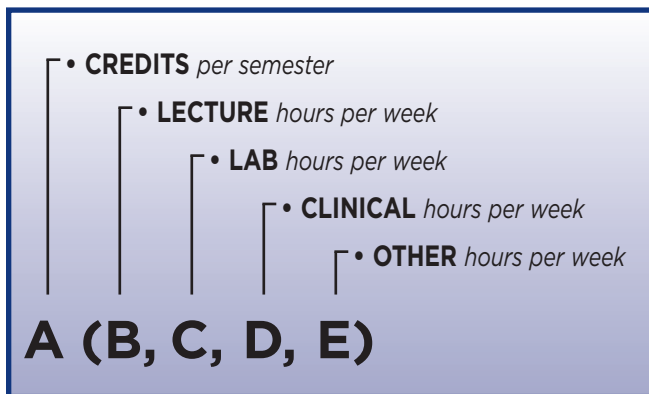


COURSE DESCRIPTIONS

The following course descriptions are intended to briefly describe the nature of each of the courses. For more complete information, departments or faculty can provide specific course syllabuses.

The numbers in the right side of each description define the credits and average weekly contact hours the student will spend in formal classes during a 16 week semester. Classes scheduled for other than a 16 week semester will have the contact hours adjusted accordingly.

- A - defines the number of semester credits
- B - average number of lecture hours per week
- C - average number of laboratory hours per week
- D - average number of clinical hours per week
- E - average number of other formal instructional hours per week



In addition to these hours, students are expected to complete homework assignments on their own time. These assignments may include library research, computer utilization, field trips, cultural performances, and other instructional activities.

EXAMPLE

ENG 101	Composition I	3 (3,0,0,0)
	3 credits	
	3 lecture hours	
	0 laboratory hours	
	0 clinical hours	
	0 other hours	

Architectural Design Technology

AAD 180 Fundamentals of Design I 3 (2,2,0,0)
Introduction to the principles and theories of design and design methodology in the “making” of representations of form and space.

AAD 182 Fundamentals of Design II 3 (2,2,0,0)
Continuation of AAD 180, with emphasis on spatial sequence, tectonics, and design precedents. Prerequisite: AAD 180.

Architecture

AAE 100 Introduction to Architecture 3 (3,0,0,0)
Survey of architecture. Includes historical examples and the theoretical, social, technical, and environmental forces that shape this profession. Especially for majors and non-majors who wish to explore this field as a career choice.

Collision Repair

ABDY 101B Collision Repair Fundamentals and Estimating 4 (2,4,0,0)
This lecture/lab course includes an overview of the collision industry, instruction in safe shop procedures, measurement, vehicle disassembly, and estimating software and techniques. Successful students will earn nine I-CAR certification points.

ABDY 110B Paint and Refinish I 4 (2,4,0,0)
This course provides instruction in all phases of metal preparation: sanding, masking, metal treatment, priming, as well as spraying basecoat and clear coat and the proper use and maintenance of paint guns.

ABDY 120B Non-Structural Welding 4 (2,4,0,0)
This course prepares the student in general welding safety, Plasma Arc Cutting, Oxy and Acetylene welding, cutting, heating and GMAW MIG welding techniques. Students will be prepared to take the I-CAR hands on steel welding test.

ABDY 122B Non-Structural Body and Panel and Trim 4 (2,4,0,0)
This course covers the proper techniques for removal, installation, adjustment, and alignment of body hardware, body trim, and body sheet metal parts (using basic hand tools).

ABDY 125B Airbrush Technology 2 (1.5,1,0,0)
Students will learn the techniques of airbrushing for automotive related applications. Equipment selection, paint mixing, surface preparation and special effects will be covered.

ABDY 140B Automotive Electrical 4 (2,4,0,0)
This course will provide the student with a working knowledge of basic circuitry, wiring schematics, diagnosis, and servicing of electrical and electronic components.

ABDY 144B Automotive Brakes and Suspension Systems 4 (2,4,0,0)

This course prepares the student to diagnose and repair collision related damage to suspension and braking systems.

ABDY 146B Automotive Mechanical Systems 4 (2,4,0,0)

Diagnosis and repair of drive train, fuel and exhaust systems, drivability and emissions systems, heating and cooling systems, air conditioning systems and restraint systems.

ABDY 150B Structural I 4 (2,4,0,0)

Introduction to specialized frame and unibody measuring, anchoring, and pulling equipment. The student will perform welding techniques and use corrosion preventive materials to restore the vehicle as closely as possible to pre-collision condition. Prerequisite: ABDY 120B or instructor approval.

ABDY 152B Structural II 4 (2,4,0,0)

This course prepares the student in the repair of a moderate to heavily damaged vehicles using specialized frame and unibody measuring, anchoring, and pulling equipment. Continued instruction in welding techniques and corrosion preventive materials to restore the vehicle as closely as possible to pre-collision condition is included. Prerequisite: ABDY 150B or instructor approval.

ABDY 154B Structural III 4 (2,4,0,0)

Advanced preparation for the student in repair of a moderate to heavily damaged vehicle using specialized frame and unibody measuring, anchoring, and pulling equipment. Welding techniques will receive special emphasis. Prerequisite: ABDY 152B or instructor approval.

ABDY 180B Non Structural - Advanced Body Panel 4 (2,4,0,0)

This course covers the identity of auto body parts and their structural relationships. Removal, installation, adjustment, and alignment of body hardware, body trim, and body sheet metal parts (using basic hand tools) are skills that are mastered in this course. Prerequisite: ABDY 122B or instructor approval.

ABDY 220B Paint and Refinish II 4 (2,4,0,0)

This course covers metal preparation, sanding, masking, metal treatment, and priming. Spraying of basecoat and clear coat, color matching, blending, and the proper care of a paint gun are also included. Students will learn blending, color adjusting and tinting. Prerequisite: ABDY 110B or instructor approval.

ABDY 222B Paint and Refinish III 4 (2,4,0,0)

This course is an advanced study in the proper technique in metal preparation including sanding, masking, metal treatment, and priming. Spraying of basecoat and clear coat, color matching, color blending, and the proper set up, maintenance and trouble shooting of a paint gun are also included. Prerequisite: ABDY 220B or instructor approval.

Air Conditioning Technology**AC 100B Technician Certification Review 5 (3,0,0,0)**

A lecture course to prepare students for certification exam, devoted to all aspects of EPA regulatory requirements under Section 608 of the Clean Air Act.

AC 101B Introduction to HVAC and Refrigeration 3 (2,3,0,0)

This is an introduction course covering the mechanical and electrical functions of a HVAC system and the basic refrigeration cycle. This course will prepare students for the EPA 608 certification.

AC 102B Introduction to HVAC Electrical Theory and Application 5 (4,2,0,0)

This course covers electrical safety, basic electrical math, elementary circuit diagram reading and drawing, and motor theory. Labs cover: assembly and wiring techniques, and the use of electrical meters.

AC 103B Introduction to HVAC Mechanical Theory and Application 5 (4,2,0,0)

This course covers mechanical and electrical safety, basic mechanical math and physics, the refrigeration cycle, system components, enthalpy, and psychrometrics. Labs cover: recovery, evacuation, leak testing, charging, and system measurements.

AC 105B Domestic Refrigeration 2 (1,2,0,0)

The course covers sealed system components, defrost and electrical controls, mechanical servicing of domestic refrigerators, troubleshooting, ice makers, window air conditioners and window air conditioning repair.

AC 106B Residential Gas Heating 5 (4,2,0,0)

Types of gas furnaces, troubleshooting, function of controls, repair of mechanical controls, combustion efficiency tests, piping techniques, proper ventilation and combustion will be covered. Prerequisites: AC 102B, 103B.

AC 108B Recreational Vehicles Refrigerators/Heating and Cooling 2 (1,2,0,0)

This course will deal with all types of recreational vehicle furnaces and air conditioning systems. Proper charging methods of hydrogen ammonia absorption refrigerators will also be covered.

AC 110B Intermediate HVAC Electrical Theory and Application 5 (4,2,0,0)

This course covers intermediate level electrical diagram drawing and interpretation, enthalpy and psychrometrics, and specialized system components for resistance heat HVAC. Labs cover: wiring of various control circuits, and system measurements. Prerequisites: AC 102B, 103B, and MATH 104B or above (except MATH 122 and 123).

AC 111B Heat Pumps 5 (4,2,0,0)

This course covers heat pumps and their operation. It will teach various defrost methods including time temperature, demand, air switch and other defrost controls. Charging methods will be covered which include superheat, weigh-in and dial-a-charge. The course will also include compressor change-out methods and advance wiring. C.O.P., E.E.R., SEER rating and design points of heat pumps are covered. Prerequisite: AC 110B.

AC 112B Air Properties and Air Measurements 3 (3,0,0,0)

Air problems and air measurement are emphasized. Psychrometric properties of air are calculated combining both psychrometrics and air measurement. Psychrometers and various instruments for air measurements are utilized.

AC 114B Heat Load and Duct Design 5 (4,2,0,0)

The course will teach heat gain and loss using the J-Manual and worksheets. Students will be taught to do calculations on microcomputers. Also included in this course are the factors affecting system design and design procedures using Manual-D. Prerequisite: MATH 104B or above (except MATH 122 and 123).

AC 115B Troubleshooting 5 (4,2,0,0)

This course will teach recommended service and diagnostic procedures for air conditioning systems. This will include general troubleshooting procedures for both refrigeration and electrical systems. Prerequisite: AC 111B.

AC 116B Copper Fundamentals 1 (1,0,0,0)

Silver braising, Oxy-Acetylene equipment, use of copper tubing, swagging, flaring, bending, and proper cutting techniques in air conditioning applications will be covered.

AC 119B Professionals in Customer Service 1.5 (1.5,0,0,0)

This course introduces a methodical approach to problem resolution to service professionals (dispatchers, technicians, owners). It is also designed to contain, qualify and correct various problems with good and bad outcomes. This course instructs students to focus on their communication skills prior to using technical expertise. The grading method for this course is pass/fail.

AC 120B Air Conditioning Duct Work Fabrication 3 (2,2,0,0)

This course covers basic duct work fabrication, as it applies to the Air Conditioning industry. Areas covered include cutting, computing size requirements, plenums and straight fittings.

AC 200B Commercial Refrigeration I 5 (4,2,0,0)

An introduction to commercial refrigeration. Deals with system components, mechanical and electrical controls, random and planned defrost, various accessories, application and types of refrigeration systems and troubleshooting basic commercial systems. Prerequisites: AC 110B, and either ENG 107 or COM 115.

AC 201B Automatic Controls 3 (2,2,0,0)

Introduction to fundamentals of air conditioning controls. Electric, pneumatic and electronic components, and applications in air conditioning and refrigeration systems including microprocessors and energy management. Prerequisites: AC 102B, 103B.

AC 202B Commercial Refrigeration II 5 (4,2,0,0)

Follow-up course to AC 200B - Commercial Refrigeration I. Course covers sequence of operation, application, troubleshooting, repair cleaning and preventive maintenance techniques of various types of ice making equipment including flaked, cubed and crushed ice machines.

AC 210B Boiler Operation and Maintenance 3 (2,2,0,0)

Subjects to be covered include operation, safety, water treatment, control devices used with hot water boilers, low pressure boilers and power boiler systems.

AC 211 Transport Refrigeration 2 (1,2,0,0)

This course covers maintenance, diagnosis, and repair of trailer mounted refrigeration systems. Proper refrigerant handling, EPA regulations and certifications are covered and students will be prepared for any required certification processes. Prerequisite: DT 165 or instructor approval.

AC 221B Gas Heat Pump Technology I 5 (4,2,0,0)

The student will learn the basics of gas heat pumps. Included will be an introduction to the various products, controls, and equipment. Basic operational theory and application will be explored as well as an introduction to installations. R-410a, electrical and mechanical safety will also be covered, designed to give the student a good overview of this technology. Prerequisite: AC 111B.

AC 295B Work Experience I 1-16 (0,0,0,15-90)

This course is designed to provide practical experience applying the HVAC (Heating, Ventilation and Air Conditioning) theory and techniques gained in other CSN HVAC courses through on-the-job experience while working alongside experienced HVAC technicians.

Accounting

ACC 105 Taxation for Individuals 3 (3,0,0,0)

Development of the individual taxpayer's taxable income through an analysis of income, exemptions, deductions and credits.

ACC 135B Bookkeeping I 3 (3,0,0,0)

Introduction to the basic principles of bookkeeping and accounting, theory of debit and credit, the bookkeeping cycle, journals, ledgers, bank reconciliations and payroll.

ACC 201 Financial Accounting 3 (3,0,0,0)

Basic accounting techniques with emphasis on the accounting cycle, analysis of financial statements, payables and receivables, plant assets, inventories and internal controls for cash.

ACC 202 Managerial Accounting 3 (3,0,0,0)

Accounting methods and techniques utilized by corporations, cost systems, budgeting, and the utilization of accounting data for planning and control. Prerequisite: ACC 201.

ACC 203 Intermediate Accounting I 3 (3,0,0,0)

Accounting for assets and liabilities, concepts and techniques concerning preparation and analysis of the balance sheet, essentials of interest, annuities and present value. Prerequisite: ACC 202.

ACC 204 Intermediate Accounting II 3 (3,0,0,0)

Accounting for stockholders' equity, statement of cash flows, statement analysis, pensions and leases. Prerequisite: ACC 203.

ACC 205 Cost Accounting 3 (3,0,0,0)

Cost concepts and decision making, break even techniques, budgets and management analysis. Prerequisite: ACC 201.

ACC 210B IRS Computerized Tax Preparation Program 3 (3,0,0,0)

Hands-on experience preparing computerized individual income tax returns utilizing the I.R.S. Electronic Filing System. Prerequisite: ACC 105.

ACC 220 Microcomputer Accounting Systems 3 (3,0,0,0)

Develop skills in the use of computerized accounting. Interact with on-line realistic computerized accounting systems. Primary objective will be to focus on an applications approach using actual business case studies. Prerequisite: ACC 201.

ACC 222B Accounting Using Spreadsheets 3 (3,0,0,0)

Application of spreadsheet functions using the two most popular programs, Excel and Lotus. Techniques covered will be creating and printing a worksheet, working with files, setting up data bases, and enhancing accounting information with the use of graphs and macros. Prerequisite: ACC 201.

ACC 223B Introduction to QuickBooks 3 (3,0,0,0)

Computerized Accounting with QuickBooks is designed to introduce students to the QuickBooks accounting program. The student will receive hands-on training in the use of QuickBooks using fictitious case studies. Prerequisite: ACC 201.

ACC 295B Work Experience I 3 (0,0,0,15)

Cooperative Education course designed to provide the student with on-the-job supervised educationally directed work experience with the accounting program. Student must work a minimum average of 15 hours per week for a total of 225 hours to earn practicum work experience credit. Grade will be given upon verification of employment.

Architectural Design Technology

ADT 100B Introduction to Drafting Theory 3 (2,2,0,0)

An introduction to manual drafting theory as utilized in fields of architecture, interior design and graphic arts. Geometric construction, orthographic projection, elevations and isometric drawings are included. Open lab will be required.

ADT 103B Urban Planning 3 (3,0,0,0)

Introduction to the forces shaping urban development, to include: history and determinants of influence, nature of urban form, comprehensive planning and implementation, zoning, general terms relating to development, State statutes, and local land use controls. Prerequisite: ENG 100, 101, 107, or 113.

ADT 107B Architectural Residential Codes 2 (2,0,0,0)

The main emphasis of this course will be placed on the Residential Building Code. Students will also study portions of the Residential Electrical, Mechanical, Plumbing and Energy Conservation Codes.

ADT 114B History of the Built Environment 3 (3,0,0,0)

This course will discuss the history of architecture and city design in the western and the non-western civilization. The time periods to be covered will be from classical Greek, Hellenistic and Roman, through the Romanesque period, including the events and architecture of non-western civilization happening in the same time frame. The influences these architecture and design philosophies have had on the shaping of civilization will also be discussed.

ADT 201B Introduction to Building Information Modeling 3 (2,2,0,0)

This course introduces students to building information modeling by providing them with the essential tools and concepts for using Autodesk Revit. Students will develop a project from conceptual design to construction documents in a hands-on, scenario-based learning environment.

ADT 202B Intermediate Building Information Modeling 3 (2,2,0,0)

This course covers a wide range of intermediate level topics in Autodesk Revit, continuing to build on the concepts introduced in the Introduction to Revit course. Prerequisite: ADT 201B.

ADT 205B Architectural Environmental Control Systems 3 (3,0,0,0)

This course will help students comprehend the principles of design relating to the creation of habitats that efficiently meet the needs of the intended occupant. Content will include general systems terminology and principles and green building construction. Prerequisites: ADT 107B, GEOG 103.

ADT 210B Residential Structural Technology 3 (2,2,0,0)

This course will help students to apply basic structural principles to problems encountered in the design and construction of residential and light commercial structures not exceeding two stories in height. Prerequisite: EGG 131 or PHYS 151. (Same as CONS 210B.)

