the reasons and techniques for developing communication and understanding between the criminal justice system and various segments of the community. Recommend: CRJ 104.

CRJ 140 Elements of Supervision 3 Credits
An introduction to supervisory roles in criminal justice agencies, selection process for supervisors, models for decision making, and leadership styles. Addresses current trends in contemporary supervision within the criminal justice field. Covers the rights, obligations, and duties of line supervisors. Assesses the first-line supervisor's role within the law enforcement agency.

CRJ 155 Juvenile Justice System 3 Credits
Study of the philosophy and function of the juvenile court including court procedures and law, theories of causation and intervention strategies for juvenile offenders. Includes police encounters with juveniles, the juvenile court process, juvenile dispositions, and after care. Discussions include dependent and neglected youth in the system, the death penalty for juveniles, and school crimes. Recommend: CRJ 104.

CRJ 164 Intro Criminal Investigation 3 Credits
Forensic Science I - The Crime Scene to Follow Up. Fundamentals of investigation, crime scene search and recording, collection and presentation of physical evidence, scientific aids, sources of information, case preparation, interviews and interrogations, and follow-up. Recommend prerequisite: CRJ 104 or instructor permission.

CRJ 170 Physcl Train/Law Enforce 1 Credits
P.O.S.T. pretest. Physical training relevant to a law enforcement profession to prepare for the final physical training test.

CRJ 180 Introduction to Security 3 Credits
History and development of security services function, interrelationship to the legal process, career roles, and operational processes in various types of security organizations. Recommend: CRJ 104.

CRJ 201 Women Criminal Justice System 3 Credits
Overall view of both sides and the roles in which women participate in the Criminal Justice System. The main concentration of the course will be in the following areas: theories of female criminality, extent of female crime, women as victims, women as offenders, women as defendants and prisoners, and women as practitioners and professionals, i.e., police, courts, and corrections.

CRJ 211 Police in America 3 Credits
Course includes policy history and organization, the personal side of policing, police operations, critical issues in policing, specific police problems, women and minorities in policing, and becoming a police officer. Designed to help students develop their own philosophy of law enforcement. Critical thinking and discussion of ideas and opinions essential. Recommend: CRJ 104.

CRJ 214 Prncpl Police Patrl Techq 3 Credits
Identification of community problems which require prevention, suppression, or control through the basic methods and techniques of police patrol. The responsibilities of officers in patrol situations including foot beats, one-man cars and/or tactical units, techniques of observation and perception, recognition of hazards, evaluation, and proper police patrol action. Recommend: CRJ 104.

CRJ 215 Probation and Parole 3 Credits
Survey of the probation and parole systems of the United States including different systems within the United States; executive clemency; parole; rights of prisoners, probationers, and parolees; treatment strategies; and administrative aspects. Includes correctional and professional aspects of the parole and probation officers: the role, preparation of a probation summary, a day in court with a probation officer, and time with a parole officer. Recommend: CRJ 104.

CRJ 219 Emerg Veh Operate/Control 3 Credits
Shuffle steering, steering motion dynamics, and vehicle braking (lock-wheel, ABS, impending). Pursuit driving times (vehicle timing) and techniques. Measurement of hearing and tunnel vision.

CRJ 220 Criminal Procedures 3 Credits
Origin, development, and rationale of the structural and procedural aspects of America's criminal justice system. Emphasis on arrest, search and seizure, confessions, and related legal issues.

CRJ 226 Prevention/Control Delinquency 3 Credits
An introduction to major types of delinquent behavior, psychology of the delinquent, and factors contributing to the production of criminality or delinquency. Discussion of methods used by the criminal justice system to control delinquent behavior. Recommend: CRJ 104.

CRJ 229 Defensive Tactics 1-3 Credits
Protection against persons armed with dangerous and/or deadly weapons. Demonstration and drill in a number of holds, come alongs, restraints, and baton use. [S/U]

CRJ 230 Criminal Law 3 Credits
Substantive criminal law including elements of crime, intent, attempts, search and seizure, and the laws of arrest. Relation of criminal law to working police officer and rights and duties of both citizen and officer under criminal law.

CRJ 232 Principles Correctional Admin 3 Credits
Principles of staff operation within the correction process; administration setting, budgeting and financial control, recruitment and development of staff, public relations, and decision making; information concerning the offender, why they classify in a certain manner, and varied strategies available.

CRJ 233 Nevada Criminal Law 3 Credits
Familiarizes the CRJ student with Nevada Criminal Law as set forth in the Nevada Revised Statutes and as interpreted and tested in cases before the Nevada Courts.

CRJ 262 Intro to ER Comm. Dispatching 3 Credits
Intro to Emergency Communication Dispatching I builds the necessary skills and knowledge to work in an emergency communications center in a productive and professional manner. The course prepares each student for the basic roles, duties, and responsibilities of a public safety dispatcher.

CRJ 263 Intro to ER Comm. Dispatch II 3 Credits
Intro to Emergency Communication Dispatching II continues building the necessary skills and knowledge to work in an emergency communications center in a productive and professional manner. The course prepares each student for the basic roles, duties and responsibilities of a public safety dispatcher.

CRJ 265 Intro Physical Evidence 3 Credits
Forensic Science II - The Crime Lab to Courtroom. Surveys the forensic sciences to show their role in the use of physical evidence in matters of criminal and/or civil law. Focus on the value of modern scientific investigation. Recommended prerequisite: CRJ 104 or instructor permission.

CRJ 270 Intro to Criminology 3 Credits
Examines how society interacts with crime and delinquency through the use of the criminal justice system. Studies effective interaction and communication between the general public and members of the criminal justice system. Emphasizes the understanding of criminal behavior from a sociological and psychological perspective.

CRJ 285 Special Topic Criminal Justice 1-6 Credits
Consideration of special topics and issues in criminal justice. Selection will depend upon current interests and needs. Unlimited repeatability.

CRJ 289 Law and Justice 3 Credits
Survey of law and justice from a multi-disciplinary perspective with special emphasis on comparative justice systems, race, ethnicity, and gender.

CRJ 444 Criminological Theory 3 Credits
Comprehensive interdisciplinary examination of theories of criminal etiology from neurological, biochemical, genetic, psychological, psychiatric, social, economic and political perspectives.

CRJ 469 Psychology and Legal System 3 Credits
Psychological perspective for understanding legal issues. Topics include police psychology, eyewitness accuracy, jury decision-making, competency to stand trial, criminal responsibility, civil commitment, violence risk assessment, correctional psychology, criminal psychology profiling, and psychological impact of victimization.

(CRS)

CRS 100 Intro to Resp Care & Procedure 4 Credits
Introduction to Respiratory Therapy is a study of the respiratory therapist's role as a member of the medical team. Gas laws, physics, physiology, medical equipment terminology are taught. In addition, it provides the student with an in-depth understanding of medical gas administration, humidity and aerosol therapy, safety systems, airway management and infection control. Students will also learn the mechanical devices utilized to maintain patent airways and the carious utilities in the treatment of respiratory and cardiac arrest Laboratory exercises provide students with an opportunity to develop skills.

CRS 115 Clinical Practicum I 4 Credits
This course introduces the student to the hospital environment. The student studies the relationship of the respiratory care department with other medical departments in the hospital. The student learns charting, patient rounds, respiratory equipment modalities, medication administration, and bronchial hygiene therapy.

CRS 116 Respiratory Pharmacology 3 Credits
This course introduces the students to the medications utilized in the treatment of patients with acute and chronic cardiopulmonary disorders. This course will also present a pharmacological basis of cardiorespiratory interventions. Additionally, integrate this knowledge with aerosol medication administration.

CRS 123 Respiratory Care Assessment 3 Credits
This course covers essential information regarding common respiratory diseases. This course will also provide the student with a description of the anatomic alterations of the lungs, etiology of the disease process, an overview of the cardiopulmonary clinical manifestations associated with the disorder, and management of the respiratory system. In addition, the course is designed to provide students with the opportunity to develop informational gathering and decision-making skills in the diagnosis and treatment of patients with cardiopulmonary or related disorders.

CRS 124 Adv Pract Resp Care and Proc 4 Credits
Advanced Practice Respiratory Care is a study of the respiratory therapist's role as a member of the critical care team. The course provides a continuation of knowledge and skills of respiratory care. Students will learn how to interpret arterial blood gas values and practice the arterial puncture/technique on a mannequin arm in the lab. The students will be introduced to critical care equipment, such as advanced artificial airways, machines that provide non-invasive ventilation and invasive ventilation. Procedures that involved assisting the physician for the therapeutic and diagnostic purposes is another topic in this course.

CRS 125 Clinical Practicum II 4 Credits
This course provides the appropriate setting for the continuation of practicing and refining skills obtained throughout the course of the initial clinical experience. The student is provided the opportunity to administer medication through various types of therapy. They will also perform cardiopulmonary resuscitation, perform airway care and management, infection control procedures, patient assessments, apply non-invasive ventilation therapy, and evaluate and record pertinent data in the patient's chart.

CRS 215 Clinical Practicum III 4 Credits
This course gives the student an opportunity to develop their clinical skills of airway management, cardiopulmonary resuscitation, aerosol therapy, arterial puncture and analysis, oxygen therapy, hyperinflation therapy and patient evaluation rounds. In addition, the student will begin learning basic mechanical ventilation concepts. Students will have exposure to the ICU's during this rotation.

CRS 216 Continuity of Resp Care 3 Credits
This course will present cardiorespiratory care needs of the chronically ill, discharge planning, care management, patient education, alternative care sites, and home care. Psychological issues of geriatric acre are discussed.

CRS 218 Resp Diagnostics and Lab 4 Credits
This course is designed to provide the students with practices in the art of patient assessment and an understanding of diagnostic and monitoring procedures. The course content includes the collection, analysis, and interpretation of various pulmonary, laboratory, and hemodynamic data. The collected data will then lead the student to consider possible therapeutic interventions and evaluation of patient treatment. Attention is given to those fundamental physiological concepts that provide a foundation for discussion of cardiopulmonary pathophysiology and common cardiopulmonary disorders.

CRS 219 Neonate/Peds Resp Care and Lab 4 Credits
This course provides a comprehensive overview of pediatric and neonatal respiratory care. Special considerations of respiratory care practice unique to pediatrics and neonatology are discussed. Topics include pediatric anatomy and physiology, fetal development, clinical assessment, oxygen therapy, airway management, mechanical ventilation, resuscitation, cardiopulmonary pathophysiology and disorders specific to this specialty profession within respiratory care.

CRS 223 Exam Seminar and Preparation 1 Credits
This course content comprises management principles/concepts; professional and regulatory agencies pertinent to RC practice; principles of healthcare reimbursement; best practice and patient safety, and personnel management/supervision. Cultural competency, clinical controversies and ethical issues, as well as standards of professional behavior will be discussed. The course includes intense preparation for passing the standardized National Board for Respiratory Care exams required to earn the CRT and RRT credentials.

CRS 225 Clinical Practicum IV 4 Credits
This course is designed to provide the respiratory care student with the opportunity to develop advanced skills in the management of ventilator patients in adult critical care areas. Students will also receive an introduction to the neonatal/pediatric intensive care units. In addition, rotations through specialty areas are provided. Emphasis is placed on patient evaluation and education, decision-making skills, communication, and critical thinking skills.

(CS)

CS 135 Computer Science I 3 Credits
This course is an introduction to modern problem solving and programming methods. Emphasis is placed on algorithm development. A special focus will be on procedural and data abstraction, emphasizing design, testing, and documentation.

CS 151 Introduction to Cybersecurity 3 Credits
The purpose of this course is to prepare students and IT professionals to move into the cybersecurity field. We'll cover the skills and knowledge you'll need to set up and use threat detection tools; perform data analysis; identify vulnerabilities, threats, and risks; and protect applications and systems within a company. First, we'll cover threats and vulnerabilities. In this part of the course, we'll learn how to use proactive threat intelligence to manage organizational security and vulnerability activities. Then we'll discuss software and systems. We'll employ security solutions to manage infrastructure and understand software and hardware assurance best practices. This course is designed to prepare you to pass the TestOut CyberDefense Pro and CompTIA CySA+ certifications. At the end of the course, you'll find both the TestOut CyberDefense Pro certification practice exam and CompTIA CySA+ practice exams.

(CSCO)

CSCO 120 CCNA Introduction to Networks 3-4 Credits
This course introduces architectures, models, protocols, and networking elements. It uses the OSI and TCP layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. Students learn IP addressing, foundational network security, and basic configurations for routers and switches.

CSCO 121 CCNA SW, RT & WRLS ESNTLS 3-4 Credits
This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and switch for basic functionality. Students will configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, and single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks.

CSCO 130 Fundamentals of Wireless LANs 4 Credits
An intensive introduction to wireless LANs which focuses on the design, planning, implementation, operation and troubleshooting of wireless LANs. This hands-on lab-oriented course stresses documentation, design, and installation issues, as well as lab safety, on-the-job safety, and working effectively in a group environment. This course will help prepare students for the Cisco Wireless LAN Support Specialist Designation.

CSCO 220 CCNA ENSA 3-4 Credits
This course describes the architecture, components, and operations of routers and switches in a larger and more complex network. Students learn how to configure a router and a switch for advanced functionality. Students will configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, STP, and VTP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement DHCP and DNS operations in a network.

CSCO 230 Fundamentals Network Security 4 Credits
This course is designed to prepare students for entry level certification in network security. The course is an introduction to network security and overall security processes. This course teaches students to design and implement security solutions to reduce the risk of revenue loss and network vulnerability.

CSCO 480 CCNP Enterprise Core Network I 4 Credits
CCNP Enterprise: Core Networking (CCNP ENCOR v7) - aligns to the Cisco Press CCNP and CCIE Enterprise Core ENCOR 350-401 Official Cert Guide and the Implementing Cisco Enterprise Network Core Technologies (ENCOR 350-401) certification exam. The ENCOR course includes implementation of core enterprise network technologies including dual stack (IPv4 and IPv6) architecture, virtualization, infrastructure, network assurance, and automation.

CSCO 482 CCNP Enterprise Core Netwrk II 4 Credits
This course prepares the student with the knowledge and skills necessary to use advanced IP addressing and routing in implementing scalability for routers connected to LANs and WANs and assists in preparation for the CCNP ENCOR exam. Enterprise Core Networking (ENCOR) curriculum provides students with a broad scope of architectural understanding and implementation skills required by enterprise networks. The course covers switching, routing, wireless, and related security topics along with the technologies that support software-defined, programmable networks.

CSCO 483 CCNP ENARSI 4 Credits
Cisco has evolved its CCNP Enterprise certification to a streamlined format that requires passing two exams: the Enterprise Core (ENCOR) exam (350-401) and the Enterprise Advanced Routing and Services (ENARSI) exam (300-410). The CCNP Enterprise: Advanced Routing and Services (CCNP ENARSI v8) course is designed to provide in-depth knowledge of advanced concepts for configuring routers and services in an enterprise environment. These devices and services play a critical role in connecting devices, applications, and data across the internet and other computer networks. By the end of this course, students will be able to perform advanced configurations for routers and services, enabling them to build and configure enterprise-level local area networks (LANs) and wide area networks (WANs). This includes using both IPv4 and IPv6 advanced routing protocols, leveraging advanced protocol features to optimize network performance, implementing route redistribution, and exploring advanced tunneling technologies.

(CTE)

CTE 12Z Firefighter I **0 Credits**

(DAN)

DAN 188 Choreogrph I: Improv/Comp **2 Credits**
An introduction to the creative process of dance making using improvisation. Unlimited repeatability.

(DATA)

DATA 101 Introduction to Data Science **3 Credits**
This is a survey course to build a fundamental yet applied understanding of topics in data science. The course covers topics from a conceptual standpoint without assuming prerequisite knowledge in statistics and programming. Topics included in this course are definition and history of data science, data collection, data wrangling (including manipulating, cleaning and cleaning data), data explorations, creating models, artificial neural networks, and communicating the results. At the end of the course, students will have the necessary skills to dive further into the more qualitative technical aspects of data science.

DATA 110 Intro to Data Visualization **3 Credits**
This is an introductory course about converting data into understandable visual presentations. Topics include data relationships, data visualization and reports, and preparing, processing, and modeling data, with hands-on skills using both Microsoft Power BI and Tableau. The course covers topics from a conceptual standpoint without assuming prerequisite knowledge in statistics and programming.

(DFT)

DFT 100 Basic Drafting Principles **1-4 Credits**
An introduction to manual drafting procedures including lettering; geometric constructions; orthographic projection; dimensioning sections; auxiliary views; and metric, architectural, and engineering techniques.

(DT)

DT 100 Shop Practices **.5-4 Credits**
An introduction to hand tool identification and proper use, shop safety, and other topics including screw thread, hydraulic hose, and fitting identification. Also covers measuring devices.

DT 101 Basic Diesel Engines **1-6 Credits**
A review of basic engine operation with an emphasis on operating principles, nomenclature, components, and design, and terminology. May be repeated up to 18 credits.

DT 102 Basic Vehicle Electronics **1-9 Credits**
A lecture and laboratory course study of AC and DC electricity as used in mobile equipment. Emphasis on charging systems, starting systems, lighting systems, and wiring diagrams. Troubleshooting and repairing of electrical components, electronic controls systems, and voltage drops analysis will be covered. May be taught in modules.

DT 105 Mobile Air Conditioning **1-5 Credits**
A lecture and laboratory course covering heating and refrigeration theory. Includes heating and air conditioning components, control systems, service evacuation, charging, overhaul, and replacement of major components.

DT 106 Heavy Duty Trans/Power Tr **1-8 Credits**
The theory and operation of heavy equipment power trains will be covered in detail with emphasis on power shift transmissions. Students will become familiar with driveline angle calculations, gear ratios, clutches, differentials, and transmission electronic control systems. May be repeated up to eight credits.

DT 113 Hydraulics I **3 Credits**
Introduces basic hydraulic systems through component recognition, circuit reading, and practical application focused on hazard recognition.

DT 114 Hydraulics II **3 Credits**
Explains the function, operation, and application of components in a hydraulic system.

DT 115 Hydraulics III **1.5 Credits**
Explains the testing and troubleshooting of hydraulic system components using leak path analysis.

DT 116 Hydraulics IV **1.5 Credits**
Hydraulics IV will explain the testing and troubleshooting of the components in a hydraulic system in circuit using leak path analysis.

DT 118 Electrics I **3 Credits**
An introductory course. The first in a series of courses to study electricity as related to mobile heavy equipment. Basic DC and AC electricity is covered in theory and reinforced with laboratory experiments. Ohm's Law, magnetism, and electrical component and system identification are covered. Electrical safety and hazard recognition are emphasized.

DT 119 Electrics II **3 Credits**
The second in a series of electrical courses emphasizing mobile heavy equipment electrical systems. Electrical component disassembly, testing, and maintenance are covered. Lighting, relays, circuit breakers, wiring diagrams, and battery testing are discussed and reinforced through laboratory work. Electrical safety and hazard recognition are also covered.

DT 201 Diesel Brakes/Pneumatics 2.5 Credits
The principles of pneumatic brake systems are discussed in detail, with emphasis on cam-operated brakes. Pneumatic brake valves, schematic drawings, and foundation brake troubleshooting will be included in this technical course.

DT 202 Diesl Fuel Syst/Trblshoot 1-6 Credits
The theory and operation of diesel fuel injection systems will include Cummins PT, Caterpillar, Detroit Diesel, and Robert Bosch fuel systems. Governor operation and fuel system troubleshooting will be discussed.

DT 203 Diesel Shop Management 1.5 Credits
Designed to give students experience in the management of an equipment repair shop. Each student is required to estimate repair orders, calculate taxes, and deal with customers and employees. The course objectively evaluates what is needed to operate an equipment repair business.

DT 215 Electronic Diesel Engines 1-9 Credits
Designed to give individuals knowledge of electronic diesel engine controls as they apply to major diesel engine manufacturers. Emphasis is placed on engine sensors, electronic injection systems, and engine operating systems. No prerequisite but students having experience with diesel engines and basic electronics will find it helpful. Course may be taught in modules.

DT 299 Special Topics in Diesel Mech 1-10 Credits
A special topics course in Diesel Technology to serve a variety of needs. Topics are determined by the course instructor. Unlimited repeatability.

(ECE)

ECE 126 Social/Emotional Development 3 Credits
Study of effective development in infancy and toddlerhood. Emphasis is placed on experiences and techniques or use in the home and child care setting which will foster self-concept and social interactions for children from birth to three years of age.

ECE 127 Role of Play Infnt/Toddlr 1-3 Credits
Study of the role of play as it affects the social, emotional, and physical and intellectual growth and development of infants and toddlers.

ECE 130 Infancy 3 Credits
Course studies social, emotional, language, and sensorimotor development in infancy. Emphasis is placed on facilitating optimum infant and toddler development.

ECE 190 Professlism/Early Care 3 Credits
Focuses on professional issues in Early Childhood Education including ethical guidelines and other professional guidelines and standards related to practice; professional organizations and activities; principles of effective leadership and advocacy for young children and for the profession; and relevant public policy at the local, state, and national levels.

ECE 200 The Exceptional Child 3 Credits
This course focuses on the characteristics, training, and educational needs of children with disabilities including children who are gifted. It explores the existing educational agencies, programs, and instructional methods designed for children with disabilities.

ECE 204 Principles Child Guidance 3 Credits
A study of effective communication with children in guiding behavior. Emphasis will be placed on techniques which help children build positive self-concepts and individual strengths within the context of appropriate limits and discipline. The study includes uses of direct and indirect guidance techniques as well as introduction to guidance systems.

ECE 210 Assess of Young Children 3 Credits
This course focuses on how to observe, document, and assess the growth and development of young children in early care and education settings. Students learn and practice a variety of appropriate observation techniques, documentation methods, and assessment strategies and tools. Students are introduced to the goals, benefits, and uses of assessment for young children. Confidentiality and assessment partnerships with families and other professionals are also explored.

ECE 231 Practicum:Early Child Lab 6 Credits
Working in a preschool setting with young children under the supervision of a master teacher, planning and implementing activities. Practicum will normally be taken during the final year of the child development program. Law requires a TB test prior to enrollment.

ECE 232 Practicum:Infant/Toddler 3-4 Credits
The student works directly with infants or toddlers in a supervised facility. The student is responsible for the environment, activities, and routine of the children, and reports and evaluates the experiences with the practicum supervisor.

ECE 235 Adapting Curricula 3 Credits
This course focuses on adapting typical early childhood curricula to meet the needs of infants, toddlers, and preschoolers with special needs.

ECE 250 Intro Early Childhood Edu 3 Credits
Introduces students to early childhood education. Course deals with the total preschool program including types, objectives, philosophy, curriculum, physical plant, and equipment, as these aspects of the program relate to the needs and interests of the preschool child.