ADT 260B Photoshop for Architecture 3 (2,2,0,0)

This course will focus on the architectural specific application of Photoshop as a rendering tool for both hand sketches and CAD drawings using Photoshop, to include: interior and exterior environments. Photoshop is Adobe's flagship image editing software and has numerous uses in the design industry. Prerequisite: CADD 100.

ADT 263B Introduction to Architectural Visualization 3 (2,2,0,0)

This class will explore the simple and powerful combination of using SketchUp to quickly model 3D spaces and the render engine Vray to create photorealistic images for the purpose of effective design communication. Prerequisite: ADT 260B.

ADT 280B Architectural Residential Design 3 (2,2,0,0)

Emphasis will be placed on the conceptual process of designing a residential project. Students will present their final project to a jury of professionals. Prerequisites: ADT 100B, 107B, CONS 120B, AAD 182.

ADT 282B Architectural Residential Design II 3 (2,2,0,0)

A continuation of ADT 280B. Students will develop comprehensive design solutions to challenging residential design briefs. Prerequisite: ADT 280B.

ADT 290B Internship in Architectural Design Technology 1-4 (0,0,0,5-20)

Provide students the unique opportunity to work within selected firms/agencies of the Architectural Design industry, directed by a qualified professional and supervised by the instructor. One credit may be earned for each 5 hours worked per week, to a maximum of 4 credits total. Prerequisite: ADT 201B.

Air Force ROTC

AES 110 The Foundations of the United States Air Force I 1 (1,0,0,0)

A survey course designed to introduce AFROTC cadets and prospective Air Force officers to the Air Force culture. Course describes the heritage and structure of the United States Air Force and the opportunities available to the Air Force corps.

AES 111 AFROTC Leadership Lab I-A 2 (0,4,0,0)

A progression of experiences designed to develop leadership ability and awareness of the Air Force lifestyle with emphasis on: Air Force customs and courtesies; drill and ceremonies, physical fitness, the Air Force officer's environment and culture and opportunities available to commissioned officers. Grades assigned on a pass/fail basis. Corequisite: AES 110 or equivalent.

AES 120 The Foundations of the United States Air Force II 1 (1,0,0,0)

Survey course designed to introduce AFROTC cadets to the leadership aspects of being an Air Force officer and the environment in which the Air Force functions. Course emphasizes the Air Force's core values and other unique characteristics of serving in the United States Air Force. Prerequisite: AES 110 or equivalent.

AES 121 AFROTC Leadership Lab I-B 2 (0,4,0,0)

A progression of experiences designed to develop leadership ability and awareness of the Air Force lifestyle with emphasis on: Air Force customs and courtesies; drill and ceremonies, physical fitness, the Air Force officer's environment and culture and opportunities available to commissioned officers. Grades assigned on a pass/fail basis. Corequisite: AES 120 or equivalent.

AES 230 The Evolution of USAF Air and Space Power I 1 (1,0,0,0)

Survey course designed to trace the development of the U.S. Air Force air and space power through a historical prism. Begins with the study of early flight and concludes with the Korean conflict. Special emphasis is placed on the evolving nature of Air Force capabilities, functions and doctrine.

AES 231 AFROTC Leadership Lab II-A 2 (0,4,0,0)

An in-depth progression of experiences developing leadership ability and awareness of the Air Force lifestyle. Focus is on continued military training related to uniform wear, military customs and courtesies, and military ceremonies. Grades assigned on a pass/fail basis. Corequisite: AES 230 or equivalent.

AES 240 The Evolution of USAF Air and Space Power II 1 (1,0,0,0)

Survey course to trace the development of US Air Force air and space power through a historical prism. The course begins with the study of the Vietnam War and concludes with the second war against Iraq. Emphasis is placed on the evolving nature of Air Force capabilities, functions and doctrine. Prerequisite: AES 230 or equivalent.

AES 241 AFROTC Leadership Lab II-B 2 (0,4,0,0)

An in-depth progression of experiences developing leadership ability and awareness of the Air Force lifestyle. Focus is on continued military training related to uniform wear, military customs and courtesies, and military ceremonies. AES 241 is required for all cadets applying to attend Field Training. Grades assigned on a pass/fail basis. Corequisite: AES 240 or equivalent.

Academic and Life Success

ALS 101 College Success 3 (3,0,0,0)

Learn strategies for mastering academic and life success. Course topics include change, goal setting, money, time/priority management; test preparation, note-taking, memory techniques; relationships, communication, listening, wellness, diversity and personal responsibility.

American Sign Language

AM 145 American Sign Language I 4 (4,0,0,0)

Designed mainly to introduce ASL and to focus on the development of basic conversational skills, emphasizing receptive abilities.

AM 146 American Sign Language II 4 (4,0,0,0)

The course continues to stress the development of basic conversational skills with emphasis on expanding vocabulary and expressive skills. Prerequisite: AM 145.

AM 147 American Sign Language III 4 (4,0,0,0)

This course promotes the shifting from comprehension to production of ASL, to bring one's current ASL fluency to a point of self-generated ASL. Prerequisite: AM 146.

AM 148 American Sign Language IV 4 (4,0,0,0)

This course encourages the student to expand his or her command of discourse in ASL on various everyday topics. Prerequisite: AM 147.

AM 149 American Sign Language V 4 (4,0,0,0)

A course intended to encourage majors in Deaf Studies to further develop their conversational ASL abilities, particularly in the area of self expression. Prerequisite: AM 148.

AM 151 Fingerspelling I 1 (1,0,0,0)

This course is designed to develop basic skills in receptive and expressive fingerspelling. Prerequisite: AM 147.

AM 152 Fingerspelling II 1 (1,0,0,0)

This course is designed to improve receptive and expressive fingerspelling skills to intermediate/advanced levels. Prerequisite: AM 151.

AM 153 Deaf Culture 3 (3,0,0,0)

This course is designed to introduce students to the American Deaf Culture and definitions of culturally linked terms and philosophies. Prerequisite: AM 147.

AM 154 Deaf History 3 (3,0,0,0)

This course is designed to introduce students to the history of deaf people and the sociological, psychological, educational and political forces which have shaped the field of deafness. Prerequisite: AM 147.

AM 155 Structure of American Sign Language 3 (3,0,0,0)

This course acquaints students with the information and research concerning phonetics, morphology, syntax, semantics, neurolinguistics, psycholinguistics, and sociolinguistics of American Sign Language. This class will be conducted in American Sign Language without voice. Prerequisite: AM 147 or instructor approval.

AM 156 A Survey of Deafness 1 (1,0,0,0)

This survey course provides students an overview of deafness including such topics as career options, deaf culture, language, communication modes, adaptive equipment and causes of deafness.

AM 157 ASL/English Translation 3 (3,0,0,0)

This course is an introduction to the process of working between two languages. Students will analyze textual material and translate from the source into the target language with the goal of maintaining semantic accuracy. Prerequisite: AM 155 or instructor approval.

AM 205 Introduction to Interpreting 4 (4,0,0,0)

An introduction and overview of the profession of sign language interpretation, including standards of practice, Code of Ethics for Interpreters, professionalism, business practices and assessment skills. Prerequisites: AM 145-149, 151, 152 or instructor approval.

AM 206 Consecutive Interpreting 4 (2,4,0,0)

This skills development course focuses on the task of interpretation and transliteration skills between American Sign Language, English, and other communication modes used by deaf people using consecutive interpreting strategies. Prerequisites: AM 145-149, 151, 152 or instructor approval.

AM 207 Simultaneous Interpreting 4 (2,4,0,0)

This skills development course focuses on the task of interpretation and transliteration between American Sign Language, English and other communication modes used by deaf people using simultaneous interpreting strategies. Prerequisite: AM 206.

AM 208 Observation/Practicum in Interpreting 3 (1,0,0,8)

This course provides students opportunities to shadow, observe and interact with professional interpreters in a supervised observation/practicum setting. Class discussions will be held in seminar format. Prerequisite: AM 207.

AM 209 Advanced Interpreting 4 (2,4,0,0)

This course continues the development of skills in interpretation and transliteration in order to prepare students for employment. Emphasis is placed on practical application of theory and process of interpreting in class and lab situations. Prerequisite: AM 207.

AM 210 Specialized Interpreting 2 (2,0,0,0)

This course introduces students to areas of interpreter specialization. Each area of specialization will include vocabulary, techniques, practical text to analyze and interpret. Prerequisite: AM 207.

AM 211 Internship in Interpreting 3 (1,0,0,8)

This course provides internship experiences to students in the final semester of the interpreter preparation program. Site visits will be made by the instructor. Prerequisite: AM 210.

Animation

ANIM 237B Fundamentals of 3D Computer Animation 4 (3,3,0,0)

Introduction to the basic concepts of computer animation. Familiarization with software interfaces, screen layout, coordinate system, commands and files manipulation. Introduction to the creation of objects, cameras, lights, and scenes. Basic editing, mapping, and rendering.

ANIM 240B Intermediate 3D Computer Animation 4 (3,3,0,0)

Introduction to the concepts of story boards, hierarchical linkage of objects, editing of objects and sub-objects, animation controls, kinematics and inverse kinematics and animating materials. Prerequisite: ANIM 237B.

ANIM 242B Introduction to 3D Conceptual Designs 4 (3,3,0,0)

An introduction to the 3D Conceptual Designs in the AEC industry, using 3D Studio Viz and AutoCAD. This course will demonstrate various modeling methods used in the Drafting industry of Architecture, Mechanical, Civil, and Electrical/Electronic design. It will also teach how to create 3D Renderings and Animated Assemblies required in the Drafting and Engineering Industries. Prerequisite: ANIM 240B.

ANIM 244B Introduction to 3D Material Applications 4 (3,3,0,0)

The student will use the material editor of the 3D Studio Max program to apply various bitmaps to the 3D geometric models and adjust the lights, camera, and the material mapping coordinates for rendering a photorealistic scene. Prerequisite: ANIM 240B.

ANIM 245B Advanced 3D Computer Animation 4 (3,3,0,0)

This course will introduce special effects. The student will demonstrate the use of particle systems, space warp, volumetric, compositing effects, network rendering and video post output. Prerequisite: ANIM 240B.

ANIM 247B Introduction to 3D Animation Compositing 4 (3,3,0,0)

Introduction to compositing 3D animated scenes, live video, audio, graphic images, and special effects (SFX) using the latest postproduction software (i.e. Combustion, Premier, After Effects, Studio 7, etc.). Prerequisite: ANIM 240B.

ANIM 250B 3D Character Modeling and Animation I 4 (3,3,0,0)

The student will create organic 3D models; people, plants, animals, etc., and apply bones, metaballs, physique, and bipedal footsteps to the geometry doing the animation process. Prerequisite: ANIM 240B.

ANIM 255B 3D Character Modeling and Animation II 4 (3,3,0,0)

The student will place created organic 3D models into a scene and prepare the scenes for postproduction before outputting to a media type, e.g., film or CD ROM.

Prerequisite: ANIM 250B.

Anthropology**ANTH 101 Introduction to Cultural Anthropology 3 (3,0,0,0)**

An in-depth analysis of culture revealed by world ethnography.

ANTH 102 Introduction to Physical Anthropology 3 (3,0,0,0)

Survey of changes in life through time, with emphasis on the primate order of mammals, including the fossil evidence for primate evolution, in particular, human evolution.

ANTH 104 Great Discoveries in Archaeology 3 (3,0,0,0)

Examination of famous archaeological discoveries and contemporary archaeological fieldwork and analysis. Illustrates archaeology's contribution to modern views of the past.

ANTH 105 Introduction to World Archaeology 3 (3,0,0,0)

Development of human society and technology from the earliest traces of culturally patterned behavior to the emergence of civilization in the Old and New Worlds.

ANTH 106 Introduction to Anthropological Linguistics 3 (3,0,0,0)

Introduction to the anthropological study of language in the context of culture. This course also examines the scientific study of phonology, morphology, syntax, and semantics.

ANTH 112 Social Anthropology 3 (3,0,0,0)

An examination of the application of anthropological concepts to contemporary society. The results of studies of non-western, sociocultural systems used in considering alternate solutions to the problems confronting Western man today will be covered.

ANTH 133 Culture and Communication 3 (3,0,0,0)

Introduction to theory, analysis and practice in understanding culture and its impact on communication. Emphasis on the use of cultural awareness and multicultural sensitivity to improve oral and written communication. (Same as COM 133.)

ANTH 201 People and Culture of the World 3 (3,0,0,0)

A study of human societies and their peculiar institutions as seen in the cultures of various peoples around the world.

ANTH 202 Introduction to Archaeology 3 (3,0,0,0)

An examination of the research goals, theoretical foundations, and methods of anthropological archaeology. Examples are drawn from archaeological sites worldwide, with a Great Basin emphasis.

ANTH 203 Special Topics in Anthropology 3 (3,0,0,0)

Intensive survey of major areas of Anthropology. Topics will vary. May be repeated up to six (6) credits. Prerequisite: ANTH 101.

ANTH 204 Art in Cross-Cultural Perspective 3 (3,0,0,0)

An examination of the visual arts within the context of the culture and social system that gave rise to it. The philosophies of art and the relationship between art and ideology, both in contemporary and past societies are examined. Areas covered include Mesoamerica, Native America, Africa, New Guinea, Upper Paleolithic and other ancient high cultures.

ANTH 205 Ethnic Groups in Contemporary Societies 3 (3,0,0,0)

A survey of ethnic relations in the United States and other societies where cultural and "racial" pluralism illustrates problems and processes of social interaction. Prerequisite: ANTH 101 or SOC 101. (Same as SOC 205.)

ANTH 206 African Culture Through Oral History and Storytelling 3 (3,0,0,0)

An exploration of the different life-ways in various societies of Africa and African Diaspora through oral traditions and folklore.

ANTH 207 Sport and Culture 3 (3,0,0,0)

This course looks at the relationship of sport and culture in past and contemporary world cultures. The course uses western and non-western sports to illustrate the nature of this relationship.

ANTH 209 Gender in Cross-Cultural Perspective 3 (3,0,0,0)

An examination of human gender and sexuality through an investigation of cross-cultural similarities and differences.

ANTH 211 Introduction to the Archaeology of North America 3 (3,0,0,0)

Examines the prehistory of North America from the peopling of the continent to European contact. Particular emphasis is on the prehistory of the Great Basin.

ANTH 212 Introduction to North American Indians 3 (3,0,0,0)

Survey of traditional life and modern conditions of American Indians with emphasis on the western United States.

ANTH 214 Introduction to Mesoamerican Prehistory and Archaeology 3 (3,0,0,0)

The study of prehistoric and protohistoric cultures and areas of Mexico and Central America, including the Aztecs and Mayans.

ANTH 215 Introduction to Faith, Witchcraft and Magic 3 (3,0,0,0)

Introduces students to the anthropological study of religion as a human institution. Examines the history, methods, and current status of the field.

ANTH 216 Cultures Through Film 3 (3,0,0,0)

An exploration of societies, cultures and cultural anthropology through film. Ethnographic and documentary films are shown.

ANTH 217 Drums, Culture and New World Rhythmatism 3 (3,0,0,0)

Explore the complex relationships between culture, rhythm, music, and dance, while learning to sing and play hand drums from around the world. This course will compare and contrast the role and meaning of rhythm and music in traditional cultures with the contemporary global renaissance of drum and dance. In addition to lecture, reading, writing and video, expect a hands-on experiential process involving song, poetry, some movement, and lots and lots of drumming.

ANTH 225 Archaeological Field Methods Survey 3 (3,0,0,0)

Introduction to archaeological field problems, survey, and recording. Study of a variety of archaeological locales including historic, prehistoric and rock art sites.

ANTH 291 Practicum: Group Discussion Leader 2 (1,0,0,4)

This course is designed to introduce the student to skills and facilities of instruction in the college classroom. Prerequisite: ANTH 101.

ANTH 299 Capstone Course in Anthropology 1 (1,0,0,0)

Provides theoretical and practical overview of the field of anthropology in relationship to the Anthropology AA degree and emphasis. Prerequisite: Completion of Anthropology AA degree emphasis course of study.

Arabic

ARA 111 First Year Arabic I 4 (4,0,0,0)

This course is intended to teach the alphabet and sound system of Modern Arabic. It will introduce basic conversation in Egyptian Arabic as well as the cultural norms related to these conversations. It will include basic Arabic vocabulary and an introduction to Arabic grammar.

ARA 112 First Year Arabic II 4 (4,0,0,0)

This course is intended for non-native Arabic speakers who wish to study modern Arabic, including listening, speaking, reading, and writing. The course focuses primarily on Modern Standard Arabic but also includes practice with the spoken Arabic of Egypt. Prerequisite: ARA 111 or permission of the department.

ARA 211 Second Year Arabic I 3 (3,0,0,0)

This course is a continuation of Arabic 112, and is intended for non-native Arabic speakers who wish to study modern Arabic, including listening, speaking, reading, and writing. This course focuses primarily on Modern Standard Arabic but also includes practice with the spoken Arabic of Egypt. Prerequisite: ARA 112 or permission of the department.