ECE 251 Curriculm Early Child Edu 3 Credits
This course will consist of methods of planning and teaching curriculum for children three to five years old. Included will be curriculum development, children's play, lesson planning, and daily scheduling. Emphasis on art, science, literature, music, language, blocks, dramatic play, etc.

ECE 262 Early Lang/Litrcy Develop 3 Credits
Course focuses on the four areas of Language Arts: speaking, listening, reading, and writing. Through a hands-on and interactive approach, students will explore the process of combining quality practices with specific materials and strategies focused on language and literacy development. In addition, students will examine the fundamentals of oral language and literacy-rich environments supported by the knowledge, skills, and dispositions that are predictive of later success in learning to read and write.

ECE 441 Play, Creat, & Aesth 3 Credits
This course will focus on current theories of play interpretation, examination of the nature of creative expression, and use of materials and activities to support the aesthetic domain of young children.

ECE 453 Methods I/Social Sciences 3 Credits
This course will focus on social studies in early childhood education. Students will review the philosophical backgrounds of the Early Childhood Movement: growth, development, and learning patterns of children, birth through 5 years of age. Strategies of teaching and evaluating young children and reporting growth and development to parents will also be examined.

ECE 454 Methods II/Math & Science 3 Credits
This course will focus on the examination of curriculum areas (e.g. math, science, nutrition, and safety) and planning, implementation, and evaluation of activities. An emphasis will be placed on developmentally appropriate materials and learning experiences and working with special populations within the parameters of the curriculum.

ECE 461 ECE Management 3 Credits
This course will focus on the examination of managerial principles, skills, knowledge, and philosophy required of administrators of early childhood programs. This course also investigates basic principles involved in establishing and operating learning centers for young children.

ECE 483 Pre-Student Teaching 3 Credits
This course will prepare students for ECE 493 Supervised Internship in an approved early childhood setting. The focus of the seminars will include the development of a portfolio focused on NAEYC's Six Processional Standards and Competencies to include program planning, implementation, guidance, and working with families.

ECE 493 Supervised Internship in ECE 1-12 Credits
Working in a preschool setting with young children under the supervision of a master teacher, planning and implementing activities. Practicum will normally be taken during the final year of the child development program. Law requires a TB test prior to enrollment.

(ECON)

ECON 101 Nation/Global Econ and Fin Lit 1 Credits
Study of the basics of national and global markets. Discussion and analysis of financial literacy components.

ECON 102 Prin of Microeconomics 3 Credits
Study of the causes and effects of individuals' choices among alternative uses of scarce resources. Topics include supply and demand analysis, price determination, theories of various market structures, competition and coordination, labor, the role of profit and interest, and government involvement in the economy.

ECON 103 Principles of Macroeconomics 3 Credits
Basic price and quantity relationships, study of monetary systems and policy, inflation, production and growth, recession, unemployment, fiscal policy, supply and demand perspectives, international exchange, and governmental-market relationships.

ECON 104 Current Economic Issues 3 Credits
Analysis of current economic issues and their relevance to individuals in their roles as consumers, workers, businessmen, and voters. Economic theories and concepts are utilized in explaining important social interaction relating to such topics as medical care, anti-trust policy, price controls, drug prohibition, environmentalism, tax policy, public debt, and income distribution.

ECON 261 Principles of Statistics I 3 Credits
This course emphasizes the application of statistical methods for prediction and decision making in economics and management. This course will cover basic concepts in descriptive and inferential statistics. This course provides tools and techniques needed for students to design and implement empirically managerial and economic studies, to interpret and evaluate estimation results and justify conclusions by focusing on probability distributions and theory, data presentation and analysis, regression analysis and hypothesis testing.

ECON 295 Special Topics in Economics 1-3 Credits
Various short courses and workshops covering a variety of topics. This course will be variable credit of one-to-three credits depending on the course content and number of hours required. The course may be repeated for up to six credits.

ECON 307 Environmental Economics 3 Credits
An application of the principles of marginal analysis and economic reasoning to the environment. Differing perspectives on issues relating to ownership, property rights, preservation incentives under different scenarios, the Coarse theorem, trade-offs among human values, distributional effects of varying uses of scarce resources, and differing public policy issues.

ECON 365 Labor Economics 3 Credits
An application of economic theory relating to labor issues. Topics include determination of wage and employment levels, worker cartels, fringe benefits, subsistence wages, minimum wage laws, living wage laws, unemployment compensation, fairness in wage distribution, the division of labor, and tenure systems.

(EDCT)

EDCT 439 Gen Methd Career/Tech Edu **3 Credits**
Designed for direct involvement in solving teaching and learning problems in career and technology education and occupational-vocational education. Emphasis is placed upon developing appropriate strategies for managing the classroom and occupational/industrial laboratory environment. Prerequisite: Admission to the Teacher Education Program or Business/Industry Endorsement. Corequisite: EDSC 315 or Business/Industry Endorsement.

EDCT 447 Curriculum Development in CTE **3 Credits**
Course will provide students the opportunity to research and develop curriculum dealing with content and procedures for career and technical education programs.

EDCT 463 Teach Secondary Bus Educ **3 Credits**
Designed for students who intend to pursue a career in teaching business subjects at the high school level. The major purpose of the course is to familiarize the student with the curriculum materials and teaching strategies which are unique to teaching business subjects. Business education is explored through the development of curricular materials and instruction procedures, including assessment and evaluation procedures.

EDCT 471 Career/Tech Student Org **3 Credits**
Designed for students who intend to pursue a career teaching in the field of career and technical education at the middle/high school level. Familiarizes students with the benefits of student organizations and how to organize and manage a student organization in their particular field. Satisfies one of the requirements for the business and industry endorsement.

EDCT 490 Coop Career/Tech Programs **3 Credits**
Provides students with an understanding of the role, organization, and implementation of cooperative and applied or work-based vocational programs.

(EDEL)

EDEL 311 Elem Methods Practicum I **1-3 Credits**
The first in a sequence of clinical and field experience courses. Students participate in field experiences and then reflect on what they have observed and learned. Students will spend approximately 15 hours observing in the public schools. [S/U]

EDEL 313 Elem Methods Practicum II **1-3 Credits**
The second in a sequence of clinical and field experiences. Students will spend approximately 25 hours observing in the public schools. The portfolio and admission process is explained. May be taken two different semesters. [S/U]

EDEL 315 Elem Methd Practicum III **1-3 Credits**
The third in a sequence of clinical field experiences. Students will spend 30 to 60 hours observing and teaching in public schools. May be repeated up to six credits. [S/U]

EDEL 433 Methods Teach PK-8 Math **3 Credits**
Course prepares prospective elementary teachers in the area of mathematics education. Students in this course will explore cognitive theories of development, methods, materials, and content of mathematics in the elementary grades. Curriculum changes that have taken place and current research in the area of mathematics education will be explored.

EDEL 443 Methods Teach PK-8 Science **3 Credits**
Course provides pre-service teachers with the theory, research, and best classroom practice related to science education. Students will be introduced to some of the materials, methods, and reasons for helping elementary children understand, perform, and appreciate science. Students will analyze the behavior of model teachers in elementary school classrooms and apply their acquired knowledge and skills by teaching elementary age students.

EDEL 453 Methods Teach PK-8 Soc Stdies **3 Credits**
Course focuses on integrating a number of subject areas into the curriculum. Explores the scope and sequences of understandings, attitudes, and skills taught in elementary social studies programs. Examines various methodologies used. A variety of teaching strategies will be explained and demonstrated for work with a diverse array of students in society.

EDEL 483 Elem Supervisd Teach Intn **1-16 Credits**
A semester teaching experience approved by the Teacher Education Committee. Each student will have a placement for 16 weeks. Policies and procedures are detailed in the Student Teaching Handbook.

EDEL 491 Elem Edu Capstone Seminar **1-3 Credits**
Addresses ethical, professional, and substantive issues in the teaching profession. This course forms the bridge between theory and practice where teaching skills can be analyzed, discussed, and refined: and professional competency can be assessed and achieved through professional collaboration and reflective practice.

(EDES)

EDES 300 Lang Arts and Lit **3 Credits**
This course will focus on learning and instruction in reading, writing, oral language, literature for preschool through kindergarten.

(EDRL)

EDRL 437 Teaching Reading **3 Credits**
A concentration on the developmental aspects of reading and language arts programs from PK to eighth grade. Involves theoretical and research knowledge pertinent to child growth and development and also to fundamental skills appropriate for the teaching of reading and language arts, especially reading skills and phonetic skills.

EDRL 442 Literacy Instruction I **3 Credits**
Designed to help pre-service teachers view reading, writing, listening, and speaking from a holistic, integrated perspective. The course emphasizes content, teaching methods, and strategies specifically related to analyzing the language acquisition and development of children. The relationship between literacy, language arts, and other curricular areas will be explored.

EDRL 443 Literacy Instruction II **3 Credits**
Designed to help pre-service elementary teachers understand and apply current research and best practices in teaching reading, writing, listening, and speaking from a holistic, integrated perspective. The course emphasizes the relationship between literacy, language arts, and other curricular areas, as well as teaching methods and strategies specifically related to language arts. Content area reading, selection and use of appropriate materials, resources, and technologies will be addressed.

EDRL 471 Theory/Pract Acad Eng Lang Dev **3 Credits**
This course addresses first and second language acquisition; language development universals and differences; English language structure and its particular challenges for the learner of a new language; English phonology (sounds), morphology (word formation), syntax (sentence formation), semantics (word meaning), and pragmatics (word choice); grammatical instruction and error analysis; and the writing process for English Language Learners. The course will also include the role of culture in language acquisition, evidence based practices for academic ELD, and approaches and models of instruction.

EDRL 474 Method/Curr Tch Eng Lang Learn **3 Credits**
Provides systematic instruction to help ELL students (1) adjust to school; (2) acquire English for self-help and for extended interaction; and (3) develop English for extended learning. This course includes an analysis of standard second language tests for diagnosis, placement, and teaching of ELL students using WIDA standards and research-based practices.

EDRL 475 Assess/Eval Eng Lang Learner **3 Credits**
Includes an analysis of standard second language tests and development and evaluation of teacher-generated instruments for placement, diagnosis, and teaching second language learners.

EDRL 477 Plcy,Iss,BstPrac ELL-Practcum **3 Credits**
This three-credit course will aim to familiarize students with historical and current issues and cultivate students' skill in the design and implementation of instruction and assessment for English Learners (ELs). Students will be expected to demonstrate their in-depth understanding of academic literacy for ELs through practicum experiences.

(EDSC)

EDSC 311 Secndry Methd/Practicum I **1-3 Credits**
First in a sequence of field and clinical experience courses in a secondary classroom. Students work in middle-level or high school classrooms to develop skills working with students and implementing instructional plans. Students will spend approximately 15 hours observing in the public schools. Class may be repeated up to a total of three credits. [S/U]

EDSC 313 Secndry Methd/Practicm II **1-3 Credits**
Second in a sequence of field and clinical experience courses in a secondary classroom. Students will observe approximately 25 hours of the middle-level or high school classrooms. The portfolio and admission process is explained. Class may be repeated up to a total of three credits. [S/U]

EDSC 315 Secndry Methd/Practm III **1-3 Credits**
The third and final course in a sequence of field and clinical experience courses. Students will spend 30-60 hours at the middle-level or high school classroom. Students will be expected to work toward completion of the requirements for their portfolio project. Taken in conjunction with content area methods course. Class may be repeated up to a total of three credits. [S/U]

EDSC 425 PE Methods **3 Credits**
This course is designed to prepare students to teach Physical Education at the 7-12 grade levels. Emphasizing the theoretical foundations, practical teaching strategies, and assessment techniques, students will gain a comprehensive understanding of teaching physical education to secondary school students. Through discussions, practical activities, and reflective assignments, students will develop the skills necessary to create engaging and effective physical education lessons that promote lifelong physical activity and well-being.

EDSC 433 Teaching Secondry English **3 Credits**
Designed to prepare students to teach English at the 7-12 grade levels. The course will consist of three hours of lecture and a one hour lab each week. Course objectives are aligned to the INTASC teaching standards. The course is premised upon the assumption that effective teachers combine an awareness of theory with ongoing research into effective practices, as well as continual reflection upon their own teaching. Students will also design objectives which reflect the Nevada State English standards and which integrate the various components of the Language Arts Curriculum. Students will develop and implement lessons and effective assessments based upon those objectives.

EDSC 453 Teaching Secondary Math **3 Credits**
Course examines the methods, materials, teaching techniques, and strategies unique to mathematics education. Emphasis is placed on the pre-algebra, algebra, and geometry curriculum; classroom organization; test construction and evaluation; use of audio-visual materials and equipment.

EDSC 463 Teachng Secondary Science **3 Credits**
Course will give students a broad perspective on science education from its historical development to current issues and trends, and will introduce methods of curriculum design, assessment techniques, instructional strategies, and other areas important in equipping successful science teachers. Practical material will be developed that may be used as resources in future science teaching situations.

EDSC 473 Teach Secndry Soc Studies **3 Credits**
Designed to provide undergraduate students in secondary education with an overview of the methods, assessment techniques, materials, curriculum, and activities used to teach social studies. The course is intended to help students acquire a repertoire of planning and instructional skills necessary for teaching social studies.

EDSC 483 Secnd Suprvsd Tch Intnshp 1-16 Credits
The Supervised Internship provides the student with the opportunity to experience, in depth, the full role and meaning of teaching in a school setting. Experiences include planning and organizing for instruction, developing classroom teaching competencies and skills, evaluating pupil progress, participating in extracurricular activities, working with special school personnel, and utilizing school and community resources in the instructional program.

EDSC 491 Sec Ed Capstone Seminar 3 Credits
Addresses ethical, professional, and substantive issues in the teaching profession. This course forms the bridge between theory and practice where teaching skills can be analyzed, discussed, and refined; and professional competency can be assessed and achieved through professional collaboration and reflective practice.

(EDSP)

EDSP 301 Education Excptl Child 3 Credits
A survey of the special education area for majors and non-majors, designed to acquaint the student with the special needs of learners categorized under all areas of exceptionality. Introduces methods for identifying, planning, and working effectively with exceptional children in the regular classroom. Emphasis on etiology, physical, and educational characteristics. The pre-service teacher is taught to recognize and refer exceptional learners for assessment, as well as design and implement individualized programs, instructional strategies, and classroom management strategies.

EDSP 418 Intro to SEAD Skills 3 Credits
This course introduces Social, Emotional, and Academic Development (SEAD) competencies: Self-awareness, self-management, social awareness, relationship skills, and responsible decision-making skills and their significance for educators to model SEAD skills and create meaningful, healthy relationships with students, peers, and community members. Course assignments and activities will highlight how SEAD competencies can increase professional impact and desired workplace outcomes.

EDSP 428 SEAD Practices/Critical Issues 3 Credits
This course introduces educators to current state policies and future state needs related to Social, Emotional, Academic Development (SEAD) competencies (self-awareness, self-management, social awareness, relationship

EDSP 434 Commnty/Fam Intg Spc Need 3 Credits
The purpose of the course is to provide students with the understanding of theory, principles, procedures, and legal requirements for working toward collaborative partnerships among families, professionals, students, and other stakeholders to meet the transitional needs of the individual student with a disability. Also focuses on the importance of parent involvement with the individual student.

EDSP 438 SEAD Methods and Curriculum 3 Credits
This course introduces educators to practical strategies and instructional approaches to embed Social, Emotional, Academic Development (SEAD) competencies (self-awareness, self-management, social awareness, relationship skills, and responsible decision-making skills) and related lessons into their personal and workplace practices. The SEAD applications presented in this course can be used to strengthen SEAD instruction and support services across Pre-K to 12th grade levels and reinforce school-family-community relationships. Ten teaching practices that support teaching strategies to use in classrooms to support a positive, engaging, and inclusive classroom experience for students and teacher will be highlighted. SEL skills targeted by evidence based SEL programs will be investigated. Course assignments and a personalized action plan will further introduce methods to leverage SEAD competencies as a way to increase professional impact and desired workplace outcomes for modeling, teaching, and implementing SEAD.

EDSP 441 Chars/Strat Mld/Mod Disab 3 Credits
Provides an overview of educational laws/practices that influence the identification, placement, and instruction of students with mild to moderate disabilities. Instructional practices will include academic accommodations, social skills, and classroom management.

EDSP 443 Specl Educ Curr/Gen Methd 3 Credits
Special instructional methods for students with mild to moderate disorders. Includes instruction in IEP goals and objectives.

EDSP 448 SEAD Assessment and Evaluation 3 Credits
This course introduces educators to practical Social, Emotional, Academic Development (SEAD) assessments that measure self-awareness, self-management, social awareness, relationship skills, and responsible decision-making skills in youth and adults. This course identifies methods to monitor SEAD competency development to help improve future SEAD program needs across educational levels. Course participants will gain practical skills to evaluate SEAD growth and its relationship to whole-student success. Finally, personalized action planning will help ensure that class participants are making intentional progress towards their professional goals and SEAD related outcomes.

EDSP 452 Assessmt/Sp Educ Teachers 3 Credits
Formal and informal methods of assessing students with disabilities: academic, language, motor, perception, and social skills. Interpretation of assessment and application to program needs.

EDSP 453 Behavr Tchnq/Stdt Disabil 3 Credits
Developing, implementing, and evaluating, behavior management techniques, including social-emotional and academic development for general and special education classrooms. Focus will also include assessment and intervention into problem behaviors. (This aligns with a recent course change in EDSP 453 from UNR.)

EDSP 464 Mulit-tiered Systems of Supp 3 Credits
Specific training in (a) implementation of Multi-tiered Systems of Support intervention models and (b) identification of evidence-based strategies and interventions to support students identified as at-risk or with disabilities.

EDSP 484 Special Educ: Elem Level 1 Credits
Clinical and Field Experience in an elementary special education setting. Students will spend approximately 25 hours observing and in a special education setting in the public schools. [S/U]

EDSP 485 Special Educ:Second Level **1 Credits**
Clinical and Field Experience in a secondary special education setting. Students will spend approximately 25 hours observing and teaching in a special education setting in the public schools. [S/U]

EDSP 495 Studnt Teach Intrn/Sp Edu **8-14 Credits**
Student Teaching Internship.

(EDU)

EDU 208 Students w/ Diverse Abilities **3 Credits**
Focus on successful inclusion of students with various disabilities, students from culturally diverse backgrounds, and English language learners in a general education classroom.

EDU 210 Nevada School Law **2 Credits**
Historical development of paramount issues in contemporary education. Emphasizes legal aspects of emerging educational patterns. Meets state licensure requirements in Nevada School Law. [S/U]

EDU 214 Prep Teachers to Use Tech **3 Credits**
Lab course on advanced skills and strategies for integrating technology into the K-12 classroom. Computer experience is required in word processing, basic spreadsheet design, and file management.

EDU 245 Fnd. of Lit./Sc. of Reading **3 Credits**
This course is designed for paraprofessionals, substitute teachers, or other support staff to understand the current research, theory, methods, and instructional strategies related to the science of reading. This focus includes the 5 pillars of literacy instruction: phonemic & phonological awareness, phonics and spelling, vocabulary, reading fluency, and reading comprehension. Effective literacy assessments, intervention strategies, and differentiated techniques will also be explored.

EDU 250 Foundations of Education **3 Credits**
A foundations course in education and introduction to the philosophy, history, and sociology of modern education. Emphasis is placed on current trends in education.

EDU 282 Effect Substitute Teach **1 Credits**
Specialized instruction designed to develop understanding of a current aspect of education. Maximum of three credits which may be applied as elective credit hours toward a degree. [S/U]

EDU 295 Education Top: Subtitle Varies **1-6 Credits**
Special topics in education. Unlimited repeatability. [S/U]

EDU 310 Learning Differences in GT **3 Credits**
In this course participants will understand the characteristics and needs of gifted children and youth, types of programs available to gifted children and youth, the historical and philosophical foundations required of professionals int he field, the history of the gifted child movement, and advocacy for gifted children and youth.

EDU 320 Learning Environments for GT **3 Credits**
In this course participants will understand how to create safe learning environments that foster emotional well-being, positive social interaction, leadership, and cultural understanding success in a diverse society. They will gain knowledge of the impact of giftedness and diversity on social-emotional development and be enabled to design environments, withing a continuum of services, that encourage independence, motivation, and self-efficacy of individuals from all backgrounds.

EDU 330 GT Curriculum and Planning **3 Credits**
In this course participants will understand and apply research-based models of curriculum and instruction related to students with gifts and talents and respond to their needs by planning, selecting, adapting, and creating culturally relevant curriculum and by using a repertoire of evidence-based instructional strategies to ensure specific student outcomes. Participants will understand the purpose of using a comprehensive and sequenced core curriculum that is aligned with local, state, and national standards, and hot to differentiate and expand it in order to meet the unique needs of students with gifts and talents. Participants will select, adapt, and plan for the use of a variety of evidence-based instructional strategies to advance learning of gifted and talented individuals.

EDU 340 Assessment in Gifted Education **3 Credits**
In this course participants will understand how to collect multiple types of assessment information so that all students are able to demonstrate their gifts and talents. They will understand how ongoing assessments such as pre- and post -, self-, performance-based, and product-based assessments guide differentiation. Participants will understand the importance of using non-biased, technically adequate, and equitable approaches in order to identify students from diverse backgrounds for gifted programs. This course will focus on interpreting multiple assessments in different domains and understand the uses and limitation of the assessments in identifying the needs of students with gifts and talents.

(EDUC)

EDUC 323 Curriculm Design/Family Engage **3 Credits**
Includes planning for family engagement including families from diverse backgrounds in learning-centered environments, preparing lesson plans, preparing a professional portfolio, and understanding the Nevada Academic Core Standards.

EDUC 406 Curriclm/Assess Education **3 Credits**
Course covers the range of assessments used in elementary schools. Students learn to administer and interpret standardized or norm referenced tests, create appropriate criterion-referenced assessments, portfolios, performance tasks with data-collection, and record-keeping strategies for reporting student academic progress. Nevada Curriculum Standards and state testing instruments will be studied.

EDUC 470 Multicultural Education 3 Credits
This course explores identity, culture, and multiculturalism for educators. Special emphasis is placed upon the understanding of race and ethnicity and the interconnectedness of race and ethnicity with other aspects of diversity, including, but not limited to, geographic origin, residency status, language, socioeconomic status, sex, gender identity or expression, sexual orientation, religion, spirituality, age, physical appearance and disability. Students will review cognitive theory for culturally responsive teaching, examine culturally responsive instructional materials, design curricula, and explore effective assessments.

(EE)

EE 220 Circuits I 3 Credits
This course is an introduction to analysis methods and network theorems used to describe operation of electric circuits. Topics covered include resistive, capacitive, and inductive components in DC and AC circuits.

(EIT)

EIT 233 Intro to Instrumentation 3-4 Credits
Successful completion of this course will provide the student with an understanding of the concepts of instrumentation as used in industry and why the accompanying skills are an exciting and highly sought after trade. Common pneumatic and electronic instruments that are used to control processes in refineries, power plants, mines, and most manufacturing facilities will be discussed.