ARA 212 Second Year Arabic II 3 (3,0,0,0)

This course is a continuation of Arabic 211, Second Year Arabic I, and is intended for non-native Arabic speakers who wish to study modern Arabic, including listening, speaking, reading, and writing. This course focuses primarily on Modern Standard Arabic but also includes practice with the spoken Arabic of Egypt. Prerequisite: ARA 211 or permission of the department.

Art

ART 101 Drawing I 3 (0,6,0,0)

An introductory studio course emphasizing a disciplined foundation in drawing concepts based on visual observations.

ART 102 Drawing II 3 (0,6,0,0)

Further development of the fundamental drawing skills acquired in Art 101. Emphasis on extending visual concepts, exploring alternate materials and developing compositional devices. Study of various applications of life drawing included. Prerequisite: ART 101.

ART 105 Color Theory 3 (0,6,0,0)

An introduction to color interaction, optical phenomena and their creative application.

ART 106 Jewelry I 3 (0,6,0,0)

Introduction to basic fabricating processes, i.e., sawing and soldering of both common and fine metals. From simple jewelry pieces to setting stones or construction of simple non-jewelry pieces. Includes historical evolution of metal work and student research. Emphasis on knowledge and development of manual skills and personal aesthetic sense.

ART 107 Design Fundamentals I (2-D) 3 (0,6,0,0)

A course in art fundamentals designed to develop a visual language. Emphasis on the application of the elements and principles of pictorial structure, point, line, shape, plane, space and color.

ART 108 Design Fundamentals II (3-D) 3 (0,6,0,0)

An introduction to the principles and elements of sculptural process in a variety of media which may include wood, plaster, clay and metal.

ART 124 Introduction to Printmaking 3 (0,6,0,0)

Introduction to printmaking with emphasis on its creative possibilities. One or several of the basic techniques developed: intaglio, lithography, serigraphy, mono-type and relief printmaking. Prerequisite: ART 101.

ART 127 Watercolor I 3 (0,6,0,0)

An introduction to the opaque and transparent watercolor media and the development of techniques and skills in the manipulation of the medium.

ART 135 Photography I 3 (0,6,0,0)

A beginning course which emphasizes a fine arts and aesthetic approach to the medium. Assignments explore ideas in contemporary art while developing technical and dark-room skills.

ART 141 Introduction to Digital Photography 3 (0,6,0,0)

A beginning course in digital photography that emphasizes a fine arts approach. Technical proficiency and individual exploration are stressed.

ART 142 Introduction to Digital Photography II 3 (0,6,0,0)

Intermediate study of operations and techniques in digital photography such as lighting, exposure and print enhancement. Emphasis placed on development of personal body of work. Prerequisite: ART 141 or instructor permission.

ART 160 Art Appreciation 3 (3,0,0,0)

An introduction to the visual arts. Emphasis will be placed upon the acquisition of the tools and the skills necessary to understand and interpret works of art. Traditional art forms, such as painting and sculpture will be considered as well as newer genres such as installation and performance.

ART 201 Life Drawing I 3 (0,6,0,0)

An introduction to the depiction of the human form with studies in anatomy and pictorial organization. Emphasis on technical skills based on observational studies. Prerequisite: ART 102.

ART 202 Life Drawing II 3 (0,6,0,0)

A continuation of studies of the human form. Emphasis on conceptual development using a variety of materials. Prerequisite: ART 201.

ART 206 Jewelry II 3 (0,6,0,0)

Introduction to the basic techniques of lost wax metal casting (centrifuge and vacuum). Includes information about advanced fabricating techniques with emphasis on personal expression and individual artistic growth. Prerequisite: ART 106.

ART 211 Ceramics I 3 (0,6,0,0)

Basic hand-building techniques are explored as means to produce vessel and sculptural forms along with glaze decoration. Cost of clay is in addition to course fee.

ART 212 Ceramics II 3 (0,6,0,0)

Introduction to basic wheel-throwing techniques to produce vessel forms, surface decorations and glaze application. Cost of clay is in addition to course fee.

ART 216 Sculpture I 3 (0,6,0,0)

An introduction to techniques and concepts in contemporary sculpture which will include casting, carving and constructing.

ART 217 Sculpture II 3 (0,6,0,0)

Intermediate study of techniques and concepts in contemporary sculpture. Prerequisite: ART 216 or instructor permission.

ART 219 Beginning Sculpture Foundry 3 (0,6,0,0)

Beginning techniques and concepts of traditional and contemporary cast metal including mold making, casting, tooling and patination. Prerequisite: ART 216 or instructor permission.

ART 223 Beginning Printmaking: Serigraphy 3 (0,6,0,0)

Introduction to the basic techniques of screenprinting with an emphasis on its creative potential. Prerequisite: ART 101 or 107.

ART 225 Intermediate Printmaking 3 (0,6,0,0)

A continuation of ART 124 with emphasis on color theory, print history and the exploration of personal imagery. Studio projects will be based on individual interests with faculty advisement. Both group and individual critiques will be employed. Prerequisite: ART 124.

ART 226 New Technology Printmaking 3 (0,6,0,0)

Introduction to photo, computer and hand-drawn imagery within the traditional printmaking format. Techniques covered will include: intaglio, lithography, and monotype. Prerequisites: ART 101, 124.

ART 231 Painting I 3 (0,6,0,0)

Introduction to the concepts of painting, including color, form, technical skills and knowledge of materials. Emphasis on the development of aesthetic awareness. Projects will be problem-solving assignments. Prerequisite: ART 101.

ART 232 Painting II 3 (0,6,0,0)

A continuation of ART 231 with an emphasis on conceptual development and individual interests. Prerequisites: ART 101, 231.

ART 235 Photography II 3 (0,6,0,0)

Intermediate level course which explores techniques such as Zone System, night photography, large format and alternate darkroom processes. Emphasis on development of personal body of work and exploration of contemporary photography. Includes field trips. Prerequisite: ART 135.

ART 243 Digital Imaging I 3 (0,6,0,0)

An introduction to the concepts and practices of computer imaging and the use of related media with emphasis on creative applications of digital technology. Prerequisite: ART 101 or 107.

ART 244 Digital Imaging II 3 (0,6,0,0)

Advanced application of the concepts and practice of computer imaging and the use of related media with emphasis on creative applications of digital technology. Prerequisite: ART 243.

ART 245 Digital Media I 3 (0,6,0,0)

Exploration of various digital media in the creation of art.

ART 253 Cinema II/The Sound Era 3 (3,0,0,0)

This introductory course identifies creative use of film-making techniques and surveys the major genres of film since the 1930s. Main genres explored include the Western, Crime, Horror, Musical, Science Fiction, War, Comedy, Action-Adventure and Foreign. In-class films, class critiques, field trip.

ART 260 Survey of Art History I 3 (3,0,0,0)

A survey of Western art and architecture from the prehistoric era to the beginning of the Renaissance.

ART 261 Survey of Art History II 3 (3,0,0,0)

A survey of painting, sculpture and architecture in the West from the Renaissance through the modern era.

ART 262 Survey of Asian Art 3 (3,0,0,0)

An introduction to the art and architecture of Asia including India, Tibet, China, Korea, Japan, and Southeast Asia, through an exploration of the major religious and secular artistic traditions from Neolithic to Modern times. Slide lectures, video/film, discussions and museum field trip.

ART 263 Survey of African, Oceanic, and Native American Art 3 (3,0,0,0)

An introduction to the arts and architecture of Tribal Africa, Oceania and Aboriginal Cultures, and Native America. Slide lectures and class discussion. Field trips.

ART 264 Survey of American Art 3 (3,0,0,0)

Survey of the art and architecture of the United States from the colonial period through the late 20th century. Slide lectures, discussions and videos.

ART 265 Introduction to Contemporary Art 3 (3,0,0,0)

Survey of the major art forms and movements since World War II and of the critical and cultural milieu in which they developed.

ART 267 Pre-Columbian Art and Architecture 3 (3,0,0,0)

Studies the art and architecture of the numerous traditions and cultures of South and Meso America and the examination of the effects of European contact and later developments in the ancient Southwest.

ART 270 Women in Art 3 (3,0,0,0)

This course will explore the contributions women have made to Western art from the Middle Ages through the present. Among the topics we shall consider are: works of art produced by women artists and the historical circumstances in which they were produced; how women have been represented by Western artists, both male and female; and the role women have played in Western culture as art patrons and art collectors.

ART 275 Survey of History of Photography 3 (3,0,0,0)

Introduction to the artistic development of photography from early inventions as a technique to its use as a fine art. Considered also is relationship of photography to Modern Art movements and mass media. Slide lectures, discussion and field trips.

ART 278 Art and Photography in 20th Century Mexico 3 (3,0,0,0)

This course examines the contributions made by Mexican artists and photographers to 20th century visual culture. The focus is on the "Mexican Renaissance" of the 1920s and 1930s: in particular, the revival of the fresco tradition and the effect it had on artistic production. Other topics include: the print tradition, easel painting, and the development of Mexican photography. (Same as PHO 278.)

ART 298 Portfolio Emphasis 3 (0,6,0,0)

Participants will develop portfolios, documents and verbal skills necessary for the college transfer or job acquisition in the fine arts field. Class will cover development of professional portfolio, résumé, artists' statement and marketing strategies in art. Twelve (12) hours of Art credits strongly recommended for entry into this course.

Astronomy

AST 101 General Astronomy 3 (3,0,0,0)

An elementary course which considers the solar system, stellar systems and stellar and galactic evolution according to currently accepted concepts. This course designed for non-science majors with little or no background in science or mathematics.

AST 103 Introductory Astronomy: The Solar System 3 (3,0,0,0)

A survey course at the beginning level which discusses the nearby objects of our solar system, the formation and evolution of planetary bodies and the exploration of space. A minimum of mathematics is required, in the tradition of the amateur astronomer. Recommended for non-science majors.

AST 104 Introductory Astronomy: Stars and Galaxies 3 (3,0,0,0)

A survey course at the beginning level which discusses stellar systems and galaxies. Topics include stellar evolution, formation of galaxies and cosmology. A minimum of mathematics is required, in the tradition of the amateur astronomer. Recommended for non-science majors.

AST 105 Introductory Astronomy Laboratory 1 (0,3,0,0)

Course provides practical experience in observational astronomy including telescopic observations and laboratory exercises. AST 105 fulfills the lab science elective for any degree program. Should be taken with or after taking AST 101 or AST 103 or AST 104. Prerequisite: MATH 095 or above.

AST 299B Directed Study 1-3 (0,3-9,0,0)

Covers selected topics and directed student research of interest to students in astronomy. Prerequisite: Instructor approval.

Automotive Technology

AUTO 105B Automotive Maintenance I 4 (1,6,0,0)

Students will learn basic operation of the major automotive systems, safety procedures, tool and equipment usage and using electronic service information while performing lubrication, tire and basic maintenance service procedures. Test-out exam is available through the Transportation Technologies program office.

AUTO 115B Automotive Electricity and Electronics I 4 (1,6,0,0)

This course will introduce the operation of AC and DC electrical circuits, wiring diagrams and the use of Digital Multimeters and diagnosis of circuit malfunctions including battery, starting, charging and accessory systems. Prerequisite: AUTO 105B.

AUTO 117B Advanced Automotive Electronics 4 (1,6,0,0)

Operation, diagnosis and repair of automotive electrical circuits including lighting and convenience accessories, instrument cluster/gauges, supplemental restraint systems, audio, cruise and anti-theft systems. Prerequisite: AUTO 115B.

AUTO 136B Engine Repair 5 (2,6,0,0)

Students will learn to identify engine components and their operation, accurately use precision measuring tools, perform disassembly/assembly and maintenance procedures of engines, cooling systems and lubrication systems. Diagnosis of engine condition, leaks, and abnormal noises are emphasized. Prerequisite: AUTO 105B.

AUTO 145B Automotive Brakes 4 (1,6,0,0)

Facilitate the theory, diagnosis, and service of drum, disc, and anti-lock braking systems, brake component machining, hydraulic component reconditioning, friction and hardware replacement. Prerequisite: AUTO 115B.

AUTO 155B Steering and Suspension 4 (1,6,0,0)

Diagnose and service of steering and suspension components, tire service, balancing, and advanced alignment procedures. Identify components and perform service procedures for electronic steering systems. Prerequisite: AUTO 105B.

AUTO 165B Automotive Heating and Air Conditioning 4 (1,6,0,0)

Service, operation, diagnosis and repair of automotive heating and air conditioning system components, including automatic temperature control systems. All refrigerant types are covered. Emphasis is placed on service and troubleshooting. Prerequisite: AUTO 115B.

AUTO 175B Recreational Vehicle Service Repair 3 (2,2,0,0)

This course provides instruction in the maintenance and repair of the following recreational vehicle components: electrical, refrigeration and water systems, power generators and accessories.

AUTO 177B Recreational Vehicle Service Repair II 4 (1,6,0,0)

This course provides instruction in maintenance and repair of the following recreational vehicle components; air conditioning, heating, LP gas, cooking appliances and leveling systems. Prerequisite: AUTO 175B.

AUTO 185B Introduction to Alternative Fueled Vehicles 3 (3,0,0,0)

This course will familiarize students with the alternative fuels movement and the laws, regulations and programs affecting alternative fuels. The design and operation of alternative gaseous, liquid, bio-fuels, hydrogen, hybrid, electric vehicles and emerging technologies will be covered. Prerequisite: AUTO 117B or instructor approval.

AUTO 205B Manual Drivetrain and Axles 4 (1,6,0,0)

Operation, diagnosis, maintenance, repair of manual transmissions, clutch assemblies, differentials, drivelines, axles, and manual transaxles. Prerequisite: AUTO 105B.

AUTO 216B Automatic Transmissions 5 (2,6,0,0)

Operation, diagnosis, maintenance, and repair of automatic transmissions including rear wheel drive, front wheel drive, and electronically controlled transmissions and transaxles. Prerequisite: AUTO 117B.

AUTO 225B Engine Performance I/ Fuel and Ignition 4 (1,6,0,0)

Theory, function, service and analysis of engine related sub-systems including ignition, fuel, starting, and charging systems. Emphasis is placed on diagnosis and operation of electronic engine control management systems. Prerequisites: AUTO 117B, and 136B.

AUTO 227B Engine Performance II/ Emission Control 4 (1,6,0,0)

Study of automotive emission control systems including an overview of State of Nevada license requirements. Utilization of current gas analyzers, diagnosis of emission test failures. Prerequisite: AUTO 225B.

AUTO 235B Engine Performance III/ Diagnostics 4 (1,6,0,0)

Study of advanced level diagnostic test procedures and the equipment used to analyze OBD-II emission and driveability concerns. Use of Digital Storage Oscilloscopes, current ramping, scan tool analysis and 4 and 5 gas analyzers is mastered. Prerequisite: AUTO 227B.

AUTO 240B Nevada 1G Emission Inspection Preparation 2 (2,0,0,0)

This course meets the initial State of Nevada training requirements for those individuals wishing to become a Nevada 1G emission inspector.

AUTO 242B Nevada 2G Technician Preparation 3 (3,0,0,0)

Course reviews compression, ignition, electrical, air fuel delivery, and emission control devices modules. Specifically designed to prepare experienced technicians to successfully complete the certification examination.

AUTO 244B Nevada 2G Re-Certification 2 (2,0,0,0)

This is a state approved course that qualifies under both the 12-hour and the 20-hour training requirements for the State of Nevada 2G repair technician re-certification. Under the current state guidelines, students completing this course and receiving a grade of 80% or higher on the final exam qualify for Nevada Class 2G Re-certification

AUTO 245B Power Train Removal and Replacement 4 (1,6,0,0)

Students will complete removal and installation of major automotive components including the engine assembly, transmission/transaxle assembly, differential and transfer case. Prerequisite: AUTO 136B.

AUTO 276B Nevada Class II Emissions, Compression and Ignition 2 (2,0,0,0)

Provides experienced technicians with a review of compression basics, ignition basics, ignition timing theory, diagnostic equipment use, oscilloscope waveform patterns and repair manual use.

AUTO 277B Nevada Class 2G Emissions, Electrical 2 (2,0,0,0)

Meets State of Nevada training requirements for the electrical module on the class 2G repair certification examination. State of Nevada approved.

AUTO 278B Nevada Class 2G Emissions, Air/Fuel Delivery 2 (2,0,0,0)

Meets State of Nevada training requirements for the Air/Fuel Delivery and Computer Engine Controls modules on the class 2G repair certification examination. State of Nevada approved.

AUTO 279B Nevada Class 2G Emissions, Emission Control Devices 2 (2,0,0,0)

Meets State of Nevada training requirements for the Emission Control Devices Module. State of Nevada approved.

AUTO 285B Hybrid Vehicle Service Techniques 4 (1,6,0,0)

This course will cover safety procedures, design, operation, diagnosis and repair of all classification of hybrid electric vehicles. Each student must possess legal Class "O" HV gloves and liners to attend this class. Prerequisite: AUTO 185B.

AUTO 291B, 292B, 293B, 294B Work Experience I, II, III, IV 1-4 (0,0,0,5-20)

Cooperative education courses, designed to provide the student with on-the-job supervised and educationally directed work experience. Each course except AUTO 294B will have a prerequisite of successful completion of the preceding Work Experience course. One credit may be earned for each 5 hours worked per week during the semester up to a maximum of 4 credits per semester, not to exceed 16 credits total. Prerequisite: Instructor approval.

Aviation

AV 100B Aviation Orientation 3 (3,0,0,0)

This course will introduce students to the history and development of flight, basic aircraft principles, the aviation industry, and career opportunities within the industry.

AV 105B Airport Operations 3 (3,0,0,0)

An introduction to the principles of airport operations. Topics include management functions, airport classification, organizational structures, flight operations, maintenance operations and their relationship with commercial airlines, corporate flight operations, air cargo and general aviation. Pertinent Federal Aviation Regulations governing airport operations will be emphasized.

AV 107B Airline Flight Operations 3 (3,0,0,0)

An introduction to the operational aspects of airline flight operations. Topics include management functions, organizational structure and personnel requirements with regard to airlines, commuter, air-taxi and instructional flight operations. The complex area of operational techniques utilized by airlines, and business strategies airlines face today will be discussed. Pertinent Federal Aviation Regulations governing airline operations will be emphasized.

AV 110B Private Pilot Ground School 4 (4,0,0,0)

A study of aviation fundamentals including principles of flight, aircraft and engine operations, weather, navigation and radio communication as required by FAA (Federal Aviation Administration) regulations. This course will prepare the student to take the FAA Private Pilot Airplane Certificate Knowledge exam.

AV 111B Private Pilot Certification Lab 3 (0,6,0,0)

Students will begin flight training with an FAA (Federal Aviation Administration) Certified Flight Instructor. Training will include all skills necessary to pass the FAA Private Pilot Airplane Certificate Practical exam. Corequisite: AV 110B.

AV 112B Human Factors and Safety 3 (3,0,0,0)

This course will study the effects of human factors on pilot performance and safety including education and training, the aviation environment and pilot mental and physical condition.

AV 114B Advanced Navigation and Flight Planning 3 (2,2,0,0)

Flight navigation concepts are mastered through application of instruments and navigational aids considering aircraft performance, navigation resources, weather components, and flight planning and operating limitations for aircraft. Prerequisite: AV 110B.

AV 115B Aviation Meteorology 3 (3,0,0,0)

This course deals with atmospheric conditions and the effect on aeronautical applications. Weather development patterns and observations from the pilot's point of view will be emphasized.

AV 210B Instrument Ground School 4 (4,0,0,0)

Aspects of instruction will include the aeronautical knowledge areas as determined by the Federal Aviation Administration for the Instrument Rating – Airplane. This course will prepare eligible students to take the FAA Instrument Rating – Airplane Knowledge Exam. Course may be taken as an IFR refresher or to enhance knowledge of IFR flight operations. Prerequisite: AV 110B.

AV 212B Instrument Certification Lab 3 (0,6,0,0)

Students will begin flight training with an FAA Certified Flight Instructor – Instrument. Training will include all skills necessary to pass the FAA Instrument Airplane Practical Exam. Prerequisite: AV 111B.

AV 214B Aerodynamics 3 (3,0,0,0)

Study of basic aerodynamic theory. Covers wing design and theory, lift analysis and drag criteria, and basic performance criteria calculations. The effects of low and high speed flight configurations are examined. Prerequisite: AV 110B.

AV 215B Crew Resource Management 3 (3,0,0,0)

This course will cover the common concepts and application of Crew Resource Management (CRM) as it applies to professional pilots, general aviation pilots, cabin crews, maintenance personnel, aircraft dispatchers, and air traffic controllers will be studied, emphasizing the human interface and accompanying interpersonal activities that involve decisions required to operate a flight safely. Topics such as risk assessment, management, error prevention and mitigation, and automation issues will be studied, using case studies, accident analysis and practical application exercises.

AV 220B Air Transportation 3 (3,0,0,0)

This class surveys the regulations of the aviation industry at the state, federal, and international levels. Historical events and how they impact current and past legislation will be studied. Students will also investigate the impact of legislation and treaties on the aviation industry, such as deregulation, international alliances and agreements.

AV 240B Advanced Aircraft Systems 3 (3,0,0,0)

Course covers the different types of commercial aircraft, and their various operational, instrumentation, electrical, electronic, fuel, and mechanical systems. The course will also cover principles of operations, and commercial aircraft structure and avionics. Mathematical calculations for determining large aircraft weight and balance will also be presented. Prerequisite: AV 110B.

AV 250B Commercial Pilot Ground School 4 (4,0,0,0)

This course prepares students to take the FAA Commercial Pilot Knowledge Exam. Aspects of instruction will include the aeronautical knowledge areas as determined by the Federal Aviation Administration for the Commercial Pilot Certificate. Prerequisite: AV 110B.

AV 251B Commercial Pilot Certification Lab 3 (0,6,0,0)

Students will begin flight training with an FAA (Federal Aviation Administration) Certified Flight Instructor – Advanced. Training will include all practical skills necessary for an FAA Commercial Pilot Certificate. Prerequisite: AV 111B.

Building Inspection

BI 101B Introduction to Building Codes 4 (4,0,0,0)

Introduction to International Building Code for students in fields where a basic knowledge of code requirements are necessary. Course is oriented toward IBC certification preparation.

BI 107B Introduction to the Energy Conservation Code 1 (1,0,0,0)

This course is for students needing a basic knowledge for energy conservation. Course will include: R-value for ceiling, wall, floor and door efficiency, U-factor for window efficiency, HVAC efficiency, water conservation efficiency and green building construction.

Biology

BIOL 095 Basic Biology 3 (3,0,0,0)

An introduction to the principles of math, chemistry, cell biology, energetics, and molecular genetics designed to prepare students for college freshman biology. The application of study skills to biology courses will also be emphasized. This course is non-transferable.

BIOL 101 Biology for Non-Majors 4 (3,3,0,0)

An introduction to biology with emphasis on human concerns. Topics include aspects of organism structure, function, ecology, and evolution which provide a biological perspective for issues facing modern society. Intended to satisfy the lab science general education requirement.

BIOL 103 Biology Laboratory 1 (0,3,0,0)

Entry by departmental authorization only.

BIOL 112 Introduction to Animal Behavior 3 (3,0,0,0)

Introduction to invertebrate and vertebrate animal behavior, its description, role, genetic and evolutionary basis, and methods of study. Designed as a general education, non-majors course.

BIOL 113 Life in the Oceans 3 (3,0,0,0)

An introduction to the environment and inhabitants of the sea.

BIOL 116 Natural History 3 (3,0,0,0)

This course explores the ways living organisms survive in nature and demonstrates how each organism illustrates the principles of ecology and evolution.

BIOL 120 Plants and People 3 (3,0,0,0)

An introduction for non-biology majors to the social, cultural, and economic role of useful and harmful plants and plant products in modern society. Consideration is given to the origin, history and human value of selected plants, especially those used for food, medicine and industrial raw materials, or in religious rites.

BIOL 121 Human Nutrition 3 (3,0,0,0)

Description of the nature and role of carbohydrates, lipids, proteins, water, vitamins and minerals in the human body. Energy relationships and various controversies in nutrition are examined, as well as relationships between nutrition, health and disease.

BIOL 122 Desert Plants 3 (2,3,0,0)

A study of the typical desert plant community types in the United States and the identification of their more common species. Explores adaptations to aridity and the nature, origin and occurrence of arid environments.

BIOL 189 Fundamentals of Life Science 4 (3,3,0,0)

Survey of contemporary biology topics including biochemistry, cell structure and function, cellular metabolism, physiology, and genetics. For Health Science majors who require biology as part of their professional career preparation.

BIOL 196 Principles of Modern Biology I 4 (3,3,0,0)

A study of the basic characteristics of living systems including the chemical and physical structure of cells, classification of living organisms and principles of genetics, ecology and evolution. This course is designed for science, biological science and preprofessional majors.

BIOL 197 Principles of Modern Biology II 4 (3,3,0,0)

A survey of major groups of organisms presented in an evolutionary context, including natural selection, biodiversity, structure and function, reproduction, physiology, and ecology. Prerequisite: BIOL 196.

BIOL 202 General Botany 4 (3,3,0,0)

An introduction to the development, anatomy, physiology, diversity and evolutionary relationships of the major plant groups. Prerequisite: BIOL 196.

BIOL 208 Introduction to Human Genetics 3 (3,0,0,0)

Non-majors, general education course covering hereditary principles applied to human inheritance and their implications for human affairs. Study of selected examples of human traits. Prerequisite: BIOL 101 or higher.

BIOL 211 Introduction to Field Biology 4 (3,3,0,0)

An introduction to field safety, navigation, species diagnosis, data collection, survey techniques, and regulations associated with field biology. Outdoor field work required. Prerequisite: BIOL 197.

BIOL 214 Molecular Processes 3 (3,0,0,0)

An introduction to concepts of DNA replication, transcription, translation, the control of gene expression, and DNA recombinant technologies. Will also include comprehensive study of both prokaryotic and eukaryotic nuclear structure and cell protein structure/function. Prerequisites: BIOL 196.

BIOL 220 Introduction to Ecological Principles 3 (3,0,0,0)

An introduction to the major principles and underlying processes of organismal, population, community and ecosystem ecology. (Same as ENV 220.)

BIOL 223 Human Anatomy and Physiology I 4 (3,3,0,0)

A detailed study of the anatomy and physiology of human cells and tissues and the integumentary, skeletal, muscular and nervous systems. Designed for allied health majors. Prerequisite: Grade of "C" or better in BIOL 189.

BIOL 224 Human Anatomy and Physiology II 4 (3,3,0,0)

A detailed study of the anatomy and physiology of the human body. Topics include the circulatory, respiratory, digestive, urinary, endocrine and reproductive systems. This course is designed for allied health majors. Prerequisite: BIOL 223.

BIOL 251 General Microbiology 4 (3,3,0,0)

Survey of the distribution, morphology and physiology of microorganisms in addition to skills in aseptic procedures, isolation and identification. Topics in microbial genetics, human disease and immunology are also explored. Recommended for all allied health and preprofessional majors. Prerequisite: Grade of "C" or better in BIOL 189.

BIOL 251H General Microbiology - Honors 4 (3,3,0,0)

Topics include prokaryotic cell structure, function, metabolism, genetics, phylogenetic classification, diversity, relation to plants/animals/humans and pathogenesis, ecology and evolution, environmental and applied microbiology, agents, and eukaryotic microorganisms. Emphasis is on bacterial metabolic strategies to include aerobic and anaerobic metabolism, chemolithotrophy, phototrophy, and role in biogeochemical cycles, ecological diversity, genetics and phylogeny/evolution, and human-microbe interactions and infectious disease. Three hours lecture and three hours laboratory. Prerequisite: Grade of "C" or better in BIOL 196.

BIOL 299 Selected Topics in Biology 1-4 (0,3-12,0,0)

Covers selected topics of interest to students in the biological sciences. Prerequisite: Instructor approval.

Construction Technology**BTE 116B Electrical Theory and Applications 1 3 (2,3,0,0)**

Items covered in this course will include: electrical fundamentals, basic electricity, electrical circuits, electrical systems and protection, alternating current, motors, generators, transformers, grounding and bonding. The OSHA 10-hour construction standard card is required for this course. Corequisites: CONS 105B, 120B.

BTE 120B Electrical Theory and Applications 2 3 (2,3,0,0)

Items covered in this course will include: introduction to the National Electrical Code, requirements for electrical installations, wiring and protection devices, wiring methods and materials and equipment for electrical use. Corequisite: MATH 116. Prerequisite: BTE 116B.

BTE 130B Electrical Theory and Applications 3 3 (2,3,0,0)

Items covered in this course will include: special electrical occupancies, special electrical equipment, special electrical conditions and communications. Prerequisite: BTE 116B.

BTE 210B Electrical Theory and Applications 4 3 (2,3,0,0)

Items covered in this course will include: basic electrical theory, electrical calculations, advanced electrical calculations and motor control basics. Prerequisites: BTE 120B, 130B, MATH 116.

BTFS 110B Fire Sprinkler Theory and Applications 1 3 (2,3,0,0)

Items covered in this course will include: introduction to fire sprinkler components and systems, underground piping, general purpose valves, standard spray fire sprinklers, wet fire sprinkler systems and dry pipe fire sprinkler systems. Prerequisite: BTP 115B.

BTFS 210B Fire Sprinkler Theory and Applications 2 4 (3,3,0,0)

Items covered in this course will include: deluge and preaction systems, standpipes, water supplies, fire pumps, application-specific sprinklers, inspection, testing and maintenance, special extinguishing systems, procedures and documents. Prerequisite: BTFS 110B.

BTLV 110B Low-Voltage Theory and Applications 1 3 (3,0,0,0)

Items covered in this course will include: electrical fundamentals, basic electricity, electrical circuits, electrical systems and protection, alternating current, motors, generators, transformers, grounding and bonding. The OSHA 10-hour construction standard card is required for this course. Corequisites: CONS 105B, 120B.

BTLV 120B Low-Voltage Theory and Applications 2 4 (3,3,0,0)

Items covered in this course will include: DC circuit, AC circuit, switching devices, timers, semiconductors, integrated circuits, test equipment, cable selection, wire and cable termination and power quality and grounding. Corequisite: MATH 116. Prerequisite: BTLV 110B.

BTLV 130B Low-Voltage Theory and Applications 3 4 (3,3,0,0)

Items covered in this course will include: networks, fiber optics, wireless communication, rack assembly, system commissioning, maintenance, repair and fundamentals of leadership. Prerequisite: BTLV 120B.

BTLV 210B Low-Voltage Theory and Applications 4 5 (4,2,0,0)

Items covered in this course will include: fire alarm systems, intrusion detection systems, audio systems, nurse call and signaling systems, CCTV systems, broadband systems, access control systems, systems integration, media management systems and telecommunications systems. Prerequisite: BTLV 130B.

BTP 101B Building Trades Plumbing - Level I 3 (2,3,0,0)

Items covered in this course will include: plumbing history, hand tools, piping materials, safety rules, mathematics, measuring tapes, folding rules, scale rulers, sewage disposal, introduction to gasses and pressure pipe and fittings.

BTP 102B Building Trades Plumbing - Level II 3 (2,3,0,0)

Items covered in this course will include: mathematics (percent and decimals), job safety (OSHA), typical plumbing fixtures, fittings and valves and introduction to blueprint reading and drawings. Prerequisite: BTP 101B.

BTP 103B Building Trades Plumbing - Level III 3 (2,3,0,0)

Items covered in this course will include: water distribution systems, mathematics, offsets and formulas and drain, waste and vent piping systems. Prerequisite: BTP 102B.

BTP 104B Building Trades Plumbing - Level IV 3 (2,3,0,0)

Items covered in this course will include: basic welding, rigging and hoisting, scheduling rough-in sheets and advance blueprint reading and drawings. Prerequisite: BTP 103B.

BTP 105B Building Trades Plumbing - Level V 3 (2,3,0,0)

Items covered in this course will include: residential and commercial plumbing fixtures and appliances, residential and commercial plumbing fixture fittings and trim, residential and commercial rough and finish plumbing installations, National Fuel Gas Code, mathematics, local gas codes and inspections and testing. Prerequisite: BTP 104B.

BTP 106B Building Trades Plumbing - Level VI 3 (2,3,0,0)

Items covered in this course will include: storm drainage, sizing storm drains, piping expansion, energy and temperature control, water heaters, water treatment, basic electricity, electrical safety and blueprint reading. Prerequisite: BTP 105B.

BTP 107B Building Trades Plumbing - Level VII 3 (2,3,0,0)

Items covered in this course will include: repair service and sizing of sanitary drainage, venting systems, storm drainage potable water systems, gas piping, indirect waster systems (I, II and III), interceptors and backwater valves and protection of water supply, air gaps, vacuum breakers and heating systems. Prerequisite: BTP 106B.

BTP 108B Building Trades Plumbing - Level VIII 3 (2,3,0,0)

Items covered in this course will include: hydraulic theory, pump theory, types, installation and maintenance, isometric drawings and plumbing code review. Prerequisite: BTP 107B.

BTP 115B Plumbing Theory and Applications 1 3 (2,3,0,0)

Items covered in this course will include: plumbing history, plumbing tools, piping materials, fixtures and faucets, drains, waste and vents (DWV) systems and water distribution systems. The OSHA 10-hour construction standard card is required for this course. Corequisites: CONS 105B, 120B.

BTP 120B Plumbing Theory and Applications 2 3 (2,3,0,0)

Items covered in this course will include: hangers, supports, structural penetrations, fire stopping, installing and testing DWV piping and water supply piping, drains, fixtures, valves, faucets, water heaters and fuel gas systems. Corequisite: MATH 116. Prerequisite: BTP 115B.

BTP 130B Plumbing Theory and Applications 3 3 (2,3,0,0)

Items covered in this course will include: sizing water supply piping, potable water treatment, back flow preventers, various types of venting, sizing DWV and storm systems, sewage pumps and sump pumps, corrosive resistant waste piping and compressed air. Prerequisite: BTP 120B.