EIT 240 Adv Topics in Instrument 2 Credits
Focuses on some of the more specialized instrumentation systems found in industry such as analyzers, weight scales, and wireless systems. Analyzer applications for pH, CO, CO2, NOx, SO2, HCN, and conductivity are becoming more critical to plant processes for environmental reasons. Weight scales are necessary for raw material accounting and inventory. Wireless systems are increasingly demonstrating their usefulness in low cost installations as security issues are resolved.

EIT 299 Special Topics 1-3 Credits
EIT 299 is a special topics course students can take for a maximum of 3 credits. The topics of the course can vary depending on how the student and faculty choose to use it, and it will be used to help students focus on specific skills identified for specialization. For the Process Operator program, the course will be 3 credits.

EIT 315 Pres/Lev/Flw Measurement 4 Credits
Exploration of the physics of pressure, level, and flow. Calculations are derived from formulas that pertain to fluids and solids and used to configure instruments for the purpose of process control. The types of instruments that are presented in this course are found in every industry that produces or manufactures a product. Labs will consist of configuring and calibrating instrumentation to precise standards based on the theory learned in the class lecture.

EIT 323 Installation and Configuration 3 Credits
Provides students with an understanding and practical application of safe and efficient methods of installation and maintenance of process instrumentation. Includes instrument piping, electrical wiring, and mechanical structures as related to physical, chemical, electrical, hydraulic, and pneumatic processes. Configuration of control loop elements is included with detailed exercises on 'live' trainers.

EIT 333 Prcss & Instrmnt Diagram 3 Credits
P&ID drawings are integral to understanding how manufacturing process works. P&IDs are the prelude to loop diagrams and other various schematics. All of these drawings are used by technicians for troubleshooting, wiring, and tubing. AutoCAD drafting basics are required to develop P&ID and loop drawings.

EIT 336 Control Valves/Regulators 4 Credits
The theory and operation of valves and associated pneumatic and hydraulic devices used in the control of gasses and fluids.

EIT 348 Temp Measure & Control 3 Credits
The measurement and control of industrial heat and temperature processes.

EIT 368 Measurement Sys Analysis 2 Credits
Designed to demonstrate the importance of accurate and reliable measurements in process control systems. Covers how to deal practically with inaccuracies and the methods to minimize the downside effects of inadequate measurement systems.

EIT 376 CCST Exam Review 1 Credits
Fundamentals of process control and brief descriptions of individual processes and combination of processes used in industry. Theory of operation and application of associated process instruments covered. [S/U]

EIT 437 Intro to Control Systems 3 Credits
Successful completion of this course will provide the student with an understanding of the concepts pertaining to analog control using Programmable Logic Controllers. Selection of hardware including processor architecture, input/output module wiring, programming, controller installation, and system troubleshooting. Students will learn PID control systems by utilizing PLC hardware/software in a 'live' process. Loop tuning methodology, controller feed-forward, feedback, cascade, and ratio control will be incorporated on process simulators.

EIT 468 Advanced Control Systems 3 Credits
This course provides in-depth instruction in the design, development, and troubleshooting of programmable logic controllers (PLC), and distributed control systems (DCS) projects utilizing human machine interfaces (HMI) applications. Hands on hardware setup, programming, process monitoring and troubleshooting, and configurations of industrial networking.

(ELM)

ELM 101 Electrical Workforce Training 1-7 Credits
The first of eight courses offered in the Electrical Workforce Training Program. Offers the student a planned educational experience in the electrical field by providing online electrical craft training, related laboratory experiences, and supervised performance task completion assessment. May be repeated for up to seven credits.

ELM 102 Elect Workforce Train II 1-7 Credits
The second of eight courses offered in the Electrical Workforce Training Program. Offers the student a planned educational experience in the electrical field by providing online electrical craft training, related laboratory experiences, and supervised performance task completion assessment. May be repeated for up to seven credits.

ELM 103 Elect Workforce Train III 1-7 Credits
The third of eight courses offered in the Electrical Workforce Training Program. Offers the student a planned educational experience in the electrical field by providing online electrical craft training, related laboratory experiences, and supervised performance task completion assessment. Unlimited repeatability.

ELM 104 Elec Workforce Train IV 1-7 Credits
The fourth of eight courses offered in the Electrical Workforce Training Program. Offers the student a planned educational experience in the electrical field by providing online electrical craft training, related laboratory experiences, and supervised performance task completion assessment.

ELM 105 Elect Workforce Train V 1-7 Credits
The fifth of eight courses offered in the Electrical Workforce Training Program. Offers the student a planned educational experience in the electrical field by providing online electrical craft training, related laboratory experiences, and supervised performance task completion assessment.

ELM 106 Elect Workforce Train VI 1-7 Credits
Sixth of eight courses offered in the Electrical Workforce Training Program. Offers the student a planned educational experience in the electrical field by providing the student with online electrical craft training, related laboratory experiences, and supervised performance task completion assessment.

ELM 107 Elect Workforce Train VII 1-7 Credits
Seventh of eight courses offered in the Electrical Workforce Training Program. Offers the student a planned educational experience in the electrical field by providing online electrical craft training, related laboratory experiences, and supervised performance task assessment.

ELM 108 Elect Workforce Train VIII 1-7 Credits
This course is the eighth of eight courses offered in the electrical Workforce Training Program. The course offers a planned educational experience in the electrical field by providing online electrical craft training, related laboratory experiences, and supervised performance task completion assessment.

ELM 112 Electrical Theory, DC 1-4 Credits
The study of matter, atomic structure, electron theory, sources of electricity, and magnetism. Theory and shop application in Ohm's Law, voltage, current, resistance, and power in series, parallel, and series-parallel direct current circuits.

ELM 120 Low Voltage Systems 1-3 Credits
An introduction to low voltage systems used to distribute, carry, capture, and display voice, video, audio, and data signals. Topics include entertainment (video and audio media systems), communications (telephone, fax, modem, networks, and publication address systems), life safety (access control, alarm systems, and video surveillance), environmental control (HVAC and energy management), and automation controls (residential and commercial buildings).

ELM 121 Circuit Design 1-2.5 Credits
Developing and drawing electrical diagrams and graphs using standard electrical and JIC symbols.

ELM 122 AC Theory 4 Credits
Analyze AC series, parallel, and combination circuits with resistance, inductance, and capacitive elements using mathematics, measuring devices, and other test equipment.

ELM 123 Solid State 1-2.5 Credits
Study of the theory and operation of such solid-state devices as diodes, transistors, diacs, triacs, and SCRs.

ELM 124 DC Gen, Motors & Controls 2 Credits
Theory, design, applications, and testing of direct current (DC) generators, DC motors, and the study of such DC control devices as manual starting rheostats, reduced-voltage starting mechanisms, and speed controls.

ELM 125 AC Motors and Alternators 2 Credits
Theory, design, application, and testing of alternating current (AC) motors and alternators; single- and three-phase generation of alternating current; paralleling alternators; and calculating load and power factor characteristics under various load conditions.

ELM 126 Motor Maintenance 2 Credits
Explores the mechanical aspects of small and larger motor disassembly and assembly; bearing, commutator, slip ring and brush care; electrical maintenance; safety planning; and variable frequency drives.

ELM 127 Intro to AC Controls .5-3 Credits
Introduction to pilot devices, wiring diagrams, ladder diagrams, and basic motor circuits. Areas of emphasis include two- and three-wire controls, parallel stop-start, and hand-off automatic controls. May be repeated up to three credits.

ELM 128 Transfrmrs & Ind Lighting 4 Credits
Comprehensive study of the theory and operation of transformers and industrial lighting. The functions of various types of transformers and the maintenance and repair of industrial lighting systems will be emphasized. Perform the actual hookup and testing of basic single-phase and three-phase transformer connections. Observe and demonstrate proper safety and maintenance techniques and develop service wiring techniques.

ELM 130 Low Voltage Systems II **3 Credits**
The second of three courses offered in Low Voltage Systems. Low voltage systems are used to distribute, carry, capture, and display voice, video, audio, and data signals. Industries addressed in the course include entertainment (video and audio medial systems), communications (telephone, fax, modem, networks, and public address systems), life safety (access control, alarm systems, and video surveillance), environmental control (HVAC and energy management), and automation controls (residential and commercial buildings). Topics covered include network cabling, cabling for wireless networks, testing of voice, video and data wiring, and fiber optic systems. May be repeated up to two times.

ELM 131 National Electric Code **2.5 Credits**
Survey of the National Electric Code and its application to the safe installation of electrical conductors and equipment.

ELM 132 Digital Concepts **1-2.5 Credits**
Introduction to digital electronics including numbering systems, binary codes, Boolean algebra, and logic hardware.

ELM 133 Advanced AC Controls **4 Credits**
Applications and testing of a variety of AC controls, including limit switches, control relays, timing circuits, control transformers, and variable frequency drives.

ELM 134 Intro Progrm Logic Cntrl **2.5 Credits**
Introduction to programmable controller hardware, numbering systems, memory organization, and peripheral devices.

ELM 135 Natl Elec Code 430 **1 Credits**
In-depth study of Article 430 of the National Electric Code and its application to motors, motor circuits, and controllers.

ELM 136 Programmable Controls App **2.5 Credits**
Practical experience in programming circuits using relay-type instructions, timers, counters, data manipulation, arithmetic functions, and other advanced features and techniques.

ELM 141 Blueprint Reading **2 Credits**
Focus on electrical prints, drawings, symbols, and specifications for construction and electrical plans.

ELM 142 Raceways **2.5 Credits**
Introduction to the types and applications of raceways, wireways, and ducts. Students will learn how to cut, ream, thread, connect, and bend conduit using hand, mechanical, hydraulic, and electric benders.

ELM 143 Wiring Techniques **1-4 Credits**
Practical application in a variety of building types and remodeling of existing buildings. Course will include job building, material estimation, tool and material use, and installation techniques.

ELM 198 Special Topics in ELM **1-6 Credits**
A special topics course in Electrical Systems Technology to serve a variety of needs. Topics are determined by the course instructor. Unlimited repeatability.

(EMS)

EMS 108 EMT **7 Credits**
Designed for individuals who anticipate working with an ambulance service, fire department, police department, mining industry or other occupational fields where medical emergencies are common. Upon successful completion of the course, the student will be eligible to take the National Registry of Emergency Medical Technicians (NREMT) examination. Prerequisite: The student is required to have a current Drivers license and proof of health insurance. Healthcare provider CPR, up to date immunizations, background check, and a drug screen are required to be eligible to attend the required clinical rotations for certification.

EMS 109 EMT Refresher Training **2 Credits**
The EMT, 30-hour Refresher Course is offered for individuals who wish to renew their EMT-Basic or Intermediate certification for a two-year period. Each student must complete six online assignments and six tests (passing with a 70% average) prior to scheduling CPR and skills evaluation. Unlimited repeatability. Prerequisite: Current certification as an EMT.

EMS 110 EMT Instructors Course **1 Credits**
Trains instructors to teach the U.S. Department of Transportation Basic Training program for Emergency Medical Technician - Basic. Emphasizes the development of teaching skills, rather than emergency care skills. Includes components of the learning process, methods of teaching, preparation and use of various media/materials, and purpose and methods of evaluation. Upon successful completion of the course, the student will have a minimum of 10 hours under the supervision of a currently certified EMS Instruction and be for Nevada EMS Instructor certification. Prerequisite: Current Nevada EMT certification.

EMS 113 First Responder **3 Credits**
Emphasizes development of student skills in patient assessment and emergency care procedures including life-threatening emergencies, injuries to various body parts, emergency childbirth, techniques of moving patients, and more. This course offers a certificate by the State of Nevada Bureau of Licensure and a Certificate as a Nevada Emergency Medical Services First Responder. A certificate will allow students to volunteer with various fire and rescue agencies.

EMS 114 First Responder Refresher **1 Credits**
A 16-hour refresher course in emergency medical care. [S/U]

EMS 118 Adv Emergency Medical Tech **8 Credits**
This course is designed to instruct students to the level of Advanced Emergency Medical Technician (AEMT) based upon the new National EMS Education Standards. These AEMTs will provide both basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system (EMS). AEMTs function as part of the comprehensive EMS response, under medical oversight. AEMTs perform interventions with the basic and advanced equipment typically found on the ambulance. The AEMT is a vital link in the pre-hospital care system. Prerequisite:

The student is required to show proof of a current Nevada EMT certification, Healthcare Provider CPR card, proof of health insurance. Proof of current immunizations or immunities, background check, and drug screen are required for clinical rotations for certification.

EMS 119 EMT I-85 to AEMT Refresher 3 Credits
The Emergency Medical Technician Intermediate 85 to Advanced Emergency Medical Technician (AEMT) Bridge Refresher Course is offered for individuals who wish to bridge from Intermediate 85 to Advanced EMT to meet the new national standards. This course will also serve as a State of Nevada accepted refresher course for re-certification purposes.

EMS 198 Special Topics in EMS .5-3 Credits
Selected emergency medical technician topics offered for general interest. No prerequisites. Unlimited repeatability.

EMS 200 Fund Paramedic Medicine 3 Credits
Information will be provided that defines the roles and responsibilities of the paramedic and the importance of scene safety and wellness when practicing in the field. The course also provides information on injury prevention and the use of protective equipment needed to protect the paramedic in the field. It will provide the student with an understanding of the medical-legal and ethical issues which will impact them in their career. At the completion of this course, the EMT-Basic skills will be assessed and reviewed.

EMS 204 Princ Anatomy/Pathophysiology 4 Credits
This course prepares the student to understand basic medical terminology, microscopic and gross anatomy and physiology. The course is designed to go beyond what is covered in the anatomy and physiology review of each section in the national standard curriculum. This course will be offered for 4 credits (3 credits of Lecture and 1 credit of Skills Lab).

EMS 205 Prin of Pathophysiogy 3 Credits
Course prepares student to understand basic medical terminology, microscopic and gross anatomy and physiology. Designed to go beyond what is covered in the anatomy and physiology review of each section in the national standard curriculum.

EMS 206 Prin Pharm/Medication/Venous 3-4 Credits
This course prepares the student to understand and to be able to integrate the principles of pathophysiological pharmacology and the assessment findings to formulate a field impression and implement a pharmacologic management plan for patients in the prehospital environment. This course will be offered for 4 credits (3 credits of Lecture and 1 credit Lab).

EMS 207 Airway Mgt/Vent Paramedic 2 Credits
Students successfully completing this course will demonstrate a behavioral, cognitive, and psychomotor understanding of, and proficiency with, basic and advanced airway management. This course will be offered for 2.0 credits (1 credit theory/1 credit lab).

EMS 209 Patient Assess Paramedics 2-3 Credits
This course introduces the Paramedic student to a comprehensive physical examination and assessment, which includes history taking, clinical decision-making, communications, and documentation. This course will be offered for 2.0 credits (1 credit theory / 1 credit lab).

EMS 210 Princple Cardlgy Paramdic 3 Credits
This course prepares the Paramedic student to identify single and multi-lead cardiac rhythms and treat those rhythms considered to be life-threatening with electrical therapy. The skills taught include defibrillation, cardioversion, and cardiac rhythm interpretation. It will also prepare the student to assess, manage, and treat various cardiovascular emergencies that include ventricular fibrillation, bradycardia, tachycardia, myocardial infarction, cardiogenic shock, pulmonary edema, angina pectoris, congestive heart failure, hypertension, PEA (pulseless electrical activity), and asystole. This course will be offered for 3 credits (2 theory / 1 lab).

EMS 211 Parmdc Care Md Emerg 3-4 Credits
This course will prepare the Paramedic student to identify, assess, manage, and treat various medical emergencies and communicable diseases. Advanced Cardiac life Support is required for healthcare providers who either direct or participate in the resuscitation of a patient in the prehospital or hospital setting.

EMS 212 Para Trauma Emg/Intl Life 3 Credits
This course prepares the student to identify, assess, manage, and treat various types of trauma emergencies. Topics include Trauma Systems; Mechanism of Injury; Soft-Tissue Trauma; Burns, Head and Face Trauma; Spinal Trauma; Thoracic Trauma; Abdominal Trauma; and Musculoskeletal Trauma. Skills include trauma assessment, splinting, bandaging, spinal immobilization, IV therapy, chest decompression, and associated pharmacological interventions.

EMS 214 Pediatrics/Spcl Consider 3 Credits
This course prepares Paramedic to identify, assess, manage, and treat age related emergencies and other special challenges. The student will also be introduced to the concept of assessment based management. Topics include Neonatology, Pediatrics, Geriatrics, Abuse and Assault, and Patients with Special Challenges.

EMS 215 Assess Bsd Mgt/Op Paramed 3 Credits
This course will contain the principles of Assessment Based Management that will teach the paramedic student how to implement a plan for patients with common complaints. The course will also prepare the Paramedic to the concepts of medical incident command, ambulance and rescue operations, hazardous materials, incident, and crime scene awareness.

EMS 216 Hosp/Clinic Exp Paramedic 4-6 Credits
This course allows the paramedic student to apply learned classroom skills and knowledge in the hospital and other clinical care environments. The student will function under the direction of a paramedic, nurse, or physician preceptor. This course will be offered for 6 credits (90 hours per credit = 270 clinical hours).

EMS 219 Paramedic Field Intrnship 8 Credits
This course is designed to introduce the paramedic student to Advanced Life Support (ALS) prehospital operations. The student will also become familiar with procedures and care provided by paramedics in the field. Each student will be a third person on a paramedic rescue unit and will work directly with a paramedic preceptor.

EMS 220 Paramedic Refresher **3 Credits**
This course is the required 48 hour refresher that allows paramedics (NRP) to maintain their national registry certification. Unlimited repeatability.

EMS 300 Community Paramedic **10 Credits**
Information will be provided that defines the roles and responsibilities of the EMT, AEMT, and/or paramedic as a community paramedic. The course will provide the student with a better understanding of chronic diseases, preventative care, along with coordinating health services for patients. The course will assist the student with understanding community based needs and multidisciplinary collaboration by reducing hospital admissions, preventing unnecessary ambulance transports, and treating patients in their own homes. The student will learn to establish therapeutic relationships, assist patients with connecting to social services, and assist the primary care physician in providing patient care. The course includes 100 hours of clinical experience. The course will prepare the student to take the CP-C Exam for community paramedicine and to gain Nevada community paramedic certification. Students must have a current EMT or AEMT or Paramedic certification with Nevada or NREMT.

(ENG)

ENG 411B Principles Modern Grammar **3 Credits**
Principles of modern grammar and usage. Designed for students seeking certification in secondary English.

ENG 416C Special Problems in English **1-6 Credits**
Workshops in language, literature, and composition. May be repeated up to two times.

ENG 418A Adv Eng Reading Strategie **3 Credits**
Designed for the secondary level pre-service education student and/or the actual practicing educator (at either the secondary or post-secondary levels). Its primary aim is to provide a theoretical and practical base for connecting effective reading strategies to the teacher's specific content area of instruction. These strategies will be specifically targeted to the secondary/ post-secondary levels of instruction. Students will be engaged in the effective design and implementation of reading into the delivery of their own content area. Topics to be explored include reading comprehension of expository and narrative texts (especially fiction and literature), developing life-long habits across the realm of reading, integrating reading across all of the language arts (speaking, listening, and writing) as well as across one's content area of instruction.

ENG 433A Shakespeare:Tragedy/Hist **3 Credits**
An examination of some of Shakespeare's major tragedies and histories.

ENG 449A British Literature I **3 Credits**
Major authors and works in British literature from the beginning through the eighteenth century. The course includes reading and analysis of works of prose, poetry, and drama. This course fulfills the British literature requirement for secondary education majors.

ENG 449B British Literature II **3 Credits**
Reading and discussion of major British authors from the Romantic Movement to the present. This course fulfills the British literature requirement for secondary education certification in English.

ENG 451A American Literature I **3 Credits**
Major figures and movements from the beginnings of the Civil War. Fulfills the American literature requirement for secondary education certification in English.

ENG 451B American Literature II **3 Credits**
Major figures and movements from the Civil War to the present. Fulfills the American literature requirement for secondary certification in English.

ENG 497A Top Multi-Cultural Lit **3 Credits**
Reading and analysis of works of fiction, non-fiction, and drama by Asian American, Latin American, Native American, and/or African American writers. This course fulfills the multi-cultural literature requirement for secondary education certification in English.

ENG 475B Literary Nonfiction **3 Credits**
The analysis of essays and nonfiction prose.

ENG 498B English Capstone **3 Credits**
Students will design and produce an independent project in the field of English under the supervision of a member of the English Faculty. Serves as the capstone course for The Bachelor of Arts in English.

ENG 402A Advanced Creative Writing **3 Credits**
A workshop based creative writing course in which students pursue independent projects in fiction and poetry. May be repeated up to nine credits.

ENG 95 Basic Writing II **3 Credits**
Designed to develop writing skills. Focuses on the review of grammatical relationships, sentence patterns, punctuation, and usage, with concentration on writing expository paragraphs and essays. Students will have additional Academic Success Center requirements. Upon successful completion of the course, the student may move directly into ENG 101.

ENG 100 Composition-Enhanced **5 Credits**
Allows students to fulfill their first semester of English while completing the remediation process. Designed for students who did not place into ENG 101 on the placement test/writing sample, but did not score so low that they need ENG 95. Allows a student to refine specific skill deficiencies while completing the first semester of freshman composition (ENG 100 is equivalent to ENG 101). Students will have additional Academic Success Center requirements. Although it is a five-credit course, it does not replace ENG 102. After successful completion of ENG 100, a student must take ENG 102 to complete the general education requirement.

ENG 101 Composition I **3 Credits**
Critical reading and writing of the expository essay. Emphasizes pre-writing, strategies for organization, and revision.

ENG 102 Composition II **3 Credits**
Continuation of English 101. Emphasizes writing from sources, argument, the investigative paper, and research techniques.

ENG 103 English Fund Tech Writing **3 Credits**
Emphasizes the essentials of sentence structure, paragraph development, grammar, and punctuation. Class writing assignments apply these essentials to a variety of on-the-job related documents such as memos, letters, and reports. Course is recommended for students seeking certificates of achievement and meets the requirement for a 100-level English course. Upon successful completion of ENG 103, students may move directly into ENG 107 or ENG 101.

ENG 107 Tech Communications I **3 Credits**
Basic skills necessary for successful on-the-job communications including improved letter and report writing, persuasion, interviewing, process, mechanism description, and business and technical grammar.

ENG 108 Tech Communications II **3 Credits**
Advanced letter and report writing techniques including proper word choice, tone, and structure. Business letters, memorandums, formal and informal reports, process, and mechanism descriptions.

ENG 203 Intro to Literary Study **3 Credits**
Introduction to the elements of fiction, poetry, and drama used in the analysis of literature.

ENG 205 Intro to Creative Writing **3 Credits**
A creative writing course designed to introduce students to the production of fiction and poetry.