BTP 210B Plumbing Theory and Applications 4 3 (2,3,0,0)

Items covered in this course will include: leadership skills, water pressure and recirculation systems, indirect and special waste, hydronic and solar heating systems, private water well systems, private waste disposal systems, swimming pools and spas. Prerequisite: BTP 130B.

BTPV 101B Photovoltaic Fundamentals 4 (3,3,0,0)

This course will give students a fundamental knowledge of Photovoltaic (PV) systems, to include: PV markets and applications, safety, basic electrical, solar energy fundamentals, PV module fundamentals, system components, PV system sizing principles, PV system, electrical and mechanical design, performance analysis and maintenance and troubleshooting. The OSHA 10-hour construction standard card is required for this course. Prerequisite: BTE 116B or Program Director permission.

BTPV 102B Photovoltaic Design and Sales 4 (3,3,0,0)

Items covered in this course will include: examining customers current electrical usage, surveying site roof condition, orientation of the roof, potential shading issues, placement of electrical equipment, solar conditions and estimating basic system design for sizing of PV systems. Prerequisite: BTPV 101B or Program Director permission.

BTPV 201B Photovoltaic Onsite Training 4 (2,4,0,0)

This course will provide the students the opportunity to work in the photovoltaic industry, supervised by a qualified professional and directed by the instructor. Prerequisite: BTPV 102B or Program Director permission.

BTW 101B Basic Weatherization 4 (3,3,0,0)

This course will focus on demonstration and hands-on application of weather stripping, insulation, ventilation, glazing, caulking, tools, safety, duct work solutions, air sealing measures, accessing attics and weatherization tactics, including construction technology and lecture and lab exercises. The OSHA 10-hour construction standard card is required for this course. Prerequisite: CONS 120B or Program Director permission.

BTW 103B Blower Door and Combustion Appliance Safety 2 (2,0,0,0)

Items covered in this course will include: procedures to determine if an appliance drafts properly, correct use of digital monometer, draft gauges and chemical smoke and techniques for resolving pressure problems. This course prepares students to accurately identify existing problems and predict if house tightening or duct repair will create new problems or make existing problems worse. Prerequisites: BTW 101B, MATH 116.

BTW 105B Lead and Mold Safety 2 (1,3,0,0)

Items covered in this course will include: methods, techniques, personal protection, engineering controls and proper clean-up procedures while being exposed to the hazards of mold and lead base paint. This course will prepare students for the EPA certification as a Certified Renovator.

BTW 201B Building Performance 4 (3,3,0,0)

This course is designed to provide the knowledge and hands-on experience necessary to prepare professionals conducting weatherization assessments and inspections and will prepare students for the Building Performance Institute (BPI) energy auditor's exam. Prerequisite: BTW 103B.

Business Management

BUS 101 Introduction to Business 3 (3,0,0,0)

Designed to build a business foundation and to give students a broad background of modern business principles. Course will introduce students to the business profession by incorporating and integrating business knowledge and information across departmental curriculum lines to enhance the overall comprehension of the business world. Class projects are assigned to promote team work among students to use their own capabilities in utilizing all educational aspects.

BUS 102B Entrepreneurship and Innovation 3 (3,0,0,0)

Practical overview of business start up, planning, preparation, and risk assessment. Concentration on business plan formulation including acquiring financing, personnel selection, sales and marketing.

BUS 106B Business English 3 (3,0,0,0)

Utilizes previous English language experience to train students in the basic skills of business communication in both oral and written form. Excellent foundation for Business Letters/Reports. Prerequisite: ENG 100 or 101 with a grade of "C" or better.

BUS 107 Business Speech Communication 3 (3,0,0,0)

Designed to provide students with the opportunity to develop speaking and listening skills necessary for successful on-the-job communications. Emphasizes interpersonal and organizational communications such as interviewing, small group dynamics and oral presentations.

BUS 108 Business Letters and Reports 3 (3,0,0,0)

Designed to develop conceptual skills in all types of written and oral business communications, furnish practical applications of these skills, and acquaint the student with tools and techniques required to communicate in the real world of business. Prerequisite: ENG 100 or 101 with a grade of "C" or better.

BUS 109B Business Mathematics 3 (3,0,0,0)

Fundamental mathematical processes for the business person and the consumer are reviewed. Discounts, commissions, depreciation, overhead and interest rates are studied.

BUS 271 Introduction to Employment Law 3 (3,0,0,0)

The study of federal and state labor law and employment law and how it impacts employers, employees and the American workforce.

BUS 272 Legal Environment 3 (3,0,0,0)

Nature and function of law, legal systems, constitutional law, administrative law, antitrust, consumer protection, torts and product liability.

BUS 273 Business Law I 3 (3,0,0,0)

A study of the law as it applies to contract sales and commercial paper.

BUS 274 Business Law II 3 (3,0,0,0)

A study of law as it applies to secured transactions, agency, employment, partnerships, corporations and property.

BUS 275B Fundamentals of International Business 3 (3,0,0,0)

This course will introduce the student to the exciting world of International Business. It will examine the following: direct focus on the development of management skills in handling problems of multinational business; analysis of problems stemming from the movement of goods, services, human resources, technology, finance, and ownership across national boundaries. Prerequisite: BUS 101.

BUS 280B Legal Aspects of International Business 1-3 (1-3,0,0,0)

An introductory overview of International Law divided into three week topical sections of related business and legal aspects designed to emphasize international imports and exports, treaties and remedies. The student may select all or one of the sections; one credit per section.

BUS 284B Internship in International Business 3 (3,0,0,0)

Students in this program will work with experienced business people to assist them as well as to learn about international activities.

Computer Aided Drafting and Design

CADD 100 Introduction to Computer Aided Drafting 3 (2,3,0,0)

This is a continuation of Drafting Fundamentals. The student will be introduced to the basic operation of a CADD workstation using AutoCAD software in a Microsoft Windows environment to produce two-dimensional design drawings. Students should be knowledgeable in the windows operating system.

CADD 105 Intermediate Computer Aided Drafting 3-4 (2,2,0,0)

This course is a continuation of CADD 100, introducing the student to the automated features of a CADD workstation, using industry standard CADD software to produce two-dimensional design drawings. Additional lab hours are required. Prerequisite: CADD 100.

CADD 210B CADD Project 3-4 (2,4,0,0)

Project application in a specific discipline. Experience in creating construction documents for construction or manufacturing using a computer-aided drafting workstation. Prerequisite: CADD 105.

CADD 245 Solid Modeling and Parametric Design 3 (2,3,0,0)

Provides training and instruction in using parametric solid modeling software to create solid model parts, assemblies and working drawings. SolidWorks software will be used for this class.

CADD 250 CAD Systems Management 3-4 (3,2,0,0)

Management of computer aided design and drafting workstations. Hardware and software selection, backup procedures, office standards, security, latest CADD technology and office issues will be covered. Prerequisite: CADD 105.

Counseling and Guidance Personnel Services

CAPS 123 Career Development 1-3 (1-3,0,0,0)

A beginning course in life and career planning. Offered to assist participant to make informed occupational choices. Explore abilities, interests, values, aptitudes and occupational needs to assist in life planning.

CAPS 125B Job Search Techniques 1-3 (1-3,0,0,0)

This course will present techniques for use in the job hunting process. Résumé writing, research strategies, skills identification plus practice interview techniques will be utilized. May be repeated 3 times.

CAPS 126B Parenting Skills 1-3 (1-3,0,0,0)

This course meets the need of CSN students who are single parents, blended families and many times for local and federal requirements in divorce mediation. May be repeated up to a maximum of 3 credits.

CAPS 127 College Success for Hispanic Leaders 2 (2,0,0,0)

The goal of this course is to close the gap between the college completion rates of Hispanics compared to non-Hispanics. Problems unique to Hispanic student achievement will be covered including study skills techniques, short and long term college planning, self-discovery and development of cross-cultural competency in leadership style.

CAPS 128 Foundations of Success for International Students 1 (1,0,0,0)

Foundations of Success for International Students is designed to assist students with F-1 visas to overcome the difficulties often experienced with achieving academic success in an unfamiliar environment. Particular attention will be paid to achieving academic success in an unfamiliar environment, how to understand the complex relationship between academics and regulatory issues, and techniques for successfully managing cultural adjustments issues.

CAPS 129B Assertiveness Techniques 1-3 (1-3,0,0,0)

This class will explain the difference between passive, aggressive and assertive actions and help the student to gain self-esteem and confidence when communicating with others. May be repeated up to a maximum of 3 credits.

CAPS 130 Stress Management Techniques 1-3 (1-3,0,0,0)

Surveys personal lifestyles to identify areas of handling stress and tension that occurs in daily life. Techniques will be taught that will help to cope with anxiety producing situations. (May be repeated up to a maximum of 3 credits.)

Civil Engineering**CEE 241 Statics 3 (3,0,0,0)**

Engineering analysis of concentrated and distributed force systems at equilibrium; analysis of structures, beams and cables, friction, virtual work, fluid statics, shear and moment diagrams. Prerequisites: PHYS 180, MATH 182.

Computer Forensics**CF 117B Computer Forensics 3 (3,0,0,0)**

This course introduces the student to the preservation, identification, extraction, documentation and interpretation of crime related computer data. This course will include both lecture and demonstration of investigative techniques. Student should have basic computer knowledge.

CF 118B Internet Forensics 3 (3,0,0,0)

This course introduces the student to network intrusion analysis. It will cover DNS, ICMP, and fragmentation intrusion techniques and the use of TCP dump and Snort in intrusion detection and prevention. Students should have basic networking knowledge.

CF 119B Introduction to Electronic Crime for Law Enforcement 3 (3,0,0,0)

This course is an introduction to the investigation of high-tech crime. It will present the tools and methods used by criminals in identity theft, financial crimes, drug trafficking, crimes against children, hacking, terrorism and other electronic crimes. It will also include high-tech intelligence gathering methods and legal considerations, including ECPA, pen/trap orders, CALEA, and Title III wire taps.

CF 124B Digital Crime Investigation 3 (3,0,0,0)

Digital evidence plays a role in a wide range of crimes. The purpose of this course is to educate students about digital evidence and computer crime. It explains how computers are used in crimes, how they can be used as a source of evidence, relevant legal issues, deductive criminal profiling, criminal motivations, and investigative techniques.

CF 217B Advanced Computer Forensics 3 (3,0,0,0)

This course builds upon the skills learned in Computer Forensics. It includes lecture on advanced computer forensics topics and demonstration and practice in using computer forensics tools to analyze and reconstruct evidentiary data. Prerequisite: CF 117B.

Chemistry**CHEM 103 Preparatory Chemistry 3 (3,0,0,0)**

Serves as a preparation for CHEM 121. Introduces general principles and terminology in chemistry to students with poor chemistry backgrounds. Exercises aimed at developing problem solving skills. Students should have taken or have concurrent enrollment in MATH 126 or higher to prepare for General Chemistry I. Prerequisite: MATH 096 or 124 or higher.

CHEM 105 Chemistry, Man and Society 3 (3,0,0,0)

A survey of basic ideas in chemistry for non-science majors. Explores chemistry at work in everyday life. Investigates structure and change in the real world.

CHEM 106 Beginning Chemistry Laboratory 1 (0,3,0,0)

Laboratory exercises designed to illustrate material discussed in CHEM 105. May be used in partial fulfillment of the General Education Core requirement. Prerequisite: CHEM 105 (or concurrent enrollment in CHEM 105).

CHEM 107 Food Chemistry 4 (3,3,0,0)

An introduction to composition of food including water, nutrients (carbohydrates, proteins, fats), food additives, flavoring and the changes they undergo during processing and storage. Using concepts of the scientific method, students will also examine the chemistry of minerals, vitamins and food coloring and explore the interaction of these items in the human body. This course is designed for non-science majors with little or no background in chemistry.

CHEM 110 Chemistry for Health Sciences I 4 (3,3,0,0)

Survey of general chemistry designed for Allied Health majors and non-science majors. Emphasis on the foundation needed for the study of organic and biochemistry. Prerequisite: MATH 120 or 124 or above.

CHEM 111 Chemistry for Health Sciences II 4 (3,3,0,0)

Survey of organic and biochemistry designed for Allied Health majors, and non-science majors. Application of chemical principles leading to an understanding of how living organisms function. Prerequisite: CHEM 110.

CHEM 121 General Chemistry I 4 (3,3,0,0)

An investigation of the fundamental structure of matter and chemical terminology. Introduces topics such as solution chemistry, thermochemistry and gas laws. Designed for science and pre-professional majors. Students enrolled in CHEM 121 should have taken or have concurrent enrollment in MATH 127 or MATH 128. Prerequisite: CHEM 103 or 110 or a passing score on the Chemistry Placement Exam.

CHEM 122 General Chemistry II 4 (3,3,0,0)

An application of chemical principles to inorganic systems. Emphasis on thermodynamics, equilibrium and kinetics. Prerequisites: CHEM 121 and MATH 127 or 128.

CHEM 220 Introductory Organic Chemistry 4 (3,3,0,0)

Introduction to the properties of organic functional groups and to elementary laboratory techniques. Prerequisite: CHEM 111 or 122.

CHEM 241 Organic Chemistry I 4 (3,3,0,0)

Intensive introduction to the chemistry of carbon and its functional groups, including the structure and behavior of its molecules. Laboratory emphasis is on natural processes. Prerequisite: CHEM 122.

CHEM 242 Organic Chemistry II 4 (3,3,0,0)

Continuation of CHEM 241, covering simple and poly-functional compounds, with emphasis on syntheses of organic molecules. Laboratory emphasis on natural processes and qualitative analysis. Prerequisite: CHEM 241.

CHEM 292 Selected Topics in Chemistry 1-4 (0,3-12,0,0)

Covers selected topics of interest to students in chemistry. Prerequisites: CHEM 122 and instructor approval.

Chinese**CHI 101B Conversational Chinese I 3 (3,0,0,0)**

A course emphasizing spoken communication. Speaking skills, oral listening skills, reading and writing skills explored. A vocabulary of Chinese-English words developed.

CHI 102B Conversational Chinese II 3 (3,0,0,0)

A continuation of CHI 101B, Conversational Chinese I. Prerequisite: CHI 101B.

CHI 111 First Year Chinese I 4 (4,0,0,0)

The development of language skills in listening speaking and writing. Oral emphasis.

CHI 112 First Year Chinese II 4 (4,0,0,0)

A second semester course designed to continue and improve skills learned in CHI 111. Prerequisite: CHI 111.

CHI 211 Second Year Chinese I 3 (3,0,0,0)

A continuation of CHI 112 and intended for non-native Chinese speakers who wish to study Chinese including listening, speaking, reading, and writing. Prerequisite: CHI 112.

CHI 212 Second Year Chinese II 3 (3,0,0,0)

A continuation of CHI 211 and includes structural review and development of the intermediate level of conversation, reading, and writing. Prerequisite: CHI 211.

Computing and Information Technology**CIT 095 Personal Computer Basics 3 (3,0,0,0)**

This course provides a hands-on, activity based learning experience that covers computer terminology, working with files, and protecting against computer viruses. It explores the Internet, teaches how to email and share pictures via email, and how to do searches. Students will create a document with word processing software and a basic budget with spreadsheet software. An overview of other computer applications such as data bases and presentations will be included. Graded Pass/Fail.

CIT 096 Personal Computer Repair 3 (2,2,0,0)

A home user course in basic troubleshooting, repair and maintenance of PC's. Students will learn how a PC works, how to diagnose and solve hardware related problems, how to install peripheral devices and how to upgrade existing PC hardware.

CIT 100B Computer Sampler 1 (1,0,0,0)

A hands-on learning experience for the new computer user/owner. This course will teach how a computer works, how to work in a Windows operating system, how to add new programs and components to your system and how to “surf the Internet.” Graded Pass/Fail.

CIT 102B Introduction to Windows 1 (1,0,0,0)

Thorough introduction to the Windows computing environment. Hands-on tutorials and projects on Personal Computers help students understand how to use this popular graphic-oriented user interface. Graded Pass/Fail.

CIT 103B Internet 1 (1,0,0,0)

Covers the principles of the Internet, including such topics as searching the Internet, Internet access, Usenet News groups, E-mail, and World Wide Web browser software. Graded Pass/Fail.

CIT 106B Spreadsheets 1 (1,0,0,0)

The basics of manipulating and presenting numerical data using a spreadsheet. Hands-on experience with a popular spreadsheet program. Prerequisites: Knowledge of personal computers and Windows; IS 101 or CIT 102B. Graded Pass/Fail.

CIT 107B Database 1 (1,0,0,0)

Fundamentals of creating tables and manipulating data, querying, customizing reports and data entry screens and working with multiple tables. Hands-on experience with a popular database management program. Prerequisites: Knowledge of personal computers and Windows; IS 101 or CIT 102B. Graded Pass/Fail.

CIT 108B PowerPoint 1 (1,0,0,0)

With Microsoft PowerPoint, you can easily organize, powerfully illustrate, and professionally deliver your ideas using computer presentations or slide shows. Whether conducting an informal meeting, presenting to an audience, or delivering your message over the Internet, PowerPoint has the tools you need to communicate with impact. This class starts with the basics and continues with a study of its numerous features. Graded Pass/Fail. Prerequisite: CIT 102B.