ENG 221 Writing Fiction **3 Credits**
The writing of fiction in a workshop setting. Students are required to produce several works of short fiction.

ENG 223 Themes of Literature **3 Credits**
Themes and ideas significant in literature.

ENG 240 Digital Literacy/Composition **3 Credits**
Development of tools to find, evaluate, compare, use, and comprehend digital resources, as well as to create compositions building on these resources in a multimedia manner.

ENG 250 Intro Children's Literature **3 Credits**
Study of outstanding children's books to promote ways in which the books can be used to enhance the lives and skills of children, teachers, and parents.

ENG 258 Shakespeare Theatre **1 Credits**
A tour to one of the summer festivals to view and study Shakespearean theatre in performance.

ENG 259 Speculative Fict/Fant Lit **3 Credits**
A critical, survey-based introduction to the genres of Speculative (Science) Fiction and Fantasy Literature.

ENG 261 Introduction to Poetry **3 Credits**
Study of a variety of poets and their techniques.

ENG 267 Intro Women in Literature **3 Credits**
Study of variety of important women authors. In some semesters, offered as a study of important female characters taken from plays and novels, both of European and American Background.

ENG 299 Special Topics in English **1-3 Credits**
Consideration of special topics and issues in English. Selection will depend upon current interests and needs. Unlimited repeatability. No prerequisite.

ENG 310 Rhetorics of Everyday Texts **3 Credits**
The examination and production of everyday texts such as digital communication, visual media, music, architecture, style, and landscape in terms of their theoretical, historical, cultural, and technological contexts. Students should expect to compose everyday texts of their own as well as write about texts examined in the course.

ENG 320 Identities and Texts **3 Credits**
The examination of the role of identity in rhetoric/composition and communication and how the multiple identities we each inhabit are reflected in the multiple identity possibilities within texts.

ENG 325 Advanced Literary Study **3 Credits**
Designed for students who are familiar with basic elements of literature and who have some experience with literary interpretation. Students will examine the major critical approaches to literature and learn to apply these approaches. Students will read and analyze works of fiction, poetry, and drama; write several essays; and one longer paper.

ENG 327 Composition III **3 Credits**
A practicum in writing, this course provides instruction in all of the stylistic choices a writer makes to communicate, not only information, but the voice behind the information. Experimentation with sentence patterns, sentence length, word choice, word placement, and punctuation.

ENG 329 Language Study **3 Credits**
A consideration of language history, function, and use. Topics include the historical development of languages, language acquisition, descriptive grammar, language controversies, etc.

ENG 333 Prof Communications **3 Credits**
A course in applied rhetoric for students to develop the writing and communication skills they will need as professionals. The goal is to make strong writers with flexible analysis, writing, and oral communication skills.

(ENGR)

ENGR 100 Intro to Engineering Design **3 Credits**
This course is an overview of engineering practices and provides exposure to the engineers working environment. Introduces engineering design, professional ethics, project planning, prototype fabrication, engineering creativity, and overview of engineering disciplines. Student groups carry out a semester-long design project while learning to be a part of an engineering team.

ENGR 241 Statics **3 Credits**
Static force systems. Topics include resolution and composition of forces, equilibrium of force systems, friction, centroids, moments of inertia, mass moments of inertia, cables, beams, fluid statics, and work.

(ENRG)

ENRG 147 Solar Water Heating Systems **3 Credits**
This course is designed to train students in the installation, maintenance, and theory of solar hot water heating systems for residential and commercial use. This course focuses on hot water systems for domestic uses. Core topics in this course are workforce safety, solar panel installation, system layout, and hot water heater theory.

(ENV)

ENV 100 Humans and the Environment **3 Credits**
Introduction to the relationship of man and his environment. Current thinking and research concerning the impact of industrialization and urbanization on environmental quality, including the population explosion; the potential decline of the affluent society by the depletion of natural resources; the pollution of air, land surface, and water; and the public agencies and policies designed to solve environmental problems.

ENV 422 Env Regulation/Compliance **3 Credits**
A review of the important environmental regulations - federal, state, and local - and the processes and methods of compliance with those regulations. The NEPA process is a major component of this course, from points of view of both the regulatory agencies and the entities with activities falling under the regulations.

(EPD)

EPD 162 Praxis Core Educ Read Review **1 Credits**
Designed to prepare prospective teacher education students for the Praxis Core for Educators. Organized around the knowledge and skills addressed on the test, this course offers participants opportunity to review and learn the knowledge and skill related to reading comprehension. [S/U]

EPD 163 Praxis Core Educ Write Review **1 Credits**
Designed to prepare prospective teacher education students for the Praxis Core for Educators. Organized around the knowledge and skills addressed on the test, this course offers participants opportunity to review and learn the knowledge and skills related to the kinds of writing tested that will be assessed on the Praxis I. [S/U]

EPD 164 Praxis Core Educ Math Review **1 Credits**
Designed to prepare prospective teacher education students for the Praxis Core for Educators. Organized around the knowledge and skills addressed on the test, the course offers participants opportunity to review and learn the knowledge and skills related to the mathematics tested on the Praxis I. [S/U]

EPD 430 Passing the Praxis II **1 Credits**
Designed to prepare prospective and current elementary school teachers for the Praxis II examination. Organized around the specifications addressed on the test, this workshop offers participants the opportunity to collaborate with one another as they review pertinent topics related to child development, learning theories, curriculum components, general principles of instruction, classroom management, student assessment, and professional growth. [S/U]

EPD 480 Coach/Mentor Studnt Intrn **1-6 Credits**
Course is designed to provide support for lead teachers who have volunteered to serve as a cooperating teacher for student interns. Explains and demonstrates different observation models, communication techniques, and evaluation skills. May repeat the course up to six credits. Placement with a student intern is required. [S/U]

(EPY)

EPY 330 Principles of Educ Psychology **3 Credits**
General principles, theories, and recent research evidence regarding human development, human learning, and human motivation, especially as they pertain to classroom instruction.

(ET)

ET 114 Introduction to Robitics **3-6 Credits**
This course will take the student through most of the different technologies required to create all forms of robotic technology. A basic start will introduce the student to the basics of electronics, schematic reading, part recognition, electronic measurements and measuring devices, electronic tools, motor (DC and AC), generators (DC and AC), pneumatics and hydraulics, data acquisition (sensoric devices), data handling (reading and controlling data), servo and synchro devices, and robotic design and construction. Unlimited repeatability.

ET 270 Elec Bench Serv Tech 1-5 Credits
Course emphasizes troubleshooting and repair of electronic components. Students are introduced to soldering and de-soldering techniques, selection and use of test equipment, and interpretation of block schematics as related to electronic circuit repair. Safety is stressed in this electronic service course. Unlimited repeatability.

ET 280 Digital Electronics 1-4 Credits
Covers 10 major areas of digital electronics, including Digital Logic Circuits, Digital Integrated Circuits, Boolean Algebra, Flip-Flops and Registers, Counters, Shift Registers, Arithmetic Circuits, Memories, Digital Systems, and Connecting digital and analog Devices. Unlimited repeatability.

(FIN)

FIN 101 Personal Finance 3 Credits
Discussion and analysis of problems relating to financial independence. Budgeting, personal tax concerns, cash and savings investments, real estate, financial institutions and borrowing, insurance, investing, retirement programs, and estate planning are covered for real world applications.

FIN 240 Introduction to Budgeting 1 Credits
An introduction to financial budgeting for individuals. Topics include the time value of money, the mathematics of finance, the borrowing decision, the lending decision, and capital budgeting. No prerequisites.

FIN 310 Applied Accounting and Finance 3 Credits
Course is designed to provide the student with the keys, concepts, and tools used in understanding the financial functions of a business enterprise. For those students with no previous education or experience in accounting, the course will include an introduction to the essential concepts necessary in understanding formal financial statements from the user's perspective.

(FIS)

FIS 100 Introduction to Film 3 Credits
Introduction to the historical development of film as art. Considers the development of cinematic techniques (i.e., cinematography, editing, sound, etc.), cinematic genres (i.e., the western, romantic comedy, etc.) and narrative elements (i.e., plot, character, conflict, etc.) as exemplified by the work of major American and international directors.

(FREN)

FREN 101 Conversational French I 3 Credits
Develops a working knowledge of French, listening and speaking skills, and practice in reading and writing.

FREN 102 Conversational French II 3 Credits
A continuation of FREN 101, this course is designed to be social, interactive, and fun. Introduces the student to the essentials of French grammar, vocabulary, and culture with an emphasis on practical and oral conversation. Additional cultural and listening activities include a French film festival, access to audio and audiovisual tapes, and a French luncheon.

FREN 111 First Year French I 3-4 Credits
Development of language skills through practice in listening, speaking, reading, writing, and structural analysis. Language practice required.

FREN 112 First Year French II 3-4 Credits
A continuation of FREN 111. Language practice required.

FREN 211 Second Year French I 3 Credits
Continues development of the four basic skills involved in the acquisition of a foreign language: listening, speaking, reading, and writing. Also introduces essential elements of French culture.

FREN 212 Second Year French II 3 Credits
Continuation of FREN 211.

(FS)

FS 285 Selected Topics Fire Science .5-6 Credits
Elective course in which subjects will vary and cover critical and current issues in fire science. Unlimited repeatability.

(GBC)

GBC 199Z New Student Orientation 0 Credits

GBC SON1 POCUS Sono Instrumentation 0 Credits
Content includes instruction on sonographic physics, modes, transducer operation and orientation, and imaging artifacts. It incorporates hands-on didactic training to prepare the learner for ultrasound applications throughout the body.

GBC SON2 Sonographer's Vascular US 0 Credits
This course helps sonographers enhance knowledge of Doppler ultrasound and basic vascular scanning. Content includes vascular anatomy and current protocols for Carotid, upper and lower extremity venous and arterial scanning.

GBC SON3 POCUS Trauma Imaging 0 Credits
Content includes scanning practices and protocol for abdoinal, pelvic, and thoracic emergency sonographic imaging to support vascular access. This course is a combination of online and onsite training.

GBC SON4 POCUS Vascular Sonography 0 Credits
Content will include instruction on sonographic vascular scanning of basic arterial and venous vessels. It will investigate color Doppler imaging, spectral waveform acquisition and assessment.

GBC SON5 Obstetric Sonography 0 Credits
Course content includes first, second, and third trimester scanning consdierations, practice, and protocols. It evaluates the fetal environment, fetal anatomy, embryology and fetal abnormalities.

GBC SON6 POCUS for the Limited Abdomen 0 Credits
This course will present limited scanning techniques and instruction on basic pathology identification of organs of the abdomen including the gallbladder, liver, Aorta, bladder, kidneys and spleen.

GBC SON7 Gynecologic US for Sonographer 0 Credits
This course is an overview of gynecologic anatomy, physiology, scanning techniques and basic pathology identification.

GBC SON8 POCUS for Limited OB 0 Credits
This course is an overview of basic Obstetric scanning of 1st, 2nd and 3rd trimester pregnancies.

GBC SON9 Abdomen US for Sonographer 0 Credits
This course presents basic abdominal scanning techniques, pathophysiology of the abdominal organs and brief evaluation of pathology identification.

(GEOG)

GEOG 103 Physical Geog Earth Environmnt 3 Credits
Physical elements of the earth's natural features and their significance to man. Topics include earth form and motion, landforms, weather, climate, vegetation, and soils. Four laboratory experiences required.

GEOG 106 Intro to Cultural Geography 3 Credits
Analyze the culture regions of the world including physical settings and cultural patterns including language, settlements, socioeconomic patterns, and historical patterns.

(GEOL)

GEOL 101 Exploring Planet Earth 3-4 Credits
Fundamental principles of geology including tectonic and surficial processes, oceans, atmosphere, environmental applications, and resources. Includes a laboratory component.

GEOL 102 Earth/Life Through Time 4 Credits
The history of the earth and life as they have evolved together through time: plate tectonics, the physical landscape, and the biosphere. Includes laboratory for evaluating rocks, fossils, and the age of events.

GEOL 132 Rocks and Minerals 3 Credits
An introduction to the more common or important minerals and rocks. Emphasizes the conditions of formation and hand sample identification. The economic value of minerals and rocks is presented.

GEOL 201 Geology of Nevada 3 Credits
Important geological developments in Nevada that have occurred throughout geologic time. At least one field trip will be required.

GEOL 299 Special Topics in Geology 1-5 Credits
To be offered on a variety of geological topics as opportunity and demand dictate. Repeatable up to six credits. [S/U]

GEOL 333 Principles of Geomorphology 4 Credits
An introduction to the processes and development of landforms and soils as the result of surficial processes operating within the framework of global tectonics. Laboratory work includes methods of analysis of land forms from surface imagining and the study of soils. Includes field trips. (Formerly GEOL 334, Geomorphology and Soils)

GEOL 335 Earth Resources/Environment 3 Credits
Geological availability, exploitation, and use of nonrenewable natural resources including metallic minerals, nonmetallic, and energy resources.

(GER)

GER 101 Conversational German I 3 Credits
Learn language skills through practice in listening, speaking, reading, writing, and structural analysis. Language practice required.

(GIS)

GIS 109 Intro Geogrphc Info Syst 3 Credits
An introduction to Geographic Information Systems (GIS) covering the basic concepts. Principles of cartography and spatial analysis are presented. The intent is to prepare the student for advanced training using specific GIS software.

GIS 320 GIS in Bus/Community 3 Credits
Basic techniques for geographic analysis and summary of business or community problems. Finding patterns and relationships in tabular and spatial data is emphasized. Popular geographic information systems software will be used for demonstration and for projects. Students will work in teams to identify a problem and to collect data for visualization and analysis of the problem. To present findings, students will create a map layout.

(GRC)

GRC 101 Intro Graphic Communicatn 3 Credits
Broad-based foundation of fundamental theories, issues, concepts, terminologies and methodologies used for creative/design projects in the graphic communications and digital media industries. Entry course for students pursuing print, web, and/or multimedia careers.

GRC 103 Intro Computer Graphics 3 Credits
Introduction to the computer as a graphic communications tool using image editing and page layout software. Software literacy, computer graphics terminology, design application, and production are stressed.

GRC 119 Digital Media 3 Credits
Introduction to the key digital elements of multimedia. Overview of hardware and software, design principles, and management skills needed to develop dynamic, interactive multimedia products.

GRC 156 Design with Illustrator 3 Credits
Introduction to visual communication as it relates to commercial art using vector-based software with an emphasis on corporate identity. Covers graphic design methodology, layout, typography, symbols, logos, and logo systems developed from thumbnails through final design.

GRC 183 Design with Photoshop 3 Credits
Introduction to digital imagery as a source for creating new images, scanning, and image manipulation. Explores visual communication through technical and conceptual methods. Recommended prerequisite: GRC 103.

GRC 188 Web Animation I 3 Credits
Introduction to animations and interactivity for the Web and mobile devices. Focuses on planning, design, and production. Topics covered include information architecture, navigational systems, tweens, audio, video, object properties, components, conditional actions, and publishing options. Recommended prerequisite: GRC 156.

GRC 256 Adv Design with Illustrator 3 Credits
Advanced two-dimensional illustration techniques using vector-based graphics software. Graphic projects are created with elements of design and application of principles of design. Recommended prerequisite: GRC 156.

GRC 301 Graphic Comm Mgt Ess 1 Credits
Designed for non-graphic majors and covers essential concepts in graphic communications required for a manager of digital technology systems. Students will begin work on individual portfolios of their achievements during this degree program. [S/U]

GRC 490 Graphic Design/Media Internshp 3 Credits
Supervised professional experience in the graphic design, media, or illustration field. At least 135 hours of student work are required. Prerequisite: Fully-admitted major in good standing, completed internship application, appropriate previous coursework, and written consent by program coordinator required for enrollment. Certain internships may require additional prior coursework per faculty advisor recommendation.

(HDFS)

HDFS 435A Child Socialization 3 Credits
Students will explore a Systems Perspective with a focus on understanding socialization of children from an ecological perspective with an emphasis on developing positive linkage between early childhood settings and families.

HDFS 201 Lifespan Human Developmnt 3 Credits
Individual development, roles, and interrelationships within the family system through the lifespan.

HDFS 202 Introduction to Families 3 Credits
Study the dynamics of development, interaction, and intimacy for primary relationships in contextual and theoretical frameworks. Review societal issues and choices facing diverse family systems and individuals living within families.

HDFS 232 Diversity in Children 3 Credits
The course considers the development of young children from the prenatal period through age eight, focusing in particular on diversity among children. Diversity will be explored in the terms of cultural, ethnic, and linguistic variations as well as differences in ability and typical and atypical development.

HDFS 428 PreK Curr I 3 Credits
This course will focus on the theoretical and practical aspects of planning and implementing a curriculum for preschool-aged children, including activities that promote creative, physical, cognitive, language and social-emotional development.

HDFS 429 Advanced PreK Curr II 3 Credits
This course will address planning an emergent, integrated curriculum, including webbing, documentation, and collaboration. Philosophical underpinnings of emergent curriculum are emphasized.

(HIST)

HIST 417C West National Experience **3 Credits**
Historical development of the American West utilized to examine contemporary issues of resources and ownership, demographic change, and national myth-making.

HIST 478B Islamic/Mid East Hist from1750 **3 Credits**
An examination of the Middle East from the 18th century to recent times. The predominant focus will be on how the indigenous leadership and peoples of the region grappled with the challenges posed by the advent of the modern world.

HIST 489C History of Globalization **3 Credits**
Globalization is intimately woven into our everyday lives. It affects what we wear, what we eat, what we do for world, and much more. This class examines the history of globalization in modern times by focusing on key commodities such as sugar, silver, cotton, coffee, opium, oil, etc. Examining how these and other goods have been produced, marketed, and consumed will help students understand the development of global inequalities, the relationship between trade and power, and the deep-seated human desires driving he worldwide movement of goods.

HIST 489B The Silk Roads **3 Credits**
What was the 'Silk Road'? How did it contribute to the foundations of our global civilization? And why is China trying to revive it in the twenty-first century? This course addresses these questions by approaching world history from the East. Made up of several overland routes and sea-lanes, the Silk Roads defined and redefined the global landscape in wave after wave of transformation for more than a thousand years. The goods, religions, technologies, diseases, and political innovations that spread along the Silk Roads have left enduring imprints on diverse societies from China, Mongolia, and India, to the Middle East, Europe, and beyond. And now, with China rising again on the global stage, the history of the Silk Roads can do more than simply deepen our understanding of the past and present; it is a history that may also give us glimpses into the future.

HIST 101 U.S. History to 1877 **3 Credits**
Survey of U.S. political, social, economic, diplomatic, and cultural development from colonial times through Reconstruction. When taken with HIST 102 satisfies the GBC General Education American Constitutions and Institutions Requirement. HIST 101 and 102 need not be taken sequentially. Either class may be taken alone.

HIST 102 U.S. History Since 1877 **3 Credits**
Survey of U.S. political, social, economic, diplomatic, and cultural development from 1877 to the present. Course satisfies the Nevada Constitution Requirement. When taken with HIST 101 satisfies the GBC General Education American Constitutions and Institutions Requirement. Can be used to satisfy the Nevada Constitution Requirement for out-of-state transfer students who have previously satisfied the United States Constitution Requirement. HIST 101 and 102 need not be taken sequentially. Either class may be taken alone.

HIST 105 Eurpn Civilzatn I to 1648 **3 Credits**
Survey of the development of Western civilization from the dawn of human history to 1648.

HIST 106 European Civil since 1648 **3 Credits**
Survey of the development of Western civilization from 1648 to the present.

HIST 208 World History I **3 Credits**
Survey of world civilizations to 1600. Examines societies, cultures, and issues relative to Africa, the Americas, Asia, Europe, the Middle East and Oceania.

HIST 209 World History II **3 Credits**
Survey of world civilizations since 1600. Examines historical societies, cultures, and issues relative to Africa, the Americas, Asia, Europe, the Middle East, and Oceania.

HIST 217 Nevada History **3 Credits**
Nevada history from early exploration to the present. Includes examination of the Nevada Constitution and satisfies the Nevada Constitution requirement.

HIST 247 Intro History of Mexico **3 Credits**
A review of pre-Columbian, Colonial, and Mexican national history with emphasis on culture and politics.

HIST 295 Special Topics in History **1-3 Credits**
Course may utilize special emphasis topics/instructors or be offered as an individualized study format with directed readings. Classes will usually mirror offerings at other NSHE institutions. Unlimited repeatability.

HIST 303 Worlds of Islam **3 Credits**
Introduces the theology and culture of early Islam. Examines the history of the 'rightly guided caliphs' era, the Umayyad and Abbasid periods, the Ottoman dynasty and others. Explores recent regional variations in Islam. This course satisfies the requirements for INT 349.

HIST 312 Expansion of the U.S. **3 Credits**
This course will examine the expansion and growth of the United States with emphasis on westward movement and increased international presence over time. Emphasis will be placed on U.S. expansion across North America and beyond. This course satisfies the requirement for INT 349.

HIST 341 Global China **3 Credits**
The outward flow of Chinese culture, cash, power, and people have profoundly influenced world history for thousands of years. This course examines the history of China in a global context from the Qin era to the present with a special focus on modern times and various Chinese migrations. This course satisfies the requirements for INT 349.

HIST 434 Cities in American History **3 Credits**
This course explores the development , conceptualization, and historical significance of cities in the United States from the colonial era to present. Topics will include, but will not be limited to, urbanization, suburbanization, intellectual characterizations of U.S. cities, urban infrastructure, crime, cities and the environment, race relations, and diversity. Special emphasis will be given to the role of the city in U.S. history.

HIST 441 Am Environmental History **3 Credits**
Explores the relationships between human beings and the physical environment on the North American continent. Examines how different cultural groups have used and transformed the continent. Examines the ebb and flow of environmental consciousness from its roots in the nineteenth century to the rise of environmentalism in the twentieth century.

HIST 458 Roman Civilization **3 Credits**
Analyzes all aspects of Roman history from earliest times to the late antique period, with central attention to the politics and society of the later Republic and how Rome became the monarchy of the Caesars.

HIST 498 Advanced Historical Studies **1-3 Credits**
Course may utilize special emphasis topics or be offered as an individualized study format with directed readings. May be repeated up to nine credits.

(HIT)

HIT 100 Intro to ICD-9-CM Coding **2 Credits**
Introduction to the mechanics of using ICD-9-CM medical coding. Procedures for assigning code numbers, guidelines for use and interpreting coding rules, and regulations that govern ICD-9-CM coding. [S/U]

HIT 101 Cur Procedural Term **3 Credits**
An introduction to outpatient procedural coding. The student will be introduced to HCFA's HCPCS three-level coding system, including basic coding guidelines and practice using CPT-4. Designed to meet the needs of the medical record practitioner in hospital medical record/billing departments, physicians' offices, and insurance companies for both reimbursement and research needs. [S/U]

(HMS)

HMS 495B Clinical Sup Mental Health Pro **3 Credits**
This course provides students with an in-depth review of the roles and models of clinical supervision. Course content will explore supervision techniques, interventions and relationship processes in supervision.

HMS 101 Intro Human Services **3 Credits**
An overview of human services as a profession, including the exploration of the history of the helping relationship, the human services movement, current influences of technology, managed care, and models of service delivery. Emphasis is on discovering employment in the human services, self-assessment activities, and development of interpersonal skills common to human services providers.

HMS 102 Intro to Counseling **3 Credits**
Assessment, interviewing, intervention, referral, and documentation skills related to client communications in human services professions are emphasized. Students receive HIPAA training in basic client/patient confidentiality. Course is required for HMS 205, Human Services Practicum I.

HMS 104 Sm Group Interact Techng **3 Credits**
Theory and methods of group dynamics and group interaction applications in social/human services settings are explored. Group leadership skills related to addiction treatment, relapse prevention, grief and loss adjustment, problem-solving, and personal development are emphasized.

HMS 105 Substance Abuse Counsel **3 Credits**
Addiction counseling theory and application methods for addiction counselors, social services/human services/health sciences students, or for anyone interested in developing skills for assisting individuals, couples, and families with substance abuse issues. Prior completion of HMS 102, or the equivalent, is highly recommended.

HMS 200 Ethics in Human Services **3 Credits**
Real life applications for personal and professional boundaries, beliefs, ethics, values, morals, and codes of conduct in human relationships using ethical decision-making, problem-solving, and critical-thinking activities are emphasized. This course may be repeated up to three times for continuing education credit. (Check with individual licensing boards prior to registering).

HMS 205 Human Services Practicum I **5 Credits**
This Human Services Practicum course will allow students to begin preparing for their entry into Human Services Practicum II. During this phase students will be completing the application process for their practicum, background checks, reference letters, visiting a variety of mental health agencies, securing a site for their final practicum, observing professionals and clients of those agencies to gain a better understanding of real world experiences in human services. Includes one lecture contact hour and 12 clinical practice /observation hours per week. (Formerly HMS 106, Human Services Practicum I) Practicum application approval required. Must have completed all general educational courses.

HMS 206 Human Serv Practicum II **5 Credits**
Advanced human services skills development through interaction with clients, client support systems, and other human service professionals within community agencies. Includes one lecture contact hour and twelve clinical practicum hours per week. Practicum application approval required.

HMS 250 Human Services Seminar **3 Credits**
This course provides students with the fundamental aspects of program development and evaluation. Course work includes principles of effectiveness-based planning and the steps of designing, implementing, and evaluating a human services program at the local agency level by introducing theory of program planning and significance of: needs assessments, interventions, goals and objectives, performance measures, value, cost, and other financial considerations.

HMS 322 Fam Int Treatment of Addiction 3 Credits
This course is designed to inform students of the importance of the familial context of addiction through a review of the current clinical and diagnostic literature and a comprehensive understanding of addiction.

HMS 350 Public Advocacy Community Dev 3 Credits
This course is designed to explore the profound impact public advocacy can have. Knowledge of these processes will allow students to champion the rights of individuals, communities and society at large through active participation in the political process.

HMS 405 Adv Human Services Prac I 5 Credits
This course is the first of two upper division practicum courses designed to provide the student learner with knowledge and skills necessary to work with human services clients by placing the student learner in a field site in the community.

HMS 406 Adv Human Services Prac II 5 Credits
This course is the second of two upper division practicum courses designed to provide the student learner with the knowledge and skills necessary to work with human services clients by placing the student learner in a field site in the community.

HMS 407 Analysis and Interv Addiction 3 Credits
Introduction of behavioral assessment and treatment planning utilizing a systematic overview of behavioral and cognitive principles and their applications to a wide range of issues and situations encountered in human services professions.

HMS 427 Ident and Assess Addictions 3 Credits
This course will educate students by utilizing case study scenarios to teach students clinical assessment skills for working in the addiction and behavioral health fields by gaining competence with DSM diagnosis and understand assessment.

HMS 436 Co-occuring Substance Use 3 Credits
This course is designed as a guide for working with clients with common co-occurring disorders and addictions. Course curriculum will investigate practical assessment and effective treatment approaches when working with co-occurring disorders.

HMS 439 Gambling Dis Behavioral Addic 4 Credits
This course will provide students with the knowledge of assessment and treatment for pathological gambling and behavioral addictions.

HMS 450 Adv Human Services Seminar 3 Credits
This course provides students with the fundamental aspects of program development and evaluation. Incorporating the logic model into designing, implementing, and evaluating Human Services Programs.

HMS 465 Clinical Writing, Case Mgmt 3 Credits
This course will cover a step-by-step guide through the case management process in Human Services, from intake and assessment to referrals and termination. Including client documentation, HIPAA Compliance, and client confidentiality.

HMS 475 Prevention Human Serv Addict 3 Credits
This course provides students with an in-depth review of alcohol/drug prevention and treatment strategies.

HMS 499 Clinical Supv Alcohol Drug Cou 3 Credits
This course provides students with an in-depth review of the developmental level of alcohol and drug abuse counselors and clinical supervisors. Course work will provide training on clinical supervision and ethical and legal issues.

(HSC)

HSC 300 Statistics for Health Sciences 3 Credits
Introduction to quantitative methods in the analysis and interpretation of data from research in the health and human sciences. Emphasis on conceptual understanding, appropriate application of tests, and interpretation of results.

(HUM)

HUM 101 Intro to Humanities I 3 Credits
An introduction to humanities through a study of seven major arts including film, drama, music, literature, painting, sculpture, and architecture. Each of these arts is considered from the perspective of historical development, the elements used in creating works of art, meaning and form, and criticism and critical evaluation.

HUM 111 Gateway to the Humanities 3 Credits
Through five distinct modules, students discover answers to all of the following questions: What attributes are irreducibly human - that is, independent of gender, race, culture, society, nationality, or philosophy? How do human beings relate to one another? How do we humans express ourselves? In what ways do we limit ourselves? The student will explore: philosophy/religion; language/linguistics; history; art and architecture; law and ethics; and literature/performance. Students will seek out applications of the humanities to chosen disciplines.

HUM 210 Communicating Diversity 3 Credits
Communicating Diversity is a lower division course designed to familiarize students with the fundamentals of diversity and how those are expressed through communication. Students will develop a deep understanding of the way in which we communicate race, gender, class, sexual orientation, nationality, religion, and physical/mental ability and how it impacts our daily lives. This course will take an intersectional approach to understanding diversity and seek communication strategies for inclusivity. Emphasis will be placed on defining and developing the critical thinking skills necessary to push past oppression, marginalization, and other issues centralized around diverse populations. Students will be encouraged to investigate and discover diversity issues, solutions, and concepts at the local and global level using case studies, current events, and other significant moments in history.

HUM 301 Studies in Humanities **3 Credits**
An examination of various topics and subjects in the Humanities including art, literature, music, film, theater and others.

(INT)

INT 100 GBC Orientation **.5 Credits**
An introduction to GBC and its programs and services. The goal of the course is to achieve student success. (Required for first-time full-time students and for part-time degree-seeking students before they complete 24 credits.) No prerequisite. [S/U]

INT 105 Community Volunteering **.5 Credits**
Provides the student with an opportunity to perform several hours of community service and to then reflect on both the personal experience of giving of oneself and on volunteerism in general. Repeatable up to four times. [S/U]

INT 106 Job Search/Resume Prep **.5 Credits**
Exploration of job search techniques, determination of the most effective resume format, and preparation of an appropriate resume and cover letter for a prospective career. [S/U]

INT 295 Educational Travel **1-6 Credits**
The study of people, art, music, culture, and history through travel. Unlimited repeatability. [S/U]

INT 301 Int Rsrch Methodology **3 Credits**
An introduction to basic research methods, including the nature of scholarly research, academic sources, data types, and the application of knowledge to the creation of a research proposal.

INT 339 Integrative Humanities Seminar **3 Credits**
An integrative seminar on topics in the humanities. The topics will vary to address needs and interests of programs. Course fulfills the upper-division integrative humanities general education requirements. May be repeated once for credit if the topics are different.

INT 349 Integrative Social Science Sem **3 Credits**
An integrative seminar on topics in the social sciences. The topics will vary to address needs and interests of programs. Course fulfills the upper-division integrative social sciences general education requirements. May be repeated once for credit if the topics are different. ANTH 307, ANTH 332, HIST 303, HIST 341, and PSY 313 also fulfill the INT 349 requirement.

INT 359 Integrative Math Seminar **3 Credits**
An integrative seminar on topics in mathematics. The topics will vary to address needs and interests of programs. May be repeated once for credit if the topics are different.

INT 369 Integrative Science Seminar **3 Credits**
An integrative seminar on topics in science. The topics will vary to address needs and interests of programs. Course fulfills the upper-division integrative science general education requirements. May be repeated once for credit if the topics are different.

INT 400 Intrn/Integrative Studies **3-6 Credits**
A semester placement within a student's concentration (emphasis) area. The internship requires an integration of work experience and a course of study in a specific emphasis area. May be taken for credit more than once, but no more than a total of six credit hours of INT 400 may be counted toward the BA degree.

INT 496 Capstn/Intgrative Studies **3 Credits**
The application of communication skills, core course knowledge, critical thinking, analysis, and other program skills to conducting an independent research project. The course involves intensive self-directed research and requires students to write an extensive senior paper.

(IS)

IS 101 Intro Information Systems **3 Credits**
Introduction to computer-based information systems management including hardware/software relationships, business applications usage, systems theory, current technology, networking, the Internet, computer security, and privacy issues. Recommended corequisite: IS 201.

IS 201 Computer Applications **3 Credits**
An introduction to the most commonly used microcomputer business software with emphasis on operating systems, word processing, spreadsheets, database management, presentation software, and software integration. Substantial hands-on work provides practical experience using this software. Recommended corequisite: IS 101.

IS 301 Management Information Systems **3 Credits**
The fundamentals of design, implementation, control, evaluation, and strategic use of computer-based information systems for business data processing, office automation, information reporting, and decision making. Emphasizes managerial and strategic aspects of information technology with some hands-on work using information management software.

IS 378 Project Management **3 Credits**
This course is designed to help you develop a strong understanding of IT project management as you learn to apply today's most effective project management tools and techniques. Topics include project organization, project life cycle, planning, executing, budgeting, scheduling, controlling, reporting, and closing. Also, project integration, scope, time, cost, quality, risk management, conflict resolution, and roles and responsibilities.

(IT)

IT 102 Pipefitting Principles 1-4 Credits
This is a one to four credit lecture, discussion, and laboratory course designed to introduce students to the basics of pipefitting. This course will cover basic pipefitting and introduce students to the tools and materials used to complete projects in industries associated with the pipefitting field.

IT 103 Industrial Pump Technolgy 1-4 Credits
A one-to-four-credit laboratory and lecture course covering various industrial pumps. Emphasis is on centrifugal pump maintenance and repair and introductory hydraulic engineering concepts that pertain to centrifugal pumps. Pump seals, packing techniques, and bearings are also discussed. Unlimited Repeatability.

IT 105 Mechanical Power Trans 1-4 Credits
A one-to-four-credit lecture, demonstration, and laboratory course in the study and application of bearings, belt and mechanical drives, chain and chain drives, couplings, clutches, gears, and fluids in the transmission of power used in the industrial processes.

IT 106 Maintenance/Process Term 1-4 Credits
A one-to-four credit lecture, discussion, and laboratory course designed to introduce students to millwright and process terminology. Students will learn basic terminology and functions of primary process equipment and their sub-components. This course will also cover parts of basic safety policies and procedures for use in the laboratory and also translate to the job or work site safety.

IT 201 Blueprint Read/Meas Fund 1-6 Credits
A laboratory and lecture course covering blueprint reading fundamentals for mechanical and construction drawings. Also, an introduction to different types of measuring instruments and their proper uses in industry.

IT 207 Boiler/Convey/Pneum Systm 1-5.5 Credits
A one to five-point-five credit lecture, demonstration, and laboratory course in the study and application of boiler, conveyer, and pneumatic systems. The course will cover operation, maintenance, and repair of boiler, conveyer, and pneumatic systems. Safety is emphasized. Unlimited repeatability.

IT 208 Fluid Power 1-9 Credits
A review of fluid power mechanics with an emphasis on schematic symbols, circuit operation and design, hydraulic component theory and operation, and hydraulic terminology. Course may be taught in modules.

IT 209 Principles of Rigging 1-4 Credits
This is a laboratory and lecture course covering rigging practices, proper lifting techniques and safety. Hand signals based on national standards will be taught and practiced also. May be repeated up to 16 credits.

IT 210 Failure Analysis 1-4 Credits
A one-to-four credit lecture, demonstration, and laboratory course in the study of predictive and preventive maintenance techniques. Emphasis will be placed on root cause analysis, vibration analysis, and the proper use of lubrication to prevent failures. Prevention of maintenance problems through predictive methods will be emphasized.

IT 212 Inventory and Planning 1-2 Credits
A one-to-two-credit lecture designed to acquaint the student with the principles of planned maintenance and inventory control as it relates industrial maintenance.

IT 214 Basic Electrical Theory 1-4 Credits
A one-to-four credit lecture, demonstration, and laboratory course in the diagnosis of common electrical problems associated with industrial equipment. The course covers basic AC/DC electrical theory, electrical motor maintenance, motor control, and uses of electrical tools for troubleshooting.

IT 216 Basic Metallurgy 1-4 Credits
A one-to-four credit lecture, demonstration, and laboratory course which emphasizes the practical approach to the basic principles of metallurgy. The course explores the behaviors of metals subjected to metallurgical processes and explains how desired material properties are attained.

IT 220 Alignment Principles 1-6 Credits
Study and practice and shaft and gear alignments using the four-step method to align and correct misalignments as a procedure to extend the life of bearings, couplings, and seals, and to reduce vibration in equipment and components and gears. Tools and equipment used in the course include dial indicators, and electronic and laser measuring devices. Safety is emphasized. Unlimited repeatability.

IT 299 Special Topics Industrial Tech 2 Credits
A special topics course in Industrial Maintenance Technology to serve a variety of needs. Topics are determined by the course instructor. Unlimited repeatability.

(JOUR)

JOUR 102 News Reporting & Writing 3 Credits
Principles of researching news stories, gathering information in the appropriate arenas and writing clear and accurate articles in accordance with journalistic standards established by the Associated Press. Explores the roles and responsibilities of a reporter for a news organization in keeping the public informed as well as acting as a watchdog. Examines ethical concerns in journalism and legal issues that influence media coverage.

JOUR 103 Intro to Media and Society 3 Credits
In this course, you will learn to observe, analyze, and critique mass and networked media using principles grounded in the social sciences. Study how media are used to inform and persuade and strengthen your ability to use media critically.

JOUR 105 News Production I **3 Credits**
Course designed to qualify students to produce the college newspaper, literary magazine, or any other student publication. Combination of graphics and journalism in one class period which will familiarize students with the total makeup of the newspaper assembly procedures.

JOUR 106 News Production II **3 Credits**
A continuation of JOUR 105.

JOUR 120 Introduction to Broadcasting **3 Credits**
A survey of the principles and trends involved in radio and television broadcasting, cable, and other electronic media, including history, regulation, programming, and business practices. Examines communication theories, legal, ethical, and socio-cultural issues as well as career potential in the present and future electronic cultures.

JOUR 124 Intro Broadcast News/Prod **3 Credits**
Techniques of gathering, writing, editing, and producing news for radio and television. Topics include broadcast style, working with wire services, codes of ethics, legal considerations, and news applications of audio and video technology. Students experience all aspects of studio newscast production from producing to anchoring.

JOUR 125 Elect News Gather/Edit **3 Credits**
An introduction to all elements involved in field reporting for television news. Topics include contacting and selecting the most appropriate sources, interviewing techniques, selecting sound-bites, visual storytelling, developing on-camera, as well as behind-the-camera skills, and ethical and legal considerations. Students will create voice-overs and packages using non-linear digital video editing equipment.

JOUR 201 Tv Studio Production I **3 Credits**
Study and hands-on training in basic television studio and control room operations for live and live-to-tape multi-camera productions. Students experience all positions in a production crew including producing, directing, camera, audio, lighting, switching, and learning the underlying principles of video technology.

JOUR 205 TV Field Production I **3 Credits**
Techniques of shooting video and television programs and segments single-camera-film style, on location, rather than in a multi-camera studio. Students learn the necessary preproduction planning steps including location scouting, storyboarding, and budgeting; then progress to digital video field production, including camera, audio, and lighting practices. Projects will be edited using Adobe Creative Suite Production Premium non-linear editing software.

JOUR 290 Internship in Journalism **1-3 Credits**
Limited to students interested in a career in broadcast journalism. To participate, students must fill out an internship application, meet with an intern advisor, and interview with internship sponsor and instructors. Interns will not be compensated and hours will be determined by enrollment credits.

JOUR 298 Advanced Video Prod/Edit **3 Credits**
Advanced techniques in pre-production, production, and post-production for single-camera-film-style digital video and television short program creation. Topics include field camera operations, audio set-up, and lighting techniques for unusual or adverse conditions, troubleshooting, and continuity shooting. Students learn complex editing techniques and digital audio and video special effects.

(LIB)

LIB 101 Research Skills/Coll Pprs **1 Credits**
An overview of basic research strategies using Internet, electronic, and print resources. Focus is on gathering viable information for college assignments. [S/U]

LIB 150 Intro to Library Tech **3 Credits**
A study of library tools such as indexes, bibliographies, reference books, and inter-library loan procedures. Library equipment use is also included. For students desiring to develop skills in the use of libraries and who are interested in a career in librarianship.

LIB 299 Special Topics Library **1 Credits**
Consideration of special topics in library and information science. Unlimited repeatability.

(MAPE)

MAPE 110 Fundamentals MA I **6 Credits**
A body system approach to diseases, disorders, treatments, and associated labs, diagnostics, and pharmacology. Students will also learn nutrition, patient education, and patient life span changes per body system. Body systems included in this course are the musculoskeletal system, integumentary system, digestive system, urinary system, reproductive system, and circulatory system. Students will be introduced to phlebotomy basics, ECG, and medication administration. There are clinical hours for this course.

MAPE 120 Fundamentals MA II **6 Credits**
A body system approach to diseases, disorders, treatments, and associated labs, diagnostics, and pharmacology. Students will also learn nutrition, patient education, and patient life span changes per body system. Body systems included in this course are the lymphatic system, respiratory system, nervous system, mental health, sensory, and endocrine system. Students will be introduced to phlebotomy basics, ECG, and medication administration. There are clinical hours for this course.

MAPE 130 Medical Business Finance MA I **3 Credits**
Using simulated services, students will learn clinical, and administrative functions, basic practice finances, third-party reimbursement, and procedural and diagnostic coding.

MAPE 140 Medical Business Finance MA II **3 Credits**
A continuation of MAPE 130 with continued emphasis and simulated application of clinical, and administrative functions, basic practice finances, third-party reimbursement, and procedural and diagnostic coding.

MAPE 150 Laboratory Procedures MA **6 Credits**
Students will learn infection control, how to assist with minor procedures, and receive blood-born pathogen training as well as responding to pediatric and adult health care emergencies. Continued application and review of labs, diagnostics, and tests. There are clinical hours for this course.

(MATH)

MATH 126E Precalculus I Expanded **3 Credits**
Precalculus I Expanded with Co-requisite support: Includes equations, relations, functions, graphing; polynomial, rational, exponential, logarithmic, and circular functions with applications; coordinate geometry of lines and conics; analytic trigonometry; matrices and determinants; and binomial theorem. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 116E Technical Mathematics Expanded **3-5 Credits**
Provides technical mathematical core material so that the student gains practical problem solving experience. May include arithmetic operation, integers, exponents, scientific notation, algebraic expressions, equations, metric system, trigonometry, and logarithms. This course satisfies the general education requirement for occupational/technical AAS degree.

MATH 120E Fund of College Math Expanded **3 Credits**
Fundamentals of College Mathematics with Corequisite Support: Includes real numbers, consumer mathematics, variation, functions, relations, graphs, geometry, probability, and statistics. Course is broad in scope, emphasizing applications. Fulfills the lower-division mathematics requirement for a Bachelor of Arts Degree. Satisfies mathematics requirement for baccalaureate degrees.

MATH 20 Learn Support MATH 120/120E **1-3 Credits**
Designed to be taken in the same semester as MATH 120E, this course contains a review of basic mathematics and study skills needed to be successful in college mathematics. Topics may include the real number system, fractions, exponents, simplifying algebraic expressions, solving linear and rational equations, and effective study skills. [S/U]

MATH 26 Learning Support MATH 126/126E **3 Credits**
This is a support course for MATH 126E and is designed to help students succeed in a college-level precalculus course. Topics may include fractions, linear equations, radical expressions, rational expressions, graphing, systems of linear equations, polynomials, as well as topics from precalculus that require further exploration. [S/U]

MATH 91 Basic Mathematics **3 Credits**
The fundamental operations of whole numbers, fractions and mixed numbers, decimals, percentages, measurement, and integers. Intended to provide a review of basics needed in later math courses and on the job.

MATH 95 Elementary Algebra **3 Credits**
A first course in algebra for students who plan to continue in the math sequence. Topics include operations on real numbers, simplifying expressions, solving linear and quadratic equations, polynomials, factoring, radicals, and the concept of graphing. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 96 Intermediate Algebra **3 Credits**
This is a second course in algebra for students who have completed one elementary algebra course. The topics covered include polynomials, rational functions, linear equations and inequalities, absolute value inequalities, exponents and radicals, quadratic equations, relations and functions, systems of equations, and applications. This is a developmental course. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 97 Elem & Intermediate Algeb **5 Credits**
A one-semester course equivalent to the combination of MATH 095 and MATH 096. Topics include solving linear equations in one variable, polynomials, integer exponents, factoring, rational expressions and equations, graphing linear equations in two variables, inequalities, systems of linear equations, radicals and rational exponents, and quadratic equations. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 116 Technical Mathematics I **3 Credits**
Provides technical mathematical core material so that the student gains practical problem solving experience. May include arithmetic operation, integers, exponents, scientific notation, algebraic expressions, equations, metric system, trigonometry, and logarithms. This course satisfies the general education requirement for occupational/technical AAS degree. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 120 Fund of College Math **3 Credits**
Includes set theory, logic, consumer mathematics, measurement, geometry, probability, and statistics. Course is broad in scope, emphasizing applications. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 122 Num Concept for Elem Tchr **3 Credits**
A course for students preparing for elementary school teaching or those who already hold teaching certificates. Topics include the real number system and its subsystems, algorithms, primes and divisibility, algebraic thinking, and a variety of applications. The course presumes mathematical knowledge of the material and goes more in depth giving backgrounds for the real number system and preparation of students for teaching the material. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 123 Stat/Geomtl Cpt Elem Tchr **3 Credits**
A course for students preparing for elementary school teaching or for those who already hold teaching certificates. Topics include probability, statistics, geometry, constructions, similar figures, trigonometric ratios, areas and volumes, motion geometry, and a variety of applications. Backgrounds for the concepts and preparation of students for teaching the material. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 124 College Algebra **3 Credits**
Activating course for prerequisite use effective Spring 2025. Backdated 10 years for WHIF/gen ed requirements.