CIT 109B WordPerfect 1 (1,0,0,0)

Hands-on learning of WordPerfect features to create, modify and print documents, change layout and preference parameters, merge documents, incorporate graphics, create outlines and tables, and to use other features. Graded Pass/Fail.

CIT 110 A+ Hardware 3 (3,1,0,0)

This course will prepare students to maintain PC's, identify and correct errors in hardware configuration, upgrade and install new hardware as well as preparation for the A+ Core test.

CIT 111 A+ Software 3 (3,0,0,0)

Lectures and tests prepare students to take and pass the A+ Operating Systems module test. Students must also take and pass the A+ Core test to be A+ certified.

CIT 112B Network+ 3 (3,0,0,0)

This course covers basic networking terminology, network components, transmission media and protocols. Focuses on the OSI model of network computing. Course serves as preparation for the CompTIA Network+ exam.

CIT 113B IT Project+ 3 (3,0,0,0)

The purpose of this class 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 project management processes. Prerequisite: IS 101 or associated certification.

CIT 118B Network Security Management 3 (3,0,0,0)

Students will learn about network and information security management topics, including information Security Common Body of Knowledge (ISCBK), threat techniques, and protective techniques through a technical approach. Risk analysis, contingency planning, categories of security devices, password techniques, encryption, network protocol, and intercept devices are emphasized as part of the appropriate ISCBK domain.

CIT 119B Business Data Networks 3 (3,0,0,0)

This is an introductory course that looks at various types of data networks used in many organizations. The students will learn about LANs, WANs, OSI and TCP/IP models, IP addressing, dial-up devices, security, network applications, and network management.

CIT 130 Beginning Java 3 (3,0,0,0)

An introduction to the Java programming language. Use of Java programming language for problem formulation and solution. Java language's control structures, applets, graphics, inheritances, Swing components, File I/O. Object Oriented concepts and related material. New topics may replace some old ones to keep this course current. Prerequisites: IS 115 and/or ability to program in a high level language.

CIT 131 Beginning C Programming 3 (3,0,0,0)

An introduction to the C programming language. Topics will include C data types, input, output, operators, decision and looping statements, functions, and the C library. Prerequisites: IS 115 and/or ability to program in a high level programming language.

CIT 132 Beginning Visual Basic 3 (3,0,0,0)

An introduction to the Visual Basic.NET programming language. Topics will include problem solving, Visual Basic.NET Objects, decision and repetition statements, input, output, events, functions, procedures and graphical display of data. New topics may replace some old ones to keep this course technically current. Prerequisites: IS 115 and/or ability to program in a high level language.

CIT 133 Beginning C++ 3 (3,0,0,0)

An introduction to the C++ programming language. Topics will include C++ data types, input, output, operators, decision and looping statements, functions and classes. Prerequisites: IS 115 and/or ability to program in a high level programming language.

CIT 134B Beginning C# Programming 3 (3,0,0,0)

C# is a general-purpose, object-oriented programming language best known for its ability to create single-source solutions capable of running on a variety of devices (via the .NET platform). This course is the first semester of C# programming, and will include exposure to the .NET platform, but the primary emphasis will be on general-purpose object-oriented programming. Prerequisite: IS 115.

CIT 151 Beginning Web Development 3 (3,0,0,0)

An introduction to the creation and styling of websites using HTML and CSS. Websites will include text, graphics, and multimedia. Prerequisite: IS 100B or IS 101.

CIT 152 Web Script Language Programming 3 (3,0,0,0)

This course introduces students to client side scripting to control the appearance and functionality of web pages. JavaScript will be used to improve navigation of web sites, to validate data submitted in forms, to add functionality to web pages and to improve user experience. Prerequisites: IS 115 and CIT 151, or instructor permission.

CIT 154B Dynamic Web Applications 3 (3,0,0,0)

Hands-on exploration of Web applications such as wikis, blogs, syndication methods, podcasting, social networking, virtual worlds, online video and image sharing, and web based office applications. In-depth examination of these increasingly pervasive Web 2.0 applications and of their implications and potential for many career fields. Students projects showcased in electronic portfolios (optional). Prerequisite: IS 100B or IS 101.

CIT 160 Introduction to Computer Security 3 (3,0,0,0)

Principles and practices of protecting valuable data from loss, corruption and compromise. Emphasis on the needs of home computer users and small businesses. Topics include data backup, risk assessment, network and internet security and e-commerce. Prerequisite: IS 100B or IS 101.

CIT 173 Introduction to Linux 3 (3,0,0,0)

An introduction to the Linux Operating System. Topics include Linux origins, file system, user commands and utilities, graphical user interfaces, editors, manual pages and shells. Students are expected to have basic computer literacy prior to enrolling in this course.

CIT 174 Linux System Administration 3 (3,0,0,0)

This course covers a variety of topics: installing and configuring a Linux Server, managing users and groups, securing the system and much more. Students should complete CIT 173 or have a knowledge of Linux fundamentals before attending this course.

CIT 175B Advanced Linux System Administration 3 (3,0,0,0)

Students will learn how to perform advanced administration tasks on a Linux server including: installation and manual configuration, performance tuning and backup and recovery services. Prerequisite: CIT 174.

CIT 176 Linux Shell Programming 3 (3,0,0,0)

An introduction to the Linux shell, shell scripts, shell programming, and utilities. Topics will include the Linux Bash, Korn, and C shells; regular expressions; and grep, sed, and awk utilities. Students will learn to automate system administration tasks with shell scripts, programs, and Linux utilities.

CIT 180 Database Concepts and SQL 3 (3,0,0,0)

Basic principles of data modeling and relational database design. Hands-on learning of Structured Query Language (SQL). Prerequisite: IS 115 or equivalent programming experience or instructor permission.

CIT 181 Introduction to Oracle 3 (3,0,0,0)

This course provides students with a basic understanding of the Oracle software system. This will include Oracle's implementation of SQL, PL/SQL (Oracle's programming language), and Oracle development tools (such as SQL Developer, Forms and Reports). Prerequisite: CIT 180 or instructor permission.

CIT 182 Oracle Developer I 3 (3,0,0,0)

This course presents a variety of standard and custom reports using the Oracle Developer product. Students learn how to retrieve, display and format data in a variety of styles such as tabular, matrix, mailing label and letter reports. They also learn how to customize more complex reports, embed graphical charts in reports, create simple forms to interact with the user and to link multiple forms. Prerequisite: CIT 181 or a working knowledge of SQL.

CIT 183 Database Administration 3 (3,0,0,0)

Learn to install a RDBMS, manage database objects, including performance monitoring, storage management, database security, user management, database connectivity, and backup/recovery techniques. Prerequisite: CIT 180 or 181 or instructor permission.

CIT 184 Oracle PL/SQL Programming I 3 (3,0,0,0)

This course presents the basics of writing Oracle PL/SQL program units. Basic PL/SQL language elements, decisions, loops, procedures, functions and packages will be covered. Prerequisite: IS 115 or the ability to program in a high level programming language or instructor permission.

CIT 201B Word Certification Preparation 3 (3,0,0,0)

Comprehensive coverage of basic and advanced features of Microsoft Word including, but not limited to, the set of skills on the Microsoft's certification exams for Word. Prerequisite: IS 100B or IS 101.

CIT 202B Excel Certification Preparation 3 (3,0,0,0)

Comprehensive coverage of basic and advanced features of Microsoft spreadsheet software including, but not limited to, the set of skills on Microsoft's certification exams for Excel. Prerequisite: IS 100B or IS 101.

CIT 203B Access Certification Preparation 3 (3,0,0,0)

Comprehensive coverage of basic and advanced features of database management software including, but not limited to, the set of skills on Microsoft's certification exams for Access. Prerequisite: IS 100B or IS 101.

CIT 206B MS Outlook Certification Preparation 2 (2,0,0,0)

Recognizes and applies basic and advanced features of Outlook including, but not limited to, the skills on the Microsoft Outlook Certification exams. Each component of the Outlook package will be identified and explored as an integrated system. Students should have basic computer skills.

CIT 211 MCITP/MCTS Windows Workstation OS 3 (3,0,0,0)

The Core A Operating systems course prepares student to prove their expertise with desktop, server and networking components. Core A consists of the required areas of study mandated by Microsoft for their MCITP/MCTS certification in a client operating system. Students should have basic computer skills.

CIT 212 MCITP/MCTS Windows Server OS 3 (3,0,0,0)

The Core B Advanced Operating systems course prepares students to prove their expertise with server operating systems and networking components. Core B consists of the required areas of study mandated by Microsoft to complete their MCITP/MCTS requirements. Students should have basic computer skills.

CIT 213 MCITP/MCTS Network Infrastructure 3 (3,0,0,0)

The Core C operating systems course prepares student to prove their expertise with desktop, server and networking components. Core C consists of the required areas of study mandated by Microsoft in order to complete their MCITP or MCTS certification requirements. Prerequisite: CIT 112B.

CIT 214 MCITP Application Infrastructure 3 (3,0,0,0)

The Core D course prepares students to prove their expertise with desktop, server and networks. This course consists of the required areas of study mandated by Microsoft in order to complete their MCITP Enterprise Administrator core requirements. Prerequisite: CIT 112B.

CIT 215 MCITP Active Directory 3 (3,0,0,0)

This course prepares students to prove their expertise with desktop, server and networks. This course consists of the required areas of study mandated by Microsoft in order to complete their MCITP core requirements. Prerequisite: CIT 112B.

CIT 216 Server+ 3 (3,0,0,0)

An intense class to prepare mid- to upper-level technicians, responsible for server hardware functionality, to take the CompTIA Server+ certification exam. The Server+ certification credential validates advanced-level technical competency of server issues and technology, including installation, configuration, upgrading, maintenance, troubleshooting, and disaster recovery. Students will learn how to install, configure, diagnose, and troubleshoot server hardware and network operating systems. Prerequisite: CIT 112B Network+ or associated certification.

CIT 217 Security+ 3 (3,0,0,0)

The purpose of this class is to prepare professionals with at least two years of 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 concepts, communications security, infrastructure security basics of cryptography, and operational/organizational security. Prerequisite: CIT 112B or associated certifications.

CIT 218 Microsoft Special Topics 3 (3,0,0,0)

Special topics on computers and networking equipment, OS, and administration will be covered. This course is designed specifically for students pursuing MCITP or MCTS certifications or for those desiring additional learning after achieving a Microsoft Advanced Certification. This course can be repeated to a maximum of 9 credits with different topics. Prerequisite: CIT 112B or instructor permission.

CIT 230 Advanced Java 3 (3,0,0,0)

A continuation of CIT 130. This course will focus on advanced topics of Java. Provides special examples illustrating applications for which Java was designed. Prerequisite: CIT 130 or instructor permission.

CIT 231 Advanced C Programming 3 (3,0,0,0)

An advanced course in the C programming language. Topics will include structures, arrays, pointers, sequential and direct access files in the C language. Prerequisite: CIT 131 or instructor permission.

CIT 232 Advanced Visual Basic 3 (3,0,0,0)

A continuation of CIT 132. Advanced program structures in Visual Basic.NET. Topics will include sequential files, random access files, control, Objects of Visual Basic.NET, and other applications for which Visual Basic.NET is designed. Prerequisite: CIT 132 or instructor permission.

CIT 233 Advanced C++ 3 (3,0,0,0)

Advanced data structures and program structures in C++ language. Larger programs and special examples illustrating applications C++ was designed for. Prerequisite: CIT 133 or instructor permission.

CIT 238B Introduction to Smartphone Application Development 3 (3,0,0,0)

This course introduces the student to smartphone application development. Students will develop applications that will function on smartphones using a software development kit and the object oriented language appropriate to the target smartphone. Students will use simulation programs to test their applications. Prerequisites: CIT 130 or other object oriented programming language, and a basic knowledge of the Mac and or Window operating systems.

CIT 239 Advanced Programming Techniques 3 (3,0,0,0)

Data structures and algorithms for manipulating linked lists. String and file processing, recursion, software engineering, structured programming and testing especially using larger programs. Languages (C++, Java, etc.) may vary with the course. Prerequisite: CIT 230 or equivalent or instructor permission.

CIT 251 Advanced Web Development 3 (3,0,0,0)

This course is a continuation of CIT 151 and extends student knowledge and skills with HTML and CSS. Extensible Markup Language (XML) will be used to share data among different systems and applications. Prerequisite: CIT 151 or instructor permission.

CIT 252 Web Database Development 3 (3,0,0,0)

Design and implementation of interactive, data-driven websites that integrate HTML/CSS, a scripting language (Active Server Pages or PHP), and a database. Prerequisites: IS 115 (or other programming experience) and CIT 151.

CIT 257 Web Languages 3 (3,0,0,0)

This course explores a variety of emerging technologies that are used in sophisticated Web sites. Students will explore advanced Internet topics that may include dynamic Web site content, database integration, e-commerce, security, server-side configurations, scripting, common gateway interfaces and Web application development. Prerequisites: CIT 152 and CIT 252, or instructor permission.

CIT 260 Systems Analysis and Design 3 (3,0,0,0)

An examination of systems and their elements and processes. Includes techniques used by systems analysts to determine user requirements and the translation of user requirements into design specifications. Students should have programming experience.

CIT 261 VBA Programming for Microsoft Office 3 (3,0,0,0)

Introduction to customization, automation and integration of Microsoft Office applications using Visual Basic for Applications. Teaches programming logic, principles and techniques. Prerequisites: CIT 201B, and 202B or equivalent strong working experience with Microsoft Office. No previous programming experience required.

CIT 263B Project Management 3 (3,0,0,0)

This course introduces students to the concepts of project management and project management software. Students will practice proper project management principles defined by the Project Management Institute in the PMBOK. Students should have basic computer skills.

CIT 282 Oracle Developer II 3 (3,0,0,0)

This course presents a broader coverage of Oracle Forms and Reports by building on the concepts learned in the first Oracle Developer course. Prerequisite: CIT 182.

CIT 283 Oracle Database Administration II 3 (3,0,0,0)

This course will present the basic concepts of database backup and recovery, performance tuning, and introduces the Net8 for network administration. Prerequisite: CIT 183.

CIT 284 Oracle PL/SQL Programming II 3 (3,0,0,0)

This course presents a broader coverage of using PL/SQL to develop applications and covers the more advanced features of the PL/SQL language. Prerequisite: CIT 184.

CIT 285B Advanced Database Topics 3 (3,0,0,0)

This course provides an opportunity to explore areas of current interest in database management by exploring special topics. These topics may include the use of databases in corporate environment, data mining, use of data warehouses, etc. This course may be repeated once with different topics. Prerequisite: CIT 180.

CIT 290 Internship in CIT I 1-3 (0,0,0,5-15)

Supervised work experience within a selected computer and information technology firm or an information systems department in major corporation. Designed by company official and faculty advisor to apply knowledge to on-the-job situation. Available to students entering their last two semesters of instruction for degree. Contact department for application, screening, and required skills evaluation. This course may be repeated once not to exceed a total of 3 credits.

CIT 291 Internship in CIT II 1-3 (0,0,0,5-15)

Supervised work experience within a selected computer and information technology firm or an information systems department in major corporation. Designed by company official and faculty advisor to apply knowledge to on-the-job situation. Available to students entering their last two semesters of instruction for degree. Contact department for application, screening, and required skills evaluation. This course may be repeated once not to exceed a total of 3 credits. Prerequisite: CIT 290.

CIT 295B Capstone Course 1 (1,0,0,0)

This is the capstone course for several CIT degrees. Students will complete a project designed for their specific area of concentration. Skills learned during the degree program will be required to satisfactorily complete the project. Students will also complete a comprehensive exam that includes questions for the discipline core and the appropriate area of concentration. This class must be taken during a student's final semester. Graded Pass/Fail. Prerequisite: Department consent required.

Clinical Laboratory Science

CLS 125B Microbiology for Surgical Technicians 2 (2,0,0,0)

An introduction to clinical microbiology with an emphasis on clinically significant microbes, the infectious disease process, control of microbial growth, and aseptic technique. Prerequisite: Admission to program.

CLS 126B Applied Microbiology for Surgical Technicians 1 (0,3,0,0)

This is a laboratory course utilizing microscopic, cultural, and serological techniques to study the characteristics of selected clinically significant microbes. Specimen collection and processing, as well as disinfection and sterilization methods will also be addressed. Corequisite: CLS 125B.

CLS 130B Laboratory Procedures for Medical Office Assistants 2 (2,0,0,0)

This course introduces theory and fundamentals of laboratory procedures for personnel working in a physician's office, including clinical significance of laboratory results.

CLS 131B Applied Laboratory Procedures for Medical Office Assistants 1 (0,3,0,0)

This course provides practical application of laboratory procedures for personnel working in a physician's office. Corequisite: CLS 130B.

CLS 145 Laboratory Methods 2 (2,0,0,0)

This is an introduction to the role of the medical laboratory technician in the health care system. Topics include collection and handling of specimens, laboratory computers, quality control and clinical laboratory preview of professional working situation.