MATH 126 Precalculus I **3 Credits**
A third course in algebra that stresses polynomial, quadratic, rational, exponential, and logarithmic functions, including their graphs and applications; complex numbers; systems of equations; and basic operations with matrices and determinants, including Cramer's rule. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 127 Precalculus II **3 Credits**
Topics include circular functions, their graphs, and applications; trigonometric identities and equations; conic sections; vectors; sequences and mathematical induction. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 128 Precalculus and Trigonometry **5 Credits**
Topics Include equations, relations, functions, graphing; polynomial, rational, exponential, logarithmic, and circular functions with applications; coordinate geometry of lines and conics; analytic trigonometry; matrices and determinants; and binomial theorem. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 181 Calculus I **4 Credits**
The fundamental concepts of analytic geometry and calculus functions, graphs, limits, derivatives, integrals, and certain applications. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 182 Calculus II **4 Credits**
A continuation of MATH 181. The course covers transcendental functions, methods of integration, conic sections, infinite sequences and series, and first-order differential equations. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 251 Discrete Mathematics I **3 Credits**
Topics include set operations, Cartesian product relations and functions, equivalence relation, graphs and digraphs, propositional calculus, truth tables, mathematical induction, and elementary combinatorics. Applications are made to probability. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 283 Calculus III **4 Credits**
A continuation of MATH 182. Topics include vectors, differentiation and integration of vector-valued functions, the calculus of functions of several variables, multiple integrals and applications, line and surface integrals, Green's Theorem, Stokes' Theorem, and the Divergence Theorem. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 285 Differential Equations **3 Credits**
Theory and solving techniques for general ordinary differential equations, first order and second order linear equations, boundary value problems, power series solutions, Laplace transforms, and system of first order equations. Emphasis on real world phenomena. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 310 Intro to Analysis I **3 Credits**
A re-examination of the calculus of functions of one-variable: real numbers, convergence, continuity, differentiation, and integration. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 314 History of Mathematics **3 Credits**
Evolution of mathematics from ancient numeral systems to twentieth-century mathematics. The effects of culture on mathematics and the impact of mathematics on cultures also considered. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 330 Linear Algebra **3 Credits**
An introduction to linear algebra, including matrices and linear transformations, eigenvalues, and eigenvectors. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 331 Groups/Rings/Fields **3 Credits**
Elementary structure of groups, rings, and fields, including homeomorphisms, normal subgroups, and ideals. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 333 Number Theory for Sec Ed **3 Credits**
Examines in detail the structure of number systems and polynomials over these number systems, and teaches the careful art of mathematical reasoning. The course is designed for those who will make the transition from techniques courses to conceptual mathematics. Designed for prospective high school teachers but is open to other students. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 352 Probability & Statistics **3 Credits**
Probability experiments; sample spaces, discrete and continuous random variables and distributions; mathematical expectation, central limit theorem; hypothesis testing, and linear regression. It is recommended that students have completed prerequisites within two years of enrolling in this course.

MATH 389 Special Topics in Mathematics **3 Credits**
Covers specialized topics in Mathematics. Course may be repeated up to six credits if topics are different.

MATH 475 Euclidean/NonEuclidean Geomtry **3 Credits**
Axiom systems, models, independence, consistency; incidence, distance betweenness, congruence, convexity, inequalities, parallels, perpendiculars, the Klein model; Saccheri quadrilaterals, limit triangles, and the non-Euclidean geometry of Bolyai-Lobachevsky. It is recommended that students have completed prerequisites within two years of enrolling in this course.

(MCOD)

MCOD 110 Intro Medical Code/Bill **3 Credits**
An introduction to Medical Coding and Billing, technology and the medical professional, and learning about documentation, confidentiality, and ethics.

MCOD 120 Med Termlgy Hlthcare/Env **3 Credits**
Designed for students to master medical terminology and learn the history of coding and billing.

MCOD 130 Intro Anat/Path/Pharm **5 Credits**
Designed as an introduction to pharmacology, anatomy, pathophysiology and disease processes.

MCOD 140 Hlth Care Struct/Med Rcrd **3 Credits**
Designed as an introduction to healthcare structure. Provides an overview of detailed information of each report in the outpatient medical record, and will also present the composition of each of the report types and how they relate to medical coding and billing.

MCOD 200 Introduction Diagnostic Coding **3 Credits**
Introduction to Basic Diagnosis Coding. Learn to navigate the code book and find official addition coding conventions and general coding guidelines.

MCOD 210 Explore Reimburse/Procedl **5 Credits**
Explores healthcare reimbursement and provides detailed information about the various types of payment systems used to reimburse outpatient services. Introduction to the Current Procedural Terminology (CPT) codebook.

MCOD 220 Skill Building Outpatient Code **6 Credits**
Skill building for outpatient coding of actual outpatient medical records.

(ME)

ME 242 Dynamics **3 Credits**
Kinematics and kinetics of particles and rigid bodies in two and three dimensions; relative motion; work and energy; impulse and momentum.

(MET)

MET 101 Intro to Metallurgical Engr **1-2 Credits**
This course acquaints students with the fundamentals of extractive metallurgy processes. Lectures on the course provide students with the knowledge of the key concepts of extraction and purifying metals from ores obtained through mining operations as well as secondary resources.

MET 102 Intro to Metallurgical Engr II **1-2 Credits**
The course acquaints students with the fundamentals of extractive metallurgy processes. Lectures on the course provide students with the knowledge of the key concepts of mineral processing, extraction and purifying metals from ores obtained through mining operations as well as secondary resources. Freshman year experience course to include development of analytical skills in spreadsheets on process flowcharts relating to mining, minerals, metals, mineral processing, metallurgical operations and basic engineering principals are covered.

(MGT)

MGT 103 Intro to Sm Business Mgt **3 Credits**
Environment and management of the small business enterprise, problems in initiating the business, financial and administrative control, marketing programs and policies, management of business operations, legal and governmental relationships.

MGT 201 Principles of Management **3 Credits**
Fundamentals and principles of management, administrative policies, objectives and procedures, and problem of organization and leadership.

MGT 280 Negotiation/Conflict **3 Credits**
Human Resource professionals engage in conflict resolution and negotiations while carrying out their daily duties. This course provides student with the foundation for both activities. Of special importance is the ability to deal with challenging people in difficult situations requiring the acquisition of special skill sets.

MGT 283 Intro Human Resource Mgt **3 Credits**
Duties and responsibilities of personnel management. Areas covered include employee needs, human relationships, orienting and training employees, benefit programs, and economics of supervision.

MGT 310 Found of Mgt Theory/Pract **3 Credits**
Develops the students' theoretical foundation for further study in any field involving management. Explores historical thought and the management functions of planning, organizing, directing, and controlling. Provides a practical analysis of leadership, communications, and motivation techniques. Concludes with an exploration of current management challenges and trends.

MGT 323 Organiz/Interperson Behav **3 Credits**
A study of the interpersonal relations between individuals and groups in an organizational setting. Topics include leadership styles and techniques, organizational design, communication, decision making, motivation, perception, group behavior, and coping with stress.

MGT 330 Business and Technology **3 Credits**
This course will cover the relationship between advances in technology and the creation of wealth from the new business opportunities that result from technical innovations. It will cover the basic principles from a historical perspective and then require students to apply those principles to emerging technological innovations. Emphasis will be of the acceleration of technological innovations resulting market place competition in their application to the satisfaction of economic needs.

MGT 367 Human Resource Management **3 Credits**
Analysis of the personnel policies of business enterprises. Areas of study include recruitment, selection, placement, training, promotion, morale, employee services, compensation, labor relations, and organization and function of human resource departments.

MGT 430 Management Tech Leadership **3 Credits**
This course will teach the basic principles and techniques of identifying and adopting technological advances that have the potential to provide organizations with sustained competitive advantage. The leadership role of managers in being champions of change will be emphasized. Topics covered will include scanning the technological environment, technological forecasting, adoption of innovations and practicing technological leadership by integrating those innovations into the organization's operations, goods and services.

MGT 441 Qual Control/Problem Solv **3 Credits**
Operational quality control and problem solving in the workplace.

MGT 480 International Management **3 Credits**
An overview of the international business environment, conditions affecting firms conducting business overseas, and the effects of a transcultural setting on each of the functional areas of business. Special emphasis on managerial functions and critical elements of the management process in a firm operating under foreign economic, technological, and political, social, and cultural environments. A major focus is on management challenges facing international organizations.

MGT 482 Leadership Capstone **3 Credits**
Drawing from all business programs of study, this course is designed to expose students to foundational theories, conceptual frameworks, and methodologies they will use throughout their careers. Based on the premise that leadership skills can be learned, students will develop a student-centered educational project of their choice to demonstrate the key aspects they have learned in the Bachelor of Applied Science in Management and Supervision.

MGT 487 Entrepreneurship **3 Credits**
A comprehensive study of the process of judiciously combining the various factors of production in meeting the needs of consumers in creative and profitable ways. Topics include characteristics of successful managers, starting a new enterprise, forming an entrepreneurial team, venture capital sources, and formulation of a business plan.

(MINE)

MINE 101 Mining Engineering I **1-2 Credits**
Freshman year experience course providing an introduction to the mining industry, the mining engineering and related disciplines and career paths for mining engineers.

MINE 102 Mining Engineering II **1-2 Credits**
Foundational computer skills needed in upper division engineering classes including spreadsheet programming, large data analysis, engineering drawing, mathematical programming, and an introduction to mine design software.

MINE 210 Mining Methods **2 Credits**
This sophomore class builds on MINE 101 and offers information on mining methods and systems with emphasis on conventional surface and underground mining methods with a brief overview of less common or novel mining methods and systems. The course discusses the various stages in the life of a typical mine (surface and underground), equipment characteristics, equipment selections, and introduces typical terminologies of surface and underground operations, providing an introduction to the mining industry, the mining engineering and related disciplines, and career paths for mining engineers.

(MKT)

MKT 127 Introduction to Retailing **3 Credits**
Intended for those who desire a broad view of retailing from a management point of view. Surveys retailing principles and concepts, and covers store and merchandise management. Topics include store location and organization, personnel, pricing, inventory control, customer service, advertising, promotion, and display. Makes use of case studies and practical situation exercises.

MKT 210 Marketing Principles **3 Credits**
Study of problems of manufacturers, wholesalers, and retailers in the market of goods and services, channels of marketing, customer relations, functions of sales departments, price policies, and communications.

MKT 211 Intro to Professional Sales **3 Credits**
Selling, including buying behavior, product knowledge, prospecting, developing the sales presentation, handling objections, closing the sale, and the personal characteristics required for success. Skills and processes necessary for selling a product or service are applied to special marketing segments: retail, industrial, governmental, and international markets.

(MTL)

MTL 101 Basic Machine Shop I **4 Credits**
Learn the basics of work setup, machine operation, turning, threading, broaching, and boring operations. Students will also learn interpretation of and uses of formulas and charts associated with the machine trades.

MTL 102 Basic Machine Shop II **4 Credits**
A four-credit lecture, demonstration, and laboratory course in the study of machine operations used in the reconstruction and repair of industrial equipment.

(MTT)

MTT 100 Measurement for Machinists 3 Credits
Measurement for Machinists will teach the skills necessary to accurately measure parts and fixtures for the manufacturing industry. Skills will focus on micrometers, calipers, CMM, optical comparators and various other measurement tools.

MTT 101 Introduction to Machine Shop 3 Credits
Introduces safety procedures, use of bench tools, layout tools, power saws, drill presses, precision measurement tools, rotary tables and indexing devices, lathe and mill cutting tools and tool holding, work holding and machining applications as well as the various hand tools related to the machine shop.

MTT 105 Machine Shop I 3 Credits
This course introduces basic machine shop skills which include lathe operation, mill operation, metal removal speeds and feeds, precision measuring techniques, layout methods, band saw and drill press operations, and exposure to the science of heat-treating of metals. Shop safety and etiquette will be stressed.

MTT 106 Machine Shop Practice I 2 Credits
Expands the student's manual skills by putting into practice the theories, and user skills introduced in MTT 105. The emphasis will be geared to a more practical, hands-on experience through the use of lathes, layout techniques, vertical and horizontal band saws, measuring instruments and vertical mill work. Shop safety and cleanup are always stressed.

MTT 110 Machine Shop II 3 Credits
Expands skills introduced in MTT 105 to an intermediate level and introduces further skills which include advanced manual milling, advanced manual turning, drill sharpening, speed feeds, grinding and some production methods.

MTT 111 Machine Shop Practice II 2 Credits
Further develops student's manual skills by putting into practice the theories and user skills introduced in MTT 110. The emphasis will be a more practical, hands-on experience through the use of advanced manual mill work, layout techniques, vertical and horizontal band saws, grinding, measuring instruments and advanced manual turning. Shop safety and cleanup are always stressed.

MTT 230 Computer Numerical Control I 1-4 Credits
Covers computer numerical control (CNC) lathe operations, program format, and machine setup, G & M codes, control functions, the letter address system, and math issues related to CNC operation.

MTT 232 Computer Numerical Control II 1-4 Credits
Offers the student additional practical experience for development of skills with additional information and exposure to more complex applications of programming, mirror imaging, polar coordinates, tool compensation, threading and computer integrated manufacturing.

MTT 234 Computer Numerical Control III 1-4 Credits
This course covers the advanced programming concepts related to CNC Mill/Turning centers and synchronized 4 and 5 axis mills. Mill/Turn and 4 and 5 axis topics include program format, machine set-up, related G & M codes, live tooling, and indexing devices. Students will program, set-up, and produce a variety of precision machined projects.

MTT 291 CNC Practice 1-6 Credits
This course allows for the further development of computer aided manufacturing and/or CNC skills with hands-on instruction related to the design and production of machined parts using CAD/CAM software, CNC milling machines, and CNC turning centers. Students will plan, program, set-up, and produce a variety of precision machined projects. This course is to be considered lab time for MTT 232, and MTT 292.

MTT 292 Computer Aided Manufacturing I 1-4 Credits
This course provides the student with the essential concepts and techniques that are required for successful creation of two-dimensional part geometry, generation and verification of 3 axis toolpath models, as well as post processing of 3 axis NC codes within a computer-aided manufacturing (CAM) system.

MTT 293 Computer Aid Manufacturing II 1-4 Credits
This course is a continuation of MTT 292 with the addition of simultaneous 4 and 5 axis motion control and provides the student with the essential concepts and techniques that are required for successful creation of 4 and 5 axis toolpath models, as well as, post processing of 4 and 5 axis NC codes within a computer-aided manufacturing (CAM) system.

MTT 296 CNC Practice II 1-4 Credits
This course allows for the further development of CNC skills with hands-on instruction related to the design and production of machined parts using CAD/CAM software, CNC milling machines, and CNC turning centers. Students will plan, program, set-up, and produce a variety of precision machined projects. This course is to be considered lab time for MTT 293 and/or MTT 234.

(MUS)

MUS 101 Music Fundamentals 3 Credits
Notation, terminology, intervals, and scales. Designed to furnish a foundation for musicianship. Recommended for teachers in public schools and all others desiring a basic music background.

MUS 103 Voice Class I 1 Credits
Fundamentals of tone production, breath control, pronunciation, and practical techniques for interpreting songs. May be repeated for a total of four credits.

MUS 104 Voice Class II 2 Credits
A continuation of MUS 103 introducing the Italian art song.

MUS 111 Piano Class I 2-3 Credits
Beginning piano class. Music reading and keyboard techniques from beginning through early intermediate levels. No previous musical training required.

MUS 121 Music Appreciation **3 Credits**
The historical and cultural background of music and origins to the twentieth century.

MUS 125 History of Rock Music **3 Credits**
The history and stylistic development of rock from its origins, through transitions, and subsequent revolutions.

MUS 175 Rock Jazz Ensemble **1-2 Credits**
Ensemble members will perform a variety of music, ranging from early jazz styles and standards to contemporary fusion. There will be considerable opportunity for reading music and ad-lib soloing, to increase exposure and the skill level of the performers. The ensemble will vary each semester depending on instrumentalists enrolled and may provide opportunities for vocalists. Some music theory and notation will be studied. Repeatable up to two credits.

MUS 203 Music Theory I **4 Credits**
Counterpoint and harmony (written and keyboard).

MUS 204 Music Theory II **4 Credits**
A continuation of MUS 203.

MUS 299 Special Topics in Music **.5-6 Credits**
Consideration of special topics in issues and music. Unlimited repeatability.

MUS 301 Music Theory III **3 Credits**
An advanced class in tonal theory which includes the study of enriched harmonic resources of the eighteenth and nineteenth centuries as well as an introduction to counterpoint and large musical forms.

(MUSA)

MUSA 145 Voice - Lower Division **1 Credits**
Private vocal instruction.

(MUSE)

MUSE 101 Concert Choir **1-2 Credits**
Performance of representative choral music of all periods.

MUSE 108 Concert Singers **1 Credits**
Performance of representative choral music of all periods.

(NRES)

NRES 310 Wildlife Ecology & Manage **4 Credits**
Wildlife ecology is the study of interactions between organisms and their environment. Wildlife management is the practice of balancing the needs of wildlife and other factors that have an adverse impact on these species. Explores many aspects of what wildlife managers do to help insure the long term success of wildlife.

NRES 322 Soils **3 Credits**
The physical, chemical, and biological properties of soils, soil genesis and classification, and plant-soil relationships.

NRES 432 Adv Environmental Toxicology **3 Credits**
Chemistry and toxicology of toxicants in the environment, particularly pesticides. Other topics include metals, food additives and hazardous wastes. Describes how selected classes of environmental contaminants interact with cellular processes, biochemical reactions, organs and tissues. Influences on individuals, populations and ecosystems. Describes the relationship(s) between toxicants and the multiple ways they interact with the endocrine system. It is recommended that student have completed CHEM 241 before enrolling in this course.

(NURS)

NURS 130 Nursing Assistant **6 Credits**
Provides students with classroom, laboratory, and clinical experience. Successful completion fulfills requirements for eligibility to take the Nevada State Board of Nursing Certified Nursing Assistant examination. Offered winter and summer semesters in a condensed four-week class. Offered fall and spring semester as an eight-week class. Students must purchase a package through Complio to track clinical compliance. Clinical Compliance includes, students must be BLS certified, have health insurance, current two-step TB screening and fulfill other vaccine requirements as described in Complio. A background check and drug screening will also be performed as part of the required package. Students are encouraged to complete the Complio package before class begins to ensure you are eligible to attend clinicals.

NURS 135 Fundamental Concepts Nursing **8 Credits**
Introduction to basic concepts and competencies for the application of the nursing process in the care of diverse patients with common health alterations and to promote the health of individuals. Introduction of basic concepts of safe, patient-centered, evidence-based nursing care considering legal and ethical responsibilities of the nurse. Also introduces caring, clinical reasoning, quality improvement, communication, and teamwork when interacting with patients and members of the interprofessional team. Emphasis on essential psychomotor skills and obtaining patient information relevant to care planning. Five credits theory, three credits clinical. Offered fall semester only.

NURS 140 Medical Terminology 3 Credits
A study of word derivations and formations with emphasis on understanding of common usage in the health-care setting. Offered as a self-paced class and is open to anyone.

NURS 154 Introduction to Pharmacology 1 Credits
Basic principles of safe and effective medication administration and pharmacology of major drug classifications. Principles of medication administration including aspects of best practice for safe, quality, patient-centered care. Includes the use of informatics and media to obtain evidenced-based drug information. One theory credit. Offered fall semester only.

NURS 155 Clinic Decisn Make Drug Therpy 1 Credits
Common drug therapy regimen and application of clinical reasoning in management and monitoring of drug effects in acutely ill patients for safe, quality, evidence-based nursing care. Focuses on patient teaching and the nurse as a member of the interprofessional team when providing pharmacological interventions. One credit theory. Offered spring semester only.

NURS 158 Nurs Care Adult Health/Illness 5 Credits
Building on fundamentals of nursing, this course provides for the acquisition and application of basic adult health nursing theory by applying clinical reasoning and safe, evidence-based, patient-centered, holistic nursing care to diverse patients with common acute health problems. Incorporates a focus on health promotion. Includes the application of the concepts of caring, clinical reasoning, quality improvement, communication, and teamwork, considering legal and ethical responsibilities of the nurse when caring for adults. Two credits theory, three credits clinical. Offered spring semester only.

NURS 159 Nursing Care - Mental Health 3 Credits
Provides for the acquisition and application of mental health nursing theory for safe, evidence-based, patient-centered, holistic nursing care for diverse patients experiencing common acute and chronic mental health disorders and treatment modalities. Includes the application of the concepts of caring, clinical reasoning, quality improvement, communication, and teamwork, considering legal and ethical responsibilities of the nurse when working with patients with mental health disorders. Two credits theory, one credit clinical. Offered spring semester only.

NURS 185 Paramedic/LPN Bridge Course 5 Credits
This course prepares the Paramedic or licensed LPN for the acquisition and application of basic adult health nursing theory by applying clinical reasoning and safe, evidence-based, patient-centered, holistic nursing care to diverse patients with common acute health problems, common acute and chronic mental health disorders and treatment modalities related to common drug therapy regimens. Incorporates a focus on health promotion. Include the application of the concepts of caring, clinical reasoning, quality improvement, communication, and medical and mental health disorders and pharmacological interventions.

NURS 252 Nursing Care - Childbearing 3 Credits
Provides for the acquisition and application of maternal/child nursing theory for safe, evidence-based, family-centered nursing care for diverse patients. Includes a focus on health promotion and the application of the concepts of caring, clinical reasoning, quality improvement, communication, and teamwork, considering legal and ethical responsibilities of the nurse when working with the childbearing family. Two credits theory and one credit clinical. Offered fall semester only.

NURS 253 Nursing Care Child/Adolescents 3 Credits
Provides for the acquisition and application of pediatric nursing theory by applying clinical reasoning and safe, evidence-based, family-centered, holistic nursing care to diverse children and adolescents with acute and chronic health problems. Includes a focus on health promotion, and the application of the concepts of caring, clinical reasoning, quality improvement, communication, and teamwork, considering legal and ethical responsibilities of the nurse when caring for children and adolescents. Two credits theory and one credit clinical. Offered fall semester only.

NURS 257 Nursing Care - Acute/Chronic 5 Credits
Provides for the acquisition and application of adult health nursing theory by applying clinical reasoning and safe, evidence-based, patient-centered, holistic nursing care to diverse adults with acute illnesses and long-term management of chronic illnesses. Includes a focus on health promotion and the application of the concepts of caring, clinical reasoning, quality improvement, communication, and teamwork, considering legal and ethical responsibilities of the nurse when working with adults. Three credits theory and two credits clinical. Offered fall semester only.