CLS 146B Applied Laboratory Methods 2 (0,6,0,0)

An introduction to the ordering, processing, and analysis of patient samples; utilization of laboratory equipment, instrumentation, and information system. Corequisite: CLS 145.

CLS 147B Medical Laboratory Assistant Clinical Practicum 2 (0,0,6,0)

A clinical rotation in specimen accessioning, processing, basic laboratory techniques, and point of care testing. Prerequisite: Completion of Medical Laboratory Assistant program.

CLS 151 Phlebotomy 2 (2,0,0,0)

Study of blood collection methods, with emphasis on patient preparation and identification, sample collection, and selected diagnostic tests performed in the clinical laboratory.

CLS 152 Applied Phlebotomy 2 (0,6,0,0)

Supervised practice of blood collection methods routinely used to collect patient samples for diagnostic testing. Corequisite: CLS 151.

CLS 153 Phlebotomy Clinical Practicum 2 (0,0,8,0)

A clinical rotation in blood collection and specimen processing techniques. Prerequisites: CLS 151, CLS 152.

CLS 161 Urinalysis and Body Fluids 1 (1,0,0,0)

Introduction to fundamentals and ethics of medical laboratory technology, quality control, laboratory safety and supply records. Theory and practical application of urinalysis procedures and other body fluids such as CSF and synovial fluids. Prerequisite: Acceptance into program.

CLS 162 Applied Urinalysis and Body Fluids 1 (0,3,0,0)

Course covers analysis of urine with emphasis on chemical, macroscopic and microscopic methodologies. Microscopic analysis of body fluids such as CSF and synovial fluids. Corequisite: CLS 161.

CLS 241 Clinical Chemistry I 3 (3,0,0,0)

This course covers basic principles of methodology in clinical chemistry: physiologic biochemistry, specimen collection, differentiation of normal and abnormal test results, special precautions and troubleshooting of test procedures, validation of reliability and correlation with other laboratory tests. Prerequisites: Acceptance into program, CHEM 111.

CLS 242 Applied Clinical Chemistry I 2 (0,6,0,0)

This course covers specimen collection and processing of carbohydrates, proteins, lipids, heme derivatives, nitrogen, enzymes, blood pH and gases, electrolytes, vitamins, hormones and drugs; liver function tests, analytical instrumentation and quality control. Corequisite: CLS 241.

CLS 251 Immunology/Immunochemistry I 2 (2,0,0,0)

An overview of the immune response with emphasis on serological principles used in the laboratory diagnosis of disease processes. Identification of blood group antigens and antibodies and their clinical significance in transfusion therapy. Prerequisites: Acceptance into program, CHEM 111.

CLS 252 Applied Immunology/Immunochemistry I 2 (0,6,0,0)

The following serological and immunochemical laboratory procedures are covered: grouping, typing, compatibility testing, pregnancy testing, titers, cold agglutinins, quality control. Corequisite: CLS 251.

CLS 261 Clinical Microbiology for Dental Hygienists 2 (2,0,0,0)

An introduction to clinical microbiology with emphasis on microbial diseases of dental origin and diseases with secondary oral manifestations. Corequisite: CLS 262.

CLS 262 Applied Clinical Microbiology for Dental Hygienists 1 (0,3,0,0)

A laboratory course emphasizing isolation and identification of pathogenic bacteria, through the use of conventional and commercial methods, microscopic techniques, and serological tests. Specimen collection and processing of microbiological samples will also be addressed. Corequisite: CLS 261.

CLS 265 Laboratory Operations I 1 (1,0,0,0)

Introduction to clinical laboratory sciences including laboratory safety, professional ethics, fundamental laboratory calculations, quality assessment, laboratory information systems, and correlation of laboratory data in patient care. Prerequisite: Acceptance into MLT/MLS program.

CLS 271 Clinical Microbiology I 3 (3,0,0,0)

The study of microorganisms of medical importance to man. Includes characteristics, medical significance and identification of bacteria, mycobacteria, viruses, fungi and parasites. Prerequisite: Acceptance into program.

CLS 272 Applied Clinical Microbiology I 2 (0,6,0,0)

Specimen collection and processing. Isolation and identification of pathogenic bacteria, through the use of conventional and commercial methods, microscopic techniques and serological tests. Corequisite: CLS 271.

CLS 291 Hematology I 2 (2,0,0,0)

Development, identification and function of cellular and humoral elements in whole blood. Principles of laboratory assays used in determining the existence and diagnosis of hematologic disorders. Prerequisites: Acceptance into program, CHEM 111.

CLS 292 Applied Hematology I 2 (0,6,0,0)

Slide preparation and staining; manual and automated assays of whole blood components; cell identification; coagulation tests and special hematology procedures. Corequisite: CLS 291.

CLS 294 Clinical Practicum I 2 (0,0,6,0)

A clinical rotation in clinical microbiology. Prerequisite: CLS 272.

CLS 295 Clinical Practicum II 2 (0,0,8,0)

A clinical rotation in chemistry, urinalysis, and body fluids. Prerequisites: CLS 162, 242.

CLS 296 Clinical Practicum III 4 (0,0,12,0)

A clinical rotation in hematology, coagulation, immunology, and immunochemistry. Prerequisites: CLS 252, 292.

CLS 365 Laboratory Operations II 1 (1,0,0,0)

Theory and practice of fiscal/personnel management of laboratory practitioners. Assay implementation, government regulatory and accreditation policies. Applications of basic educational methods for laboratory personnel. Prerequisite: CLS 265.

CLS 446 Clinical Chemistry II 2 (2,0,0,0)

Advanced study of chemical analysis of blood, urine and other body fluids in normal and abnormal physiological conditions. Topics include endocrinology, toxicology and special procedures. Prerequisite: CLS 242.

CLS 447 Applied Clinical Chemistry II 1 (0,3,0,0)

Advanced laboratory applications in chemical analysis of blood, urine and other body fluids in normal and abnormal physiological conditions. Topics include endocrinology, toxicology and special procedures. Corequisite: CLS 446.

CLS 448 Hematology II 2 (2,0,0,0)

Diagnostic hematology and body fluid analysis, with advanced study of anemias, leukemias, myeloproliferative and myelodysplastic disorders, and advanced topics in hemostasis. Prerequisite: CLS 292.

CLS 449 Applied Hematology II 1 (0,3,0,0)

Diagnostic hematology and body fluid analysis with emphasis on laboratory testing and molecular markers used to differentiate/diagnose various hematologic malignancies and hemostasis disorders. Corequisite: CLS 448.

CLS 456 Immunology/Immunochemistry II 2 (2,0,0,0)

Study of advanced principles of immunology and the identification of clinically significant blood group antigens and antibodies in transfusion medicine. Prerequisite: CLS 252.

CLS 457 Applied Immunology/Immunochemistry II 1 (0,3,0,0)

Applied laboratory procedures in immunologic and molecular techniques used to analyze antigen-antibody reactions in the diagnosis of health or disease. Includes advanced immunochemical procedures. Corequisite: CLS 456.

CLS 476 Clinical Microbiology II 2 (2,0,0,0)

Advanced study of pathogenic microorganisms. Emphasis on fungal, parasitic, viral, mycobacterial diseases as well as normal and pathogenic bacteria from specific body sites. Prerequisite: CLS 272.

CLS 477 Applied Clinical Microbiology II 1 (0,3,0,0)

Advanced practical applications used in recovery, isolation and identification of pathogenic microorganisms. Includes fungi, parasites, mycobacteria, viruses and miscellaneous bacteria. Corequisite: CLS 476.

CLS 478 Research Methods 2 (2,0,0,0)

Study of basic research concepts and principles aimed at equipping students with skills and tools for systematic investigation in health sciences and writing of research proposals. Prerequisites: ECON 261, CLS 477.

CLS 491 Clinical Practicum - Chemistry 4 (0,0,12,0)

Clinical rotation in Clinical Chemistry. Designed to gain applied experiences and develop entry-level competencies as a Medical Laboratory Scientist. Prerequisite: CLS 447.

CLS 493 Clinical Practicum - Immunology/Immunochemistry 4 (0,0,12,0)

Clinical rotation in Immunology/Immunochemistry. Designed to gain applied experiences and develop entry-level competencies as a Medical Laboratory Scientist. Prerequisite: CLS 457.

CLS 495 Clinical Practicum - Microbiology 4 (0,0,12,0)

Clinical rotation in Microbiology. Designed to gain applied experiences and develop entry-level competencies as a Medical Laboratory Scientist. Prerequisite: CLS 477.

CLS 497 Clinical Practicum - Hematology 4 (0,0,12,0)

Clinical rotation in Hematology. Designed to gain applied experiences and develop entry-level competencies as a Medical Laboratory Scientist. Prerequisite: CLS 449.

Communication

COM 101 Oral Communication 3 (3,0,0,0)

Theory and practice in extemporaneous speaking and other prepared speaking experiences.

COM 101H Oral Communication - Honors 3 (3,0,0,0)

Theory and practice in spoken communication and other speaking experiences. Honors addresses a greater body of research and focuses on a required theme. Honors level courses can be used to fulfill equivalent general education requirements. Prerequisite: Admission to the Honors program.

COM 102 Introduction to Interpersonal Communication 3 (3,0,0,0)

Theory and practice in effective interpersonal communication with written and real world applications. Topics may include perception, using verbal and nonverbal symbols, listening, self-disclosure, interpersonal conflict, developing and maintaining relationships. Prerequisite: ENG 100 or 101.

COM 115 Applied Communication 3 (3,0,0,0)

Emphasis placed on improving oral and written communication skills in the workplace, including organizational networks, interviewing, presentations, listening and groups. Culture and personality are analyzed.

COM 116 Critical Reasoning in Daily Life 3 (3,0,0,0)

Theory and practice of critical reasoning applied to a variety of everyday communication forms, including arguments, narratives, advertisements, visual media, protests, performances, and public space.

COM 133 Culture and Communication 3 (3,0,0,0)

Introduction to theory, analysis and practice in understanding culture and its impact on communication. Emphasis on the use of cultural awareness and multicultural sensitivity to improve oral and written communication skills. (Same as ANTH 133.)

COM 180 Cinema as Art and Communication 3 (3,0,0,0)

A survey of cinema in its diverse forms. Historical and stylistic influences on the aesthetic values and implications of cinema. The course focuses on writing about film from various perspectives. Research of peer reviewed journal articles is a focus. Illustrated by screen examples.

COM 196 Internship 1-3 (0,0,0,1-3)

A supervised workshop experience in a local television studio, radio station, newspaper, advertising agency, public relations firm or any other organization relating to communication. Can be repeated for a total of 6 credits. Prerequisites: Approval of the station, newspaper, agency or firm where internship will be completed and approval from the Department of Communication Internship Coordinator.

COM 203 Advanced Public Speaking 3 (3,0,0,0)

Theory and practice in extemporaneous speaking and other prepared speaking experiences. Emphasis on advanced delivery and research skills for public speaking.

COM 211 Survey of Rhetorical Studies 3 (3,0,0,0)

Survey of historical development of various rhetoric canons, concepts, and perspectives beginning with ancient Greek and Roman rhetoric and concluding with contemporary discourse and rhetorical theory.

COM 215 Introduction to Group Communication 3 (3,0,0,0)

Theory and practice in small group communication. Emphasis placed on discussion, problem solving, group roles, conflict management, and leadership.

COM 216 Survey of Communication Studies 3 (3,0,0,0)

Survey and analysis of the concepts, principles, and values of human communication grounded in communication theory and practice.

COM 217 Argumentation and Debate 3 (3,0,0,0)

Theory and practice in oral argumentative discourse. Emphasis placed on developing reasoning skills, critical thinking, preparing and presenting oral arguments within discussions and debates. Prerequisite: COM 101.

COM 250B Debate Practicum 1 (0,4,0,0)

The course is designed for students who are participants in intercollegiate forensic competition. This course may be taken a maximum of three (3) times. Prerequisite: COM 217.

COM 299 Special Topics in Communication 1-4 (1-4,0,0,0)

Investigates a special topic and/or area of interest within the field of Communication Studies.

Construction Management

CONS 105B Construction OSHA Standards 1 (1,0,0,0)

This course includes 10-hours of authorized training addressing OSHA construction standards. The identification of asbestos, lead and radon in potential construction projects will also be covered in this course. Upon completion, students will be issued a course completion 10-hour card by the U.S. Department of Labor's Occupational Safety and Health Administration.

CONS 120B Printreading and Specifications 3 (3,0,0,0)

A basic course designed to provide background material in printreading. Emphasis will be placed on residential and light commercial plans.

CONS 205B Construction Site Safety OSHA Standards 3 (3,0,0,0)

This course includes 30-hours of authorized training addressing the 29 CFR 1926 OSHA Construction Industry Regulation Standards. The identification of asbestos, lead, mold, radon and other hazardous materials in potential construction projects will also be covered in this course. Upon completion, students will receive a certificate from the U.S. Department of Labor's Occupational Safety and Health Administration. (Same as ESH 222B.)

CONS 210B Construction Structural Technology 3 (2,2,0,0)

This course will help students to apply basic structural principles to problems encountered in the design and construction of residential and light commercial structures not exceeding two stories in height. Prerequisite: EGG 131 or PHYS 151. (Same as ADT 210B.)

CONS 221 Construction Estimating 3 (2,2,0,0)

Advanced estimating concepts based on utilizing excel spread sheets for both residential and/or commercial projects. Students must have basic computer skills. Corequisite: CONS 281B. Prerequisite: MATH 104B.

CONS 275B Principles of Construction Surveying 3 (3,0,0,0)

Topics include principles of land surveying, an in-depth study of the public systems, restoration of corners, boundary and control survey adjustments, construction survey staking and evidence and analysis.

CONS 281B Construction Planning, Scheduling and Control 3 (2,2,0,0)

Topics include project scheduling and evaluation using scheduling techniques. Critical path scheduling is also used. Corequisite: CONS 221. Prerequisites: SCT 105B.

CONS 282B Construction Law 3 (3,0,0,0)

Items covered in this course include construction contracts and documents, specifications, contract formation, interpretation, arbitration, professional ethics, Nevada contractor lien laws, construction bonds and contractor's liabilities, rights and duties.

CONS 285B Construction Soils and Foundations 3 (2,2,0,0)

Introduction to basic concepts of soils and foundations, including compaction, compressibility, settlement, shear strength, and site investigation. Students will study problem soils and solutions, types and systems of foundations, bearing capacity, sheeting and braced excavations. Prerequisite: CONS 210B.

CONS 286B Construction Management and Analysis 3 (3,0,0,0)

Introduction to modern management theory and techniques with applications to modern construction problems, management principles and methods of applying this knowledge to the modern construction industry. Prerequisite: Instructor permission.

CONS 288B Quality Control of Construction Waste 3 (3,0,0,0)

This course is designed to provide a general overview of the hazardous materials management field with emphasis on hazardous materials, hazardous waste, laws and regulations, and its effects on the environment and worker health and safety. Discussions on federal, state, and local regulations involving hazardous materials and the implementation of pollution prevention and waste minimization will be stressed. (Same as ESH 130.)

CONS 295B Construction Internship I 3 (0,0,0,38)

This course will provide students the opportunity to work in the construction industry, directed by a qualified professional and supervised by the instructor. 600 hours of work are required for the internship. A 10,000 word report will be required with an oral presentation before supervising faculty member(s). Prerequisite: Program Director permission.

CONS 296B Construction Internship II 3 (0,0,0,38)

This course will provide students the opportunity to work in the construction industry, directed by a qualified professional and supervised by the instructor. 600 hours of work are required for the internship. A 10,000 word report will be required with an oral presentation before supervising faculty member(s). Prerequisite: Program Director permission.

CONS 299B Construction Technology Capstone 2 (2,0,0,0)

This capstone course will assess the student's rate of progress in the Construction Technology program to include: construction estimating, law, management and materials, sustainable construction of new and existing buildings and printreading. The grading method for this course is pass/fail. Prerequisite: Program Director's permission.

Computer Office Technology

COT 101B Computer Keyboarding I 3 (3,0,0,0)

Mastery of computer alpha-numeric keyboard by touch and introduction of 10-key pad. Not for students who have previously had typing.

COT 102 Computer Keyboarding II 3 (3,0,0,0)

Formatting of letters, memos, and other office documents. Introduction to word processing. Students should be able to type 25 wpm

COT 103B Keyboarding Review and Speed 1 (1,0,0,0)

Emphasis on speed building techniques. May be repeated for a maximum of three credits.

COT 108 Speedwriting Shorthand I 3 (3,0,0,0)

Complete theory of alphabetic shorthand - abbreviated longhand. Beginning dictation and transcription practice. Used for taking lecture notes or general office dictation.

COT 109B Speedwriting Shorthand II 3 (3,0,0,0)

Dictation and transcription for speed development. Reinforcement of theory through extensive repetitive use of common words, phrases, and shortcuts. Spelling and punctuation emphasis for mailable letters.

COT 127B Microsoft Office for Offices 3 (3,0,0,0)

Covers the beginning features of Word, Excel, Access, and PowerPoint, the main programs in Microsoft Office. Learn the beginning features of word processing, spreadsheets, database management, and presentations in these popular computer software packages. Emphasis on office documents for students who desire professional quality beginning skills in these programs.

COT 129B Records Management 3 (3,0,0,0)

Introduction to filing principles and rules, equipment and supplies, filing systems (alphabetic, numeric, etc.), records disposition, correspondence control, information retrieval and records storage.

COT 132B Outlook for Offices 1 (1,0,0,0)

This course explores the features of the Microsoft Office Outlook program. Some of the topics covered will include using Outlook e-mail, address books, distribution lists, and the calendar. Students will also learn to set up meetings and make use of Outlook Security.

COT 200 Word Processing I 3 (3,0,0,0)

Includes the input of documents, revisions, output, proof-reading, grammar and punctuation. Students use a computer with word processing software. Students should be able to type 40 wpm.

COT 201B Word Processing II 3 (3,0,0,0)

Instruction to the most common intermediate features of a popular word processing program. Includes proofreading and grammar, with document preparation. Emphasis on office documents and procedures. Prerequisites: COT 102, 200.

COT 205B Pads & Tabs - Office on the Go 3 (3,0,0,0)

Instruction for Apple iPad or similar device (provided in class). Current office applications, internet, communication, contact/calendar, and remote access will be covered. No homework.

COT 206B Speech Recognition for Offices 3 (3,0,0,0)

Learn how speech recognition can be used for personal or office production. Gain the skills to be able to use speech recognition to provide complete voice control of your computer and the digital world of today. Students will be presented with information for using speech recognition to create a variety of documents as well as for navigating the computer, software, and the Internet. Students will use computers with popular speech recognition.

COT 208B Tablet Computer, Voice and Handwriting 1 (1,0,0,0)

Learn the basics of a Tablet PC (or equivalent) and how to create and edit documents using your voice (up to 100 wpm) and handwriting rather than the keyboard. Students use a Tablet computer for documents, email, and other everyday computer tasks.

COT 209B Tablet Computer, Voice and Handwriting II 3 (3,0,0,0)

Learn more about Tablet computers and their capabilities, techniques, and shortcuts. Improve voice and handwriting recognition skills using a Tablet PC (or equivalent) to work with documents, email, and Internet tasks. Use programs such as Sticky Notes and OneNote, and learn other tablet features.

COT 213B Business Professionalism 3 (3,0,0,0)

A capstone course that provides students with opportunities to learn about professional characteristics and traits considered important to business environments. Also includes intermediate to advanced word processing skills for business writing. Emphasis on telephone techniques, courtesy skills, public relations, appearance and business etiquette. Prerequisites: BUS 106B, COT 102, 127B, 200, 201B.

Counseling and Personal Development

CPD 116 Substance Abuse: Fundamental Facts and Insights 3 (3,0,0,0)

Overview of how involvement with alcohol, tobacco and other drugs can affect health, personal and social development. Related social, philosophical, cultural, prevention and treatment issues.

CPD 117 Introduction to Counseling 3 (3,0,0,0)

Provides students with interviewing and basic counseling skills. Discusses confidentiality and ethics. Includes experiential role play.

CPD 120 Treatment Planning and Case Management 2 (2,0,0,0)

Provides working knowledge of treatment planning for addicted patients. Discusses patient histories, treatment goals, documentation and legal requirements. Prerequisite: CPD 116.

CPD 121 Gambling Addiction 3 (3,0,0,0)

Provides knowledge of gambling addiction. Covers signs and symptoms, historical, cultural and economic perspectives, and treatment. Prerequisite: PSY 101 or CPD 116.

CPD 133 Small Group Interaction - Group Counseling 3 (3,0,0,0)

Provides knowledge of group dynamics, counseling skills, and role play. Prerequisites: PSY 101, CPD 117.

CPD 134 Women and Substance Abuse Treatment Issues 3 (3,0,0,0)

Provides working knowledge of issues in counseling addicted women. Covers signs and symptoms, historical perspectives, cultural attitudes, family issues, pregnancy, drug affected children and treatment approaches.

CPD 201 Crisis Communication Skills 3 (3,0,0,0)

Provides understanding of crisis, its stages and intervention. Covers types of crises, training in communication and basic counseling skills and referral services. Includes experiential role play.

CPD 217 Advanced Counseling Techniques for Substance Abuse 3 (3,0,0,0)

Comprehensive overview of counseling philosophies, concepts, theories and practical treatment approaches appropriate for the substance abuser. Prerequisites: PSY 101, CPD 117.

CPD 218 Family Counseling Issues in Substance Abuse 3 (3,0,0,0)

Provides knowledge for identifying and assessing substance abuse appropriate for family counseling. Theoretical and practical approaches to family counseling. Prerequisites: PSY 101, CPD 117.

CPD 220 Dual Diagnosis 3 (3,0,0,0)

Provides working knowledge of the assessment and treatment of patients with a coexisting mental illness and substance abuse disorder. Prerequisite: PSY 101 or CPD 116.

CPD 230 Addiction and Trauma 3 (3,0,0,0)

Provides knowledge of the interrelationship between addiction and trauma. Covers diagnostic criteria and includes experiential role-play and practice in counseling skills.

CPD 254 Bio-Psycho/Social Factors in Addiction 3 (3,0,0,0)

Theories of alcohol and other drug addictions with emphasis on the signs and symptoms of problematic use as well as methods of assessment and intervention. Prerequisite: CPD 116.

CPD 255 Developmental Theories and Prevention/Education Strategies 3 (3,0,0,0)

The impact of addiction on development in children and families, perinatal addiction and fetal alcohol syndrome, and current prevention and education models and services. Prerequisite: CPD 254.

CPD 290 Internship in Counseling 1 (0,0,1,0)

Supervised counseling work experience with selected community agencies. Up to eight semester hour credits may be earned on the basis of 100 hours of internship for one credit. May be repeated up to eight credits. Prerequisite: Permission of the CSN Addiction Program Director.

CPD 291 Substance Abuse Counseling Practicum I 3 (0,0,0,12)

Substance abuse counseling work experience in a selected community agency. The student works 12 hours per week under agency supervision in the final year. If taken earlier, permission is required by CSN Addiction Program Director. Prerequisite: CPD 290 or approval of the CSN Addiction Program Director.

CPD 292 Substance Abuse Counseling Practicum II 3 (0,0,0,12)

Further supervised substance abuse counseling work experience in a selected community agency. The student works 12 hours per week under agency supervision in the final semester. Prerequisites: CPD 290 and CPD 291 or approval of the CSN Addiction Program Director.

Computer Engineering

CPE 100 Computer Logic Design I 3 (3,0,0,0)

This course covers digital design concepts and fundamentals. Combinational logic circuits, MSI and LSI circuits, sequential circuit analysis and design. Modern logic developments are also covered. Prerequisites: MATH 126 and MATH 127, or MATH 128.

CPE 100L Computer Logic Design I Laboratory 1 (0,3,0,0)

This laboratory course covers the following experiments: a) Basic logic gates, Boolean algebra and logic simplifications, b) combinational logic circuits and their applications, flip-flops and related devices, c) MSI circuits including multiplexers, decoders; d) binary adders, and asynchronous and synchronous counters. Corequisite: CPE 100.

CPE 200 Computer Logic Design II 3 (3,0,0,0)

This course is the second half of one-year course to study digital logic design. It covers a) sequential logic, synchronous and asynchronous circuits, hazards; b) PAL/PLA based logic implementation; c) introduction to computers, instruction set architecture; d) computer arithmetic, assembly language. Prerequisite: CPE 100.

CPE 200L Computer Logic Design II Laboratory 1 (0,3,0,0)

This laboratory course covers a) design and testing of combinational and sequential logic circuits; b) synchronous and asynchronous counters, races, cycles, and hazards, with timing considerations; c) design programmable logic devices (PLD), simple arithmetic logic unit; d) assembly language and arithmetic logic unit simulation. Corequisite: CPE 200.

Criminal Justice

**CRJ 103 Communication Within the
Criminal Justice Field 3 (3,0,0,0)**

Prepares the student to be able to communicate within the criminal justice field by introducing him/her to the five basic communication skills: report writing, non-verbal communication, basic public speaking, interviewing and interrogating skills, and courtroom testimony.

**CRJ 104 Introduction to Administration
of Justice 3 (3,0,0,0)**

American criminal justice system, its development, components, and processes. Includes consideration of crime and criminal justice as a formal area of study.

**CRJ 105B Corrections Operations
and Jail Management 3 (3,0,0,0)**

Administration and management of the jail. Psychological impact of the jail on both the inmate and the corrections officer. Prerequisite: CRJ 104.

**CRJ 106 Introduction to
Corrections 3 (3,0,0,0)**

The history and development of correctional agencies, particularly prisons. Designed to raise questions about the organizational and structural forces facilitating and impeding change. Prerequisite: CRJ 104.

**CRJ 108 Introduction to
Homeland Security 3 (3,0,0,0)**

This course will introduce students to the vocabulary and important components of Homeland Security. Students will discuss the importance of the agencies associated with Homeland Security and their interrelated duties and relationships. This course will examine historical events that impact Homeland Security. It will also explore state, national, and international laws impacting Homeland Security. It will examine the most critical threats confronting Homeland Security.

**CRJ 110B Introduction to Nevada
Law Enforcement 3 (3,0,0,0)**

This course provides a systematic approach to examination of criminal justice in the State and in particular Southern Nevada. It will also include an overview of the major subsystems: police, prosecution, defense, courts, corrections and juvenile justice. This course is designed for students who will be attending the Law Enforcement Training Academy.

CRJ 111B Firearms I 3 (2,2,0,0)

Laws of arrest, search and seizure. Moral and ethical aspects of the use of deadly force. Firearm handling, safety, range nomenclature, marksmanship and qualification.

**CRJ 113B 911 Communications
Specialist I 3 (3,0,0,0)**

This course will provide the student with the basic skills needed for a career as an Emergency 911 Communications Specialist. Students will learn history, terms and codes, and liability issues associated with 911 telecommunicators. Additionally, students will learn classification and prioritization of crimes/calls, various calls screening methods for 911 and 311, conflict resolution and listening skills. Meets Nevada Post Standards.

CRJ 114B Firearms II 2 (1,2,0,0)

Continuation of CRJ 111B. Advanced range qualification, precision marksmanship, defensive measures, counter ambush procedures, combat shooting, robbery in progress, building searches and shotgun use. Prerequisite: CRJ 111B.

CRJ 120 Community Relations 3 (3,0,0,0)

This course provides an understanding of the positive and negative relationships between criminal justice professionals and various members of the community. Prerequisite: CRJ 104.

CRJ 130 Survey of Criminal Law 3 (3,0,0,0)

An introduction to criminal law, its common law origins, basic concepts and applications in legal proceedings. Prerequisite: CRJ 104.

CRJ 140 Elements of Supervision 3 (3,0,0,0)

An introduction to supervisory roles in criminal justice agencies, selection process for supervisors, models for decision making and leadership styles. Prerequisite: CRJ 104.

**CRJ 145 Transportation
and Border Security 3 (3,0,0,0)**

This course provides an in-depth view of modern border and transportation security. Specific topics include security for seaports, ships, aircraft, trains, trucks, pipelines, buses, etc. This course focuses on the technology needed to detect terrorists and their weapons as well as includes discussion on legal, economic, political, and cultural aspects of the problem. Prerequisite: CRJ 108 or EMA 101.

CRJ 155 Juvenile Justice System 3 (3,0,0,0)

Explanations for deviant behavior, police encounters with juveniles, juvenile court process, juvenile dispositions and after care. Prerequisite: CRJ 104.

**CRJ 160 Business Continuity
and Resilience 3 (3,0,0,0)**

This course provides instruction in the importance of an effective Continuity of Operations Plan/Program (COOP). The course will provide fundamental understanding of continuity of operations, terms, objectives, and benefits to private business and public agencies. The course will emphasize the importance of having a plan which provides for a rapid and efficient return to business after an emergency. Prerequisite: CRJ 108 or EMA 101.



CRJ 161 Crime Scene Investigation 3 (3,0,0,0)

This course will provide the fundamentals of modern crime scene investigation including procedures and skills in securing, searching and investigating a crime scene, behavior at the crime scene, and the collection and preservation of evidence. The student will also learn how to prepare a report for use in court proceedings. Prerequisite: CRJ 104.

CRJ 162 Investigative Photography I 3 (3,0,0,0)

A course covering the photographic processes and their use in police, fire and security services. An elementary knowledge of photography is required. Prerequisite: CRJ 104.

CRJ 163 Investigative Photography II 3 (3,0,0,0)

A course covering advanced investigative photography techniques and the use of digital photography. Prerequisite: CRJ 162.

CRJ 164 Introduction to Criminal Investigation 3 (3,0,0,0)

The investigation process: crime scene search, evidence collection and preservation, interviews and interrogations and case preparation. Prerequisite: CRJ 104.

CRJ 165 Criminalistic Science 3 (3,0,0,0)

Evidence collection and preservation, scientific analysis, laboratory procedures and techniques to ensure chain of custody. Prerequisite: CRJ 104.

CRJ 167B Preliminary Investigation for Police Recruits 3 (3,0,0,0)

This course will provide the basic skills needed to do effective police preliminary criminal investigations. The emphasis will be on learning proper techniques as a first responder to a crime scene, how to secure a crime scene and controlling the scene including determining if a crime occurred, rendering aid to the injured, arresting suspects and securing witnesses.

CRJ 169B Crime Lab Operations 3 (3,0,0,0)

This course will provide a clear overview of each area of responsibility within a crime lab. Topics will include the educational and training requirements to work within each of these areas and how the crime lab interacts with the law enforcement agencies they serve. Prerequisite: CRJ 104.

CRJ 170B Physical Training for Law Enforcement 1 (0,2,0,0)

Post pretest. Physical training relevant to a law enforcement profession to prepare for the final physical training test.

CRJ 208 Criminal Street and Prison Gangs 3 (3,0,0,0)

Examines the causes and consequences of street and prison gangs as well as the larger community, societal, and international context in which they are created, evolve, and flourish, as well as the socio-legal policies designed to control it.

CRJ 210B Community Policing in Southern Nevada 3 (3,0,0,0)

This course provides an introduction into the community policing models of Southern Nevada. It will also include an overview of the history, definition, evaluation and proactive policing concepts as applied to the various groups of citizens served by law enforcement agencies. This course is designed for students who will be attending the Law Enforcement Training Academy.

CRJ 211 Police in America 3 (3,0,0,0)

History of the American police; the pioneers, processes, evolution and dynamics of the police in society. Explores the basic philosophy of law enforcement and its application in criminal justice. Prerequisite: CRJ 104.

CRJ 213B 911 Communications Specialist II 3 (3,0,0,0)

This course will provide the student with the necessary skills for entry and promotions as 911 Communications Specialist. The course will provide advanced skills in radio dispatching procedures, critical incident stress management, homeland security, verbal judo and hands-on experience through simulation of job functions. This course meets Nevada Post standards. Student must be at least 18 years old with no criminal records. Prerequisite: CRJ 113B.

CRJ 214 Principles of Police Patrol Techniques 3 (3,0,0,0)

An examination of the mission, operations and issues in police patrol. Report writing skills, techniques of observation, hazard recognition, non emergency calls. Prerequisite: CRJ 104.

CRJ 215 Probation and Parole 3 (3,0,0,0)

Survey of probation and parole systems in the United States. Exploration of skills necessary to be an effective parole or probation officer. Prerequisite: CRJ 104.

CRJ 216B Police Patrol Tactics 3 (3,0,0,0)

This course will provide a basic understanding of police patrol techniques. Various methods and procedures used including tactics for routine patrol, responding for calls for service, citizen contact, and how to handle suspects. Students will understand legal requirements.

CRJ 219B Emergency Vehicle Operation and Control 3 (1,4,0,0)

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 (3,0,0,0)

A study of the substantive and procedural laws governing the arrest and prosecution of criminal offenders. Prerequisite: CRJ 104.

CRJ 221B Criminal Procedures for Law Enforcement 3 (3,0,0,0)

This course will provide an understanding of the laws, court decisions and legal procedures for the law enforcement officer. Students will learn the legal framework necessary for law enforcement officers to conduct their duties legally.

CRJ 225 Criminal Evidence 3 (3,0,0,0)

A study of evidence rules and procedural laws affecting criminal evidence. Overview of the appeal process with particular attention to recent U.S. Supreme Court Decisions. Prerequisite: CRJ 104.

CRJ 229B Defensive Tactics 3 (1,4,0,0)

Protection against persons armed with dangerous and/or deadly weapons. Demonstration and drill in a number of holds, come alongs, restraints and baton use.

CRJ 233 Nevada Criminal Law 3 (3,0,0,0)

To familiarize 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. Prerequisite: CRJ 104.

CRJ 235 Legal Method and Process 3 (3,0,0,0)

Federal and local judicial systems, analysis and synthesis of judicial opinions, the methods of interpretation of statutes, and