NURS 258 Patients Complex Hlth Problems 5 Credits
Provides for the acquisition and application of nursing theory for patients experiencing physiological crisis and end of life. Applies clinical reasoning and safe, evidence-based, patient-centered, holistic nursing care to diverse patients with complex health problems. Includes a focus on collaboration and care management, and the application of the concepts of caring, clinical reasoning, quality improvement, communication, and teamwork, considering legal and ethical responsibilities of the nurse in the management of patients in crisis and at the end of life. Two credits theory, two credits clinical. Offered spring semester only.

NURS 273 PD and Transition to Practice 3 Credits
Provides for an examination of the impact of clinical microsystems and organizational culture on patient care delivery and nursing practice. Incorporates an analysis of professional development resources for nurses upon entry into practice to facilitate progress form novice to expert. Two credits theory. Offered spring semester only.

NURS 285 Selected Topics in Nursing .5-6 Credits
Selected nursing topics offered for general interest and nursing continuing education. Not a required course. No prerequisite. Unlimited repeatability.

NURS 312 Health Assessment/Promotion 3 Credits
Explores assessment of the healthcare needs of diverse and underserved populations in both structured (hospital/clinical) and unstructured (community/home-based) healthcare settings. The importance of the nurse in identifying health promotion and disease prevention issues for individuals and communities is explored. Refines and expands the nurse's perspective on health assessment through integration of an expanded knowledge base in risky behaviors and common health deviations of populations while focusing on equitable and culturally responsive, evidence-based care.

NURS 326 Transition Professional Nurse 5 Credits
This course bridges the students' current views and those presented throughout the program related to the major program concepts. It also differentiates the baccalaureate program from the associate level program. This course provides an overview of the major areas of nursing studied in more depth throughout the RN to BSN program, including current healthcare systems with a distinct focus on rural health and agencies serving underserved populations. It emphasizes

the responsibilities of nurse leaders in quality improvement, nursing research, and evidence-based practice and highlights the importance of collaborative relationships with the interprofessional team. Leadership principles and theories, as well as information management, are explored.

NURS 337 Pathophysiology 3 Credits
Explores the pathophysiologic processes associated with common chronic and acute health problems across the lifespan. Incorporates the influence of age, ethnicity, and cultural patterns on illness development and resolution. The evidence base supporting current knowledge of disease processes and common health problems is explored.

NURS 417 Information System/Quality Mgt 3-4 Credits
This course examines the role of information systems and quality improvement processes used to monitor and improve healthcare outcomes. Covers the use of information management to impact cost, safety, and coordination of care. Includes adaptations of information access and management in rural environments.

NURS 420 Evidence Based Pract/Research 3 Credits
This course focuses on the research process, research analysis, and research utilization in the context of evidence-based nursing practice. This course introduces students to the role of the nurse as an evolving scholar, emphasizing the critical skills of synthesizing, translating, applying, and disseminating knowledge to enhance healthcare and advance nursing scholarship, with a specific focus on the needs of rural populations. Students will develop skills in interpreting published research findings and understanding the science of nursing as the foundation for best practices and evidence-based quality improvement measures in diverse healthcare environments. This course encourages knowledge dissemination through scholarly activities that promote lifelong learning and interprofessional collaboration. Application of ethics, legal principles, and professional standards are integral to responsibly carrying out the research process and guiding decision making and leadership in clinical, research, and policy contexts. Ultimately, this course aims to equip students to be change agents, driving healthcare transformation in underserved and rural communities and improving outcomes through evidence-based, population-tailored practices.

NURS 429 Population Focus Comm Hlth (T) 4 Credits
This course focuses on the synthesis of community and public health nursing concepts and theories to promote health and prevent disease within rural communities and underserved populations, with a critical emphasis on addressing social determinants of health and promoting health equity. Students will learn to analyze the personal, social, economic, and environmental factors impacting the health of these vulnerable populations. Applying nursing concepts and principles of epidemiology, students will develop skills to plan, implement, and evaluate strategies for health promotion, disease prevention, and the management of population health, including communicable diseases. This course will also prepare students for policy advocacy, equipping them as leaders to engage stakeholders, advance equitable health policies, and build effective interprofessional partnerships to improve health outcomes in rural settings.

NURS 436 Population Focus Comm Hlth (P) 4 Credits
Building upon foundational public and community health nursing concepts, this course engages students in experiential learning activities focused on their application to promote optimal health and wellness for rural communities and underserved populations. Students will collaborate with peers from various disciplines to develop and implement interprofessional planning and interventions specifically tailored to the unique needs of rural populations. Through project-focused work, students will apply their knowledge of social determinants of health, epidemiology, and policy advocacy to address health challenges and promote positive health outcomes in these communities.

NURS 437 Diversity/Hlthcare in Rural 3 Credits
Students explore the influence of diversity and healthcare policy on local, national and global issues of healthcare equity, access, affordability, and social justice. Incorporates an analysis of nursing practices that increase cultural competence, affect health policy resulting in improved healthcare access, and reduced health disparities.

NURS 443 Nursing Leadership/Mgt Theory 4 Credits
This course explores essential leadership and management concepts for professional nursing practice in today's diverse healthcare environments, with a specific focus on developing students' leadership abilities within the framework of systems-based care, particularly in rural settings. It examines the multifaceted responsibilities of the professional nurse as a leader within both structured and unstructured healthcare systems, emphasizing inter- and intra-professional collaboration and partnerships. The course explores the cost of care, safety, legal guidelines, regulatory factors, and measurement of patient satisfaction, while also highlighting the use of informatics to support decision-making and improve patient outcomes. A key component involves embracing diversity and inclusion within the profession, preparing students to lead effectively in diverse healthcare environments. Students will foster leadership skills that prioritize resilience, agility, and the capacity to navigate change in complex and evolving healthcare systems. Through the integration of continuous learning and self-reflection, students will be encouraged to develop adaptability, preparing them as influential leaders who can guide teams, advocate for patients, and drive equitable, systemic improvements in care delivery.

NURS 449 Nurse Leadership/Mgt Practicum 4 Credits
Students will engage in experiential learning activities focused on the application of leadership and management concepts, theories, roles, and evidence to address a leadership or management issue within a selected organization or clinical area. This experience provides opportunities to apply leadership concepts within the framework of systems-based care and foster inter- and intra-professional collaboration, as well as promoting diversity, inclusion, and adaptability within the nursing profession. A key focus includes navigating leadership challenges specifically in rural settings, where resource limitations and unique population needs demand resilience, agility, and innovative solutions. Collaboration with a preceptor/mentor and faculty member is integral for project development and implementation, preparing students to drive positive change, address health disparities, and improve health outcomes in both rural and broader healthcare contexts, thus solidifying their leadership skills to meet the unique challenges faced by diverse and underserved populations, particularly in rural areas.

NURS 456 Senior Synthesis Seminar 5 Credits
This major senior project course engages students in an in-depth exploration of a practice area or issue, with a significant focus on rural healthcare settings. The course will require the comprehensive integration of knowledge acquired in the liberal arts, sciences, and baccalaureate nursing courses. Emphasizing leadership development, students will identify how they can lead initiatives based on best practices to advance nursing practice and improve patient outcomes specifically within underserved rural areas. Students will also be guided in identifying innovative practices and solutions that address gaps in care unique to rural populations, aiming to enhance overall health outcomes. Students will also identify areas for professional opportunities and continuing education as methods for engaging in lifelong learning.

NURS 490 Special Topics in Nursing 1-6 Credits
Exploration of health issues of specific populations, or aspects of health care and nursing practice including disease prevention and health promotion.

(NUTR)

NUTR 121 Human Nutrition **3 Credits**
An introductory nutrition course for the beginning student. Course will center on the major nutrients and their roles in maintaining good health. Students will learn to recognize well-balanced diets and acquire shopping tips and preparation techniques for optimum utilization of food dollars. Class includes four required labs.

NUTR 223 Principles of Nutrition **3 Credits**
Application of principles of nutrition. Concepts of nutrients, nutrient requirements, and nutritional changes associated with the aging process, infants to seniors.

(PARA)

PARA 6Z Contract Law **0 Credits**

PARA 7Z Evidence **0 Credits**

PARA 8Z Pleadings/Motions **0 Credits**

PARA 9Z Investigation & Discovery **0 Credits**

PARA 10Z Family Law **0 Credits**

(PD)

PD 88Z Fitness Center Membership **0 Credits**
Use the GBC Fitness Center to workout this semester. Participants must be currently enrolled at GBC for at least three credits.

PD 114Z Introduction to Life Coaching **0 Credits**

PD 115Z Life Coaching Practice **0 Credits**

PD 116Z Dyslexia/Reading Disorders **0 Credits**

PD 117Z Life Coaching Skills/Insights **0 Credits**

PD 118Z Life Coaching Seminar **0 Credits**

(PEX)

PEX 113 Basketball **1 Credits**
Drill work and scrimmages provide opportunity to strengthen passing, shooting, and rebounding skills. Offensive plays and defensive strategies will also be presented. May be taken for credit up to a maximum of three times. [S/U]

PEX 129 Volleyball **1 Credits**
An introduction to the basic rules, skills, and strategies of volleyball. The individual skills of passing, setting, hitting, blocking, and serving will be taught through drill and game experience. Perimeter and rotation defenses will be covered. May be taken for credit up to a maximum of three times. [S/U]

PEX 134 Rock Climbing **1-2 Credits**
Rock climbing is an introduction to the fundamentals of how to safely rock climb in the indoor setting and it transitions into intermediate skills that can be applied outdoors. From this course, students will gain an understanding of basic belay technique, climbing technique, rappelling, climbing knots, basic climbing anchors; second half of the semester will include lead belaying and lead climbing skills. Several classes will be held outdoors. May be taken for credit up to a maximum of three times. [S/U]

PEX 143 Karate **1-2 Credits**
An introduction to martial arts for beginners and a continuation of training for more advanced students. Students will learn martial art skills through the practice of basics, forms, and sparring. Together, with the self-defense aspect, the student will develop a sense of well-being through the self-confidence produced by disciplined training. May be taken for credit up to a maximum of three times. [S/U]

PEX 148 Tai Chi **1-2 Credits**
Tai Chi is an internal martial art and a set of self-practicing exercises. Because it is an internal martial art, it is used solely for self-defense. It is comprised of four parts: meditation, warm-up exercises, Tai Chi Ch'uan movements, and cool-down exercises. By integrating these four parts, the student learns to combine each part of the body into a whole unit, exercising every muscle, joint, tendon, ligament, and especially the mind. Tai Chi can be used as a wellness program, an exercise program, and a relaxation program, all rolled into one. No special equipment required except for flat-bottomed shoes. Can be performed anywhere. Tai Chi teaches the student to live in harmony with oneself and nature. It is an art and is often called 'poetry in motion.' May be taken for credit up to a maximum of three times. [S/U]

PEX 149 Zumba **1-2 Credits**
Zumba exercise classes are 'fitness parties' that blend upbeat world rhythms with easy-to-follow choreography, for a total body workout that feels like a celebration. In addition to a great cardio workout, Zumba will tone abs, thighs, glutes, and arms. May be taken for credit up to a maximum of three times. [S/U]

PEX 169 Yoga **1-2 Credits**
Participation in the various class offerings will increase the student's overall flexibility, enhance physical strength and stamina, increase heart and lung function, and nurture the health and well-being of beginning and experienced yoga practitioners. Correct structural alignment will be emphasized as well as linking movement with breath; effort with relaxation; and the mind, body, and spirit. May be taken for credit up to a maximum of three times. [S/U]

PEX 170 Cardio Fitness **1-2 Credits**
In addition to improving cardiovascular fitness, this cardio workout class will help you burn fat and calories and increase your metabolic rate. Cardio workouts also effectively reduce stress, elevate mood, and increase alertness. The class can be modified for most fitness levels and conditions. May be taken for credit up to a maximum of three times. [S/U]

PEX 172 Body Contouring and Condition **2 Credits**
Intended to enhance physical activity to improve overall health and quality of life. Students will learn knowledge of muscle groups, target heart rate, and the potential benefits of regular exercise which includes improved cardiovascular endurance, body composition, flexibility, muscular strength and improved body contour. Students will participate in aerobic activities, calisthenics and sculpting-isometric exercise, sports, conditioning, and flexibility training. May be taken for credit up to a maximum of three times. [S/U]

PEX 173 Circuit Training **1-2 Credits**
This class is designed to burn calories, sculpt, and tone your entire physique. Students will move around the room to different stations, set up for high intensity interval training, strength training, and core training. Students will learn to execute conditioning and weight training moves with correct form, showing increased strength and endurance. Class can be modified for most fitness levels. May be taken for credit up to a maximum of three times. [S/U]

PEX 180 Strength Training **1-2 Credits**
Get stronger, leaner, healthier! In this class, students will execute weight and strength training moves with correct form, resulting in reduced body fat, increased lean muscle, improved muscle sculpting, and more efficient calorie burning. The 1-credit course is perfect for your busy schedule, providing an intense, 30-minute, non-stop workout of all major muscle groups. The 2-credit course notches up the strength-training by meeting more frequently and for longer class sessions. This class can be modified for any fitness level. May be taken for credit up to a maximum of three times. [S/U]

PEX 183 Weight Training **3 Credits**
The proper form and techniques of a lifting exercise will be taught in the beginning class section. The student will learn how to implement the different programs and methods to help them achieve their goals. Spotting techniques to enhance safety will be addressed. Additional sections are offered to help the student develop a stronger and improved physique. May be taken for credit up to a maximum of three times. [S/U]

PEX 199 Special Topics **1-2 Credits**
Open Workout is one of the regularly offered Special Topics PEX courses. It is a self-designed workout class with full use of the fitness facility and equipment. Other PEX 199 courses are based on current trends and interests. Descriptions of individual Special Topics PEX courses can be found in the current class schedule. May be taken for credit up to a maximum of three times. [S/U]

PEX 207 Total Fitness/Weight Control **2 Credits**
This class will provide the information and tools to help the student make evidence-based decisions concerning fitness, nutrition, and weight control. The class includes a 30-minute workout followed by a lecture/activity on nutrition and applying nutrition concepts in real world meal planning and preparation, for long-term weight control. May be taken for credit up to a maximum of three times. [S/U]

PEX 351 Teaching PE in Elem Sch **3 Credits**
Designed for elementary education majors and those in related fields. Emphasis is placed on the teaching and spotting of basic gymnastics and tumbling skills. Foundational concepts of balance, flexibility, spatial awareness, motor learning, and risk management will be covered.

(PHIL)

PHIL 101 Intro to Philosophy **3 Credits**
Basic problems in different areas of philosophy such as ethics, political theory, metaphysics, and epistemology.

PHIL 102 Critical Thinking **3 Credits**
Covers non-symbolic introduction to logical thinking in everyday life, law, politics, science, advertising; common fallacies; and the uses of language, including techniques of persuasion.

PHIL 129 Intro to New Testament **3 Credits**
Surveys New Testament books and related literature from a nondenominational perspective. Textual and literary criticism will be practiced, and the historical background of the authors and their writings will be considered.

PHIL 135 Introduction to Ethics **3 Credits**
Introduction to Ethics: critical introduction to classical and modern ethical theories such as utilitarianism, deontology, and virtue ethics. Emphasis throughout on applying the theories in various contexts such as social, political, or interpersonal. The ultimate goal will be to allow students to clarify their own thinking and positions on important ethical issues confronting society today.

PHIL 145 Religion in American Life **3 Credits**
History and organization of major religious groups in America, with special attention given to the relationships between religious convictions and social issues such as minority rights, welfare, sexual mores, and political affiliation.

PHIL 200 Judeo Christian Trad **3 Credits**
The philosophy of Biblical religion in the Old and New Testaments. Includes Israelitic cosmology, monotheism, the prophets, the parables of Jesus, and the letters of Paul.

PHIL 207 Intro Socl/Political Phil **3 Credits**
Readings and discussion of theories concerning the nature of society and political structure from classical and contemporary philosophers.

PHIL 210 World Religions **3 Credits**
The moral and religious views of world religions including Judaism, Christianity, Islam, Hinduism, Buddhism, Confucianism, and Taoism.

PHIL 311 Professional Ethics **3 Credits**
A study of the nature of ethical thinking and its application to judgments about actions of people that make up society. Topics to be considered include ethical relativism, moral virtues and vices, foundations of morality, alternative theoretical perspectives on moral judgment, egoism, altruism, and legal and regulatory perspectives related to ethics in business. (Formerly offered as ECON 311)

PHIL 361 Intro Pauline Letters **3 Credits**
Students will study the writings of Paul, using the practices of literary criticism, historical criticism, textual criticism, and other modern method of literary study. Course material includes Saul of Tarsus as an historical figure, Paul in the book of Acts, an exegesis of each of Paul's letters, the collation and distribution of the Pauline corpus, the Acts of Paul, and the place of Paul in Christian tradition.

(PHYS)

PHYS 100 Introductory Physics **3 Credits**
A concise treatment of the basic principles of physics. Includes mechanics, matter, electricity, magnetism, heat, sound, light, relativity, and nuclear physics.

PHYS 107 Technical Physics I **3 Credits**
Investigates traditional topics of physics. Topics include mechanics, electricity, basic solid state components, optics, gases, hydraulics, fluids, and thermodynamics. This course provides a basic understanding of how physical systems are related and their technical applications. Hands-on labs, demonstrations, and calculations are an integral part of the course.

PHYS 117 Meteorology **3 Credits**
Description of the behavior of the atmosphere with special emphasis on the physical processes involved in the weather.

PHYS 151 Gen Physics I **4 Credits**
Primarily for students in arts and science. Topics include kinematics, energy and momentum conservation, rotational dynamics, thermodynamics, fluids, harmonic motion, and sound. Laboratory experiments illustrate many of these fundamental principles.

PHYS 152 Gen Physics II **4 Credits**
A continuation of PHYS 151. Topics include electrostatics, circuits, magnetism, induction, AC circuits, electronics, light optics, special relativity, and an introduction in quantum theory. Lab included.

PHYS 180 Physics Scientist/Engr I **4 Credits**
A comprehensive, calculus-based physics course designed for advanced science and engineering students. Consists of intensive word problem solving covering topics of kinematics, vectors, forces, energy, momentum, rotation, angular momentum, equilibrium, elasticity, gravity, fluids, and oscillations. Lab included.

PHYS 181 Physics Scientist/Engr II **4 Credits**
A calculus-based investigation of thermodynamic laws, kinetic theory, electric charge, field, potential, current, dielectrics, circuit elements, magnetic fields and materials, electromagnetic oscillations. Lab included.

PHYS 182 Physics Scientist/Engineer III **4 Credits**
A calculus-based investigation of Faraday's laws and inductance, AC, EM waves, light, optical systems, interference, diffraction, polarization, relativity, quantum physics, atoms, molecules, solids, nuclei and radioactivity, elementary particles. Includes a weekly laboratory component.

PHYS 483 Special Topics in Physics **1-3 Credits**
Topics of current interest which are not incorporated in regular offerings.

(PSC)

PSC 401Z Special Topics in Am Govt **3 Credits**
Analysis of selected research and topical issues of political systems. May be repeated for a maximum of 12 credits.

PSC 403C Environmental Policy **3 Credits**
An examination of environmental policy and environmental law including issues in policy formulation and implementation, the basic statutory and regulatory framework, and judicial interpretation of the law.

PSC 403K Problms/Am Public Policy **3 Credits**
Examination of American public policy frameworks and spectrum of the political characteristics, institutions, and dynamics associated with decision-making processes in American government.

PSC 401F Public Opn/Politic Behave **3 Credits**
Studies factors which shape basic political attitudes, circumstances which result in different kinds of political behavior, and psychological aspects of American government and politics in relation to public opinion in electoral politics, governance, and democratic theory.

PSC 405G International Conflict **3 Credits**
Classical and contemporary literature on the causes of war among nations and the conditions of international peace.

PSC 100 The Nevada Constitution 1 Credits
An introduction to the political history of Nevada through an in-depth examination of the basic law of the state, the Nevada Constitution as originally written and subsequently amended. Self-paced reading program. Course satisfies the Nevada Constitution requirement for out-of-state students who have already satisfied the three-credit U.S. Constitution requirement and are transferring into a GBC program.

PSC 101 Intro American Politics 3 Credits
A survey of United States, national, state, and local governments with emphasis on the cultural aspects of the governing process. Satisfies the legislative requirement for the United States and Nevada Constitutions.

PSC 210 American Public Policy 3 Credits
Analysis of the interplay of forces involved in policy making at all levels of American government. Study of the impact of policy on individuals and institutions.

PSC 231 Intro International Relations 3 Credits
Introduction to the study of international relations that stresses a systematic approach to world politics.

PSC 295 Special Topics in PSC 1-3 Credits
Course may utilize special emphasis topics/instructors or be offered as an individualized study format with directed readings. Classes will usually mirror offerings at other NSHE institutions. Unlimited repeatability. [S/U]

(PSY)

PSY 101 Gen Psychology 3 Credits
Survey of the discipline introducing psychological theories, research methods, and principles of behavior.

PSY 102 Personal & Social Adj 3 Credits
A study of personality and adjustment in normal persons. Adjustment techniques and reactions to frustration and conflict in the content of various social groups considered.

PSY 105 Introduction to Neuroscience 3 Credits
An introduction to neuroscience and the impact of neural diseases on society. Same as BIOL 105.

PSY 130 Human Sexuality 3 Credits
Provides a practical, informational approach to this subject. Surveys the biological, cultural, and ethical aspects of human sexuality.

PSY 208 Psy of Human Relations 3 Credits
Explores the relationships between human beings and assists in the development of interpersonal communication skills which can be used personally and professionally.

PSY 233 Child Psychology 3 Credits
An overview of the theories, stages, and development of the child. Provides a practical and informational view of a child's cognitive, social, and personality development.

PSY 234 Psychology of Adolescence 3 Credits
Examines psychological development during adolescence with emphasis on special problems in American society including drug abuse, pregnancy, and familial problems.

PSY 241 Intro to Abnormal Psychology 3 Credits
An overview of abnormal psychology with emphasis on the symptomology, etiology, diagnosis, treatment and prevention of the major psychological disorders. May be repeated up to three times.

PSY 276 Aging in Modern Amer Soc 3 Credits
The psychological and sociological development and the changes attendant to the process of aging in society. The course presents theory and research in the field, implications for social policy, and discusses perspectives on death and dying. Same as SOC 276.

PSY 299 Special Topics 1-6 Credits
Selected problems and conceptual issues in psychology. Issues selected will depend upon current interest of staff and students. May be repeated up to three times.

PSY 313 Well-Being: East Meets West 3 Credits
This course will cover topics pertaining to well-being from both a western psychological viewpoint, and an eastern perspective. Topics covered include, but are not limited to: positive psychology, mindfulness, joy, gratitude, cognition, spirituality, health, attachment, and emotions. The focus will be on integrating concepts from both the East and West to arrive at an understanding of what contributes to the well-being of individuals. This course satisfies the requirements for INT 349.

PSY 412 Motivation and Emotion 3 Credits
Basic principles and theories of motivation and emotion. Examination of major themes and contemporary research in the field.

PSY 435 Personality 3 Credits
Study of personality as a psychological construct with emphasis on its structure, development, and measurement.

PSY 460 Social Psychology 3 Credits
Social and group factors affecting individual behavior. Topics include social perception, opinions, and attitudes; influence processes; and small group behavior.

(RAD)

RAD 101 Exploration of Radiology .5 Credits
For students who are interested in becoming a radiological technologist. Designed to give basic knowledge of what a radiological technologist does and what careers are available in this field. The major learning outcome of this course is to help students determine if this is the right career choice for them.

RAD 112 Patient Care & Med Term 2 Credits
Covers procedures and practices related to radiological technology with an emphasis in patient care, patient safety, and communication. Aseptic techniques and procedures used to maintain a sterile field is explained. The use of prefixes, suffices, roots, and medical terms will be covered. Previous Medical Terminology course is recommended but not required.

RAD 116 Radiography I 3 Credits
Learn radiology positioning and anatomy. Identify the anatomic structures that will be on an x-ray examination, pathology noted, and radiation safety measures that should be used.

RAD 118 Radiology Physics/Circuitry 3 Credits
Provides knowledge of x-ray terminology and structure of x-ray circuitry, radiation production, radiation characteristics, and the photon interactions.

RAD 124 Rad Photography/Technique 3 Credits
Covers processing of the radiographic image, from darkroom to computerized radiography. The principles and practices with manipulation of exposure factors to obtain acceptable image quality will be discussed at length.

RAD 126 Radiography II 3 Credits
A continuation of RAD 116. Reviews advanced radiology procedures, pathology noted on images, radio-pharmacology, and film critique.

RAD 128 Imaging Equipment 3 Credits
Review all the radiographic equipment used in imaging departments and the equipment works.

RAD 198 Special Topics in Radiology .5-6 Credits
Covers limited radiology technology procedures and practices related to radiology technology with an emphasis on improving quality, radiation safety, and patient positioning. Designed for students who work with radiology equipment and want to enhance their skills. Unlimited repeatability.

RAD 225 Clinical Radiology I 5 Credits
A planned clinical experience. Gives the student the opportunity to apply didactic education to work-related examinations under the supervision of a registered technologist. The student must demonstrate clinical competency to continue in the program.

RAD 226 Clinical Radiology II 10 Credits
A continuation of RAD 225. The student will continue to apply knowledge gained in the classroom to work experience.

RAD 227 Clinical Radiology III 10 Credits
A continuation of RAD 226. Further clinical experiences will take place in order to achieve required competency.

RAD 238 Radiation Safety/Protect 2 Credits
Course covers the ALARA (as low as reasonable achievable) concept. It also includes the definitions and significance of radiation protection and the biological effects of radiation. National and state requirements will be discussed. Offered online.

RAD 240 Culmination Radiography Topics 1 Credits
This course builds on knowledge and experience gained from previous radiology courses to develop a deeper understanding of radiographic physics, positioning, anatomy, image production and evaluation and anatomy, physiology and pathology topics.

RAD 243 Medical Imaging Pathology 3 Credits
This online course will cover medical imaging pathology. The student will study disease utilizing medical imaging processes. It is critical for medical imaging professionals to understand the basic pathologic processes, therefore, this course will review pathological terms, etiology of disease, disease manifestation, and the role medical imaging plays in the diagnosis of disease.

(RE)

RE 101 Real Estate Principles 4 Credits
A general overview of the touching on a variety of topics such as escrow, title work, contracts, appraising, and listings. It is designed to give the student a basic understanding of how the business operates for 30 hours of instruction on the principles of real estate with 15 hours of instruction on agency. Can be taken concurrently with RE 103. Successful completion of RE 101 and RE 103 along with the passage of the Nevada Real Estate Exam qualifies one to become a licensed real estate salesperson in Nevada.

RE 103 Real Estate Law/Practice 4 Credits
Includes 30 hours of instruction in real estate law including land economics and appraising, land description, financing and insurance, escrows and closings, subdivisions and developments and 15 hours of instruction on contracts. Successful completion of RE 101 and RE 103 along with the passage of the Nevada Real Estate Exam qualifies one to become a licensed real estate salesperson in Nevada.

(SOC)

SOC 101 Prin of Sociology **3 Credits**
Sociological principles underlying the development, structure, and function of culture including society, human groups, personality formation, and social change.

SOC 275 Intro Marriage and Family **3 Credits**
Prepares the student for contemporary issues or problems encountered in dating, courtship, marriage, and parenthood. Emphasis will be on changing roles within families, communications, and parent-child interactions.

SOC 276 Aging/Modern Amer Society **3 Credits**
The psychological and sociological development and the changes attendant to the process of aging in society. The course presents theory and research in the field, implications for social policy, and discusses perspectives on death and dying. Same as PSY 276.

(SPAN)

SPAN 101 Basics of Spanish I **3 Credits**
Listening, reading, writing, and basic conversational skills. Building a vocabulary of Spanish-English words.

SPAN 102 Basics of Spanish II **3 Credits**
A second semester of Conversational Spanish, designed to continue and improve the skills learned in the first semester.

SPAN 111 First Year Spanish I **3 Credits**
Development of language skills through practice in listening, speaking, reading, writing, and structural analysis. Language practice required.

SPAN 112 First Yr Spanish II **3 Credits**
A continuation of SPAN 111. Language practice required.

SPAN 199 Special Topics in Spanish **1-3 Credits**
Emphasizes intermediate to advanced speaking, reading, writing, and grammar skills in Spanish. Advanced-level Spanish will focus on reading literature excerpts with discussion in Spanish, with a continued review of previously learned grammar and vocabulary. Emphasis will be placed on grammatically correct usage, pronunciation, and communication, with expanded vocabulary usage. Unlimited repeatability.

SPAN 211 Second Year Spanish I **3 Credits**
Considers structural review, conversation and writing, and readings in modern literature.

SPAN 212 2nd Year Spanish II **3 Credits**
A continuation of SPAN 211.

SPAN 305 Spanish Composition **3 Credits**
The advanced student of Spanish will be exposed to a free-writing approach in the composition of essays in Spanish. Auxiliary activities will include vocabulary development and grammatical refinement as well as a grounding in and further review of Spanish grammar and the use of idiomatic speech.

SPAN 400 Practicum Span/Community **2 Credits**
Supervised experience as an interpreter or translator using Spanish for local agencies or schools.

(STAT)

STAT 152 Intro to Statistics **3 Credits**
Includes descriptive statistics, probability models, random variables, statistical estimation and hypothesis testing, linear regression analysis, and other topics. Designed to show the dependence of statistics on probability. It is recommended that students have completed prerequisites within two years of enrolling in this course.

(SUR)

SUR 255 Introduction to Mine Surveying **3 Credits**
Surface and underground surveying techniques specifically applied to mineral exploration and mining operations.

SUR 280 Fundamentals Geomatics I **4 Credits**
A comprehensive study of angle measurement systems, taping, the traverse, differential leveling, profile leveling, plan and profile sheet, the circular curve, the vertical curve, the USGS 7.5 minute map, and elementary topographic mapping. The application of statistics to surveying, the assumptions underlying surveying on the plane, and reference surfaces are stressed in this course. In the laboratory portion of the course, students will make survey measurements, maintain a field book, and adjust survey data as appropriate. Weekly laboratory reports using the measured data to compute a survey product are required. Lecture+Lab: 3+3. Four semester hours.

SUR 281 Fundamentals Geomatics II **4 Credits**
A comprehensive study of the construction and calibration of the modern total station, instrument errors, face positions, survey astronomy, control leveling, calibration of the EDMI, large-scale topographic mapping, and the use of the data collector. In the laboratory portion of this course, students will apply the fundamental principles underlying total station instrument errors, EDMI calibration, astronomic observations for azimuth and large-scale topographic mapping. Weekly laboratory reports using measured data to compute a survey product are required. Lecture+Lab: 3+3. Four semester hours.

SUR 290 Intro Urban Development 4 Credits
An introduction to the process of land development and construction layout. An emphasis is placed on those Nevada State Statutes that define the duties of the Professional Land Surveyor in the subdivision of land. The laboratory portion of the course provides practical exercises involving Topographic Mapping, ALTA/ACSM Title Surveys, Standards of Practice, Elevation Certificates, and Subdivision Design. Lecture+Lab: 3+3. Four semester hours.

SUR 320 GIS for Surveyors 3 Credits
Reviews the basic concepts in the development and use of Geographic Information Systems (GIS). The course focuses on the application of GIS for land parcel management or the Land Information System (LIS). Applies measurement science to the collection of land information data and the development of the base map. Develops the legal issues associated with the development of land information systems. Introduces the concept of the cadastre and the history associated with land parcel management in the United States.

SUR 330 Intro Least Square Adjust 3 Credits
This course provides an introductory study of the concepts and mathematics involved in performing least squares adjustment of survey data. The student is introduced to the use of matrices to handle data, systems of linear equations, the use of the Taylor series to linearize equations, the principles of error propagation, and several methods used to fit survey data to mathematical and survey models.

SUR 340 Photogrammetry/Remote Sensing 3 Credits
Principals of photogrammetry and remote sensing as applied to surveying and mapping. Includes the mapping camera, the photograph, the stereo model, the strip and the block, and flight planning principles. The impact of the digital revolution on photogrammetry, image processing, and remote sensing principles are important topics covered in this course.

SUR 360 Public Land Survey System 3 Credits
The U.S. Public Land Survey System (PLSS) as described in Official Government Survey Manuals (1851-1973) with emphasis on evidence, both federal and state rules, resurveys, and subdivision of sections. A field project to recover original evidence of the GLO Surveys is required.

SUR 365 Land Descriptions 3 Credits
Analysis, interpretation, and writing of land descriptions, proper form, controlling elements, metes-and-bounds, sectionalized land descriptions, easements, and right-of-way. Considerations of the parent title, interpretation of expressions, bounds calls, different types of descriptions, junior-senior rights in descriptions, title considerations, and research of public and private records.

SUR 440 Geodetic/Gps Surveying 3 Credits
Introduces geometric reference to ellipsoids, ellipsoidal and local coordinate systems, coordinate transformation in 2D and 3D, datums and datum transformations, orthometric heights, the reduction of field observations, effects of the earth's gravitational field, state plane coordinate systems, and GPS network design. The student is expected to design a GPS network, collect the data, and process the data to extend control to unknown project control stations.

SUR 450 Construction Surveying 3 Credits
Prepares students for organizing, planning, and cost estimating for construction and civil engineering projects. Topics include intersections, horizontal curve, spiral curves, vertical curve fitting, route design elements, cross sections, volumes, and other pertinent topics.

SUR 456 Advanced Mine Surveying 1 Credits
An independent study course on advanced survey concepts underlying surface, underground mining, and geomatics projects, including their representations, interpretations, relationships with quality assurance/quality control measures, and their use in geomatics projects. Computations necessary to develop fundamental mine surveying principles, subsurface location principles, and geomatics projects will be expected from the student.

SUR 460 Adv Boundary Analysis 3 Credits
Study of boundary resolution where occupation and possession are not consistent with the record location. Study of unwritten property rights and the presentation of defensible evidence. Review of principles of land tenure and the cadastre, the Statute of Frauds, constructive notice, recording laws, and water boundaries.

SUR 495 Survey/Geomatics Capstone 3 Credits
Final student project requiring the application of knowledge and skills acquired in previous field experience and coursework. Project may include field/office evidence research, urban subdivision layout, descriptions, map/plat construction, and/or a directed undergraduate research project. Includes the creation of a student portfolio or project report.

(SW)

SW 101 Introduction to Social Work 3 Credits
The course acquaints students with the history, philosophy, values, and knowledge base of the social work profession. The course emphasizes human diversity and generalist practice. The goals of the course are to (1) provide students with an accurate understanding of what social workers do, (2) begin to socialize students to the values and philosophy of the social work profession, (3) introduce students for the methods and approaches of social work, (4) introduce students to the generalist social work practice paradigm, and (5) develop a basic level of critical thinking and writing skills needed in social work practice.

SW 230 Crisis Intervention 3 Credits
Analysis of crisis theories, definition of crisis, what can cause crisis, effects of crisis, and resources for crisis, and resources for crisis intervention.

SW 250 Social Welfare History/Policy 3 Credits
Explores the historical development of the social work profession and current policies governing the social service delivery system within the United States. Social policy is presented as a social construction influenced by a range of ideologies and interests. Special attention is paid to social welfare policy and programs relevant to the practice of social work, including poverty, child and family well-being, mental and physical disability, health, and racial, ethnic, and sexual minorities. The course includes a focus on the role of policy in creating, maintaining or eradicating social inequities.

SW 310 Structural Oppression 3 Credits
SW 310 is the first course in a two-course sequence that promotes a multidimensional understanding of human functioning and behavior across systems and the life course. This course specifically examines human behavior manifested in larger systems as well as the reciprocal relationship between individual

functioning and social institutions. In particular, the course orients students to social work perspectives that view human behavior as being influenced and impinged upon by environmental forces. The course advances students' ability to critically examine the role of power, privilege and oppression in shaping life experiences.

SW 311 Theor Persp Human Behavior 3 Credits
SW 311 is the second course in a two-course sequence that promotes a multidimensional understanding of human functioning and behavior across systems and the life course. This course specifically examines human behavior and functioning among individuals and families. In particular, the course emphasizes and evidence-informed approach to assessing human functioning. The course advances students' ability to critically apply a range of theories and research to better understand and assess human behavior and development.

SW 321 Basics Professionl Communicate 3 Credits
Focuses on the development of basic communication and observational skills needed for subsequent social work methods courses. Communication topics to be addressed include: active listening, questioning, empathetic responding, paraphrasing, summarizing, persuasive writing, and non-verbal communication. Emphasis will be placed on developing observation and communication skills that capture events in ways that are descriptive, accurate, and unbiased. Given the importance of nonjudgmental and unbiased communication to rapport, the course will examine the role of power differentials, gender, culture, class, context and ethnicity/race on professional communication.

SW 351 Global Context of Social Work 3 Credits
This course examines the historical, political, and cultural contexts of contemporary global social issues and the mutually reinforcing relationship between the local and the global. The course will critically examine the economic, political, social, and cultural dimensions of globalization and the upheavals they produce for nations and people. Specific models of intervention and select approaches to social development, seen as more compatible with social work's commitment to social justice will also be examined to determine their respective strengths and weaknesses in response to some of these contemporary social issues. In addition, the course will also raise critical questions about social work's past and present ability to address the growing challenges of an increasingly complex, integrated and interdependent world.

(TA)

TA 100 Shop Practices 1-4 Credits
An introduction to hand tool identification and proper use, shop safety, and other topics including screw thread, hydraulic hose, fitting identification, and measuring devices. Unlimited repeatability.

TA 108 Applied Math/Technicians 3 Credits
Emphasizes the ability to understand and apply math to solve problems in society and the workplace. Topics include a review of whole numbers, fractions, mixed numbers, decimals and percentages, plus geometry, and formulae, basic right angle trigonometry, elementary statistics, probability, linear equations, and measurement methods. This course employs lecture, small group collaboration, and hands-on lab activities relating to student's major emphasis.

TA 299 Special Topics in TA 1-5 Credits
Consideration of special topics and issues in technical arts. Selection will depend upon current interests and needs. Unlimited repeatability.

(THTR)

THTR 100 Introduction to Theatre 3 Credits
A survey of the basic principles, facts, and theories providing an understanding of the art of theatre. Course also includes a special focus on the practical technical aspects of the theatre and on live theatre experiences.

THTR 102 Introduction to Stage Voice 3 Credits
Fundamentals of voice production including relaxation, alignment, breath, resonance, and articulation. Vocal health and the physiological aspects of voice/speech production. Students will complete performance projects.

THTR 105 Introduction to Acting I 3 Credits
Examines acting fundamentals and focuses on development of vocal, physical, and creative tools to be used on stage.

THTR 121 Stage Makeup 3 Credits
This course focuses on the history of makeup and basic approaches to applying make-up for the stage and screen. Make-up supplies will be studied, as well as techniques for corrective, old-age, character, stylized, and special effects makeup.

THTR 198 Special Topics in Theatre 1-3 Credits
Consideration of special topics and issues in speech. Selection will depend upon current interests and needs. An additional emphasis provides for a responsive class which allows student actors from GBC, area high schools, and community theatres to work together on particular theatrical challenges. Unlimited repeatability.

THTR 199 Play Structure and Analysis 3 Credits
Introduction to the study of basic principles of script analysis: form, style, structure and theme. Survey of theatrical literature and Ancient Greece to the present.

THTR 204 Theatre Technology I 3 Credits
Lecture and discussion encompassing the philosophy and techniques of technical theatre.

THTR 205 Introduction to Acting II 3 Credits
Continuation of THTR 105.

THTR 209 Theatre Practicum 1-6 Credits
Performance and production of plays for GBC's Little Theatre season.

THTR 214 Theatre Technology II **3 Credits**
A continuation of THTR 204, with lecture and discussion resulting in a deeper understanding and application of the philosophy and techniques of technical theatre.

THTR 221 Oral Interpretation **3 Credits**
Introduction to and practice of oral interpretation of literary and dramatic works from Shakespeare to contemporary writers and poets.

THTR 306 Advanced Acting **3 Credits**
Offers an advanced approach to acting with an emphasis on character work, character analysis, rehearsal process, performance proficiency, and ensemble work. Students will continue development of technical skill, awareness, and fundamental understanding of acting through scene work, monologues, and specified techniques. Repeatable up to six credits.

(WELD)

WELD 105 Draw/Weld Symbol Int **3 Credits**
An introduction to the interpretation of basic elements of blueprints, sketches, and interpretation of welding symbols.

WELD 110 Basic Arc Welding Principles **.5-5.5 Credits**
Course provides students with the basic knowledge and understanding to complete fillet and groove welds in the 1G and 1F positions using the shielded metal arc welding (SMAW) process on plain carbon steel. (15 contact hours per credit)

WELD 136 Welding Maintenance Tech I **1-3 Credits**
In this course the Maintenance Technician will learn safety in welding and Oxy-Fuel Cutting operations. Also covered in this course, the Maintenance Technician will gain an understanding of electrodes and electrode selection as well as develop an understanding on Shielded Metal Arc Welding equipment that is used in the shop and field environments. The Maintenance Technician will perform the operation of using high alloy electrodes to extract broken bolts. The Maintenance Technician will become knowledgeable in the MSHA and OSHA fabrication regulations regarding hand railing. Repeatable up to three times. (Formerly WELD 135, Welding for the Maintenance Technician I)

WELD 150 Metallurgy Fund for Weld **.5-3 Credits**
Explore the basic scientific theory as well as the practical side of metallurgy as it pertains to the welding field. May be repeated up to three credits.

WELD 160 Weld Design/Layout & Pipe **5.5 Credits**
A laboratory and lecture course in the design, layout, and construction of plate, pipe, and structural beams used in the fabrication and welding industries.

WELD 198 Special Topics in Welding **1-6 Credits**
Consideration of special topics and issues in welding. Selection will depend upon current interests and courses may include pipefitting techniques, blacksmithing, ornamental iron work, other welding projects, and Tech Prep related theory. Unlimited repeatability.

WELD 200 Metal Art **3 Credits**
This course is designed to give the student the basic understanding of two dimensional 2D and three-dimensional 3D metal art. Also covered in this course we will discuss different Cutting, Welding and metal finishing techniques that are used in this discipline as it relates to metal art.

WELD 210 Advanced Welding Principles **.5-5.5 Credits**
Course provides students with the advanced knowledge to produce high quality welds in all positions on plain carbon steel, using the shielded metal arc welding (SMAW) process. Requires passing a 2G-3G limited thickness qualification test on plain carbon steel. (15 contact hours per credit)

WELD 220 Gas Metal & Flux Cord Arc Weld **.5-11 Credits**
Course provides students with the knowledge to produce high quality welds in all positions on plain carbon steel, using the gas metal arc welding (GMAW) short circuit transfer mode and flux cored arc welding (FCAW) processes. Also requires use of the spray transfer mode for the 1F-2F and 1G positions on plain carbon steel. (15 contact hours per credit)

WELD 224 Welding Projects **1-6 Credits**
Layout, fit up, and fabrication. Class provides an opportunity to use welding skills to produce any number of different projects. (15 contact hours per credit) [S/U]

WELD 231 Welding III **3 Credits**
Provides training and hands-on welding experience in the welding process of Gas Metal (GMAW) and Flux Cored Arc Welding (FCAW).

WELD 235 Welding Maintenance Tech II **1-3 Credits**
The course is designed to give the Maintenance Technician a basic understanding of the principles of the Flux Cored Arc Welding process with hands-on training. The course will also cover the Carbon Arc Cutting process, joint designs, welding symbols, weld testing and inspection. Repeatable up to three times.

WELD 240 Gas Tungsten Arc Weld **1-8 Credits**
Course provides students with the knowledge to produce high quality welds in all positions on plain carbon steel, aluminum, and stainless steel using the gas tungsten arc welding (GTAW) process. (15 contact hours per credit)

WELD 250 Welding Cert Preparation **1-6 Credits**
Through instruction and practice, this course prepares the student to pass one or more of the American Welding Society certification tests. [S/U]

WELD 260 Pipe Welding **8 Credits**
Course provides students with the knowledge of pipe welding principles using shielded metal arc welding processes. (15 contact hours per credit)

WELD 275 Line Boring **5.5 Credits**
This course is designed to give the student a basic understanding of the principles of Line Boring and Bore Welding used in the mining industry for bore repair applications.

(WLL)

WLL 111 First Year Shoshoni I **3 Credits**
A beginning Shoshone language course that introduces students to the fundamentals of Shoshone. As they fuse linguistic forms with culturally appropriate themes, students will develop a foundation in the Shoshone language that translates well for use in their everyday lives.

WLL 112 First Year Shoshoni II **3 Credits**
A continuation of WLL 111. Language practice required.

(WMST)

WMST 101 Intro to Women's Studies **3 Credits**
Introduces the methods and concerns of women's studies drawing from history, psychology, sociology, law, and language.

(WOOD)

WOOD 197 Beginning Woodworking **3 Credits**
Tool identification and uses, tools and machine safety, project design and construction, gluing, laminating, mechanical drawings, and sketches of three views.

WOOD 221 Advanced Woodworking **3 Credits**
Advanced woodworking is a continuation of the skills and practices learned in beginning woodworking. The course is designed to meet the individual needs of the student through advanced woodworking construction practices which will be employed on an individual student need basis.


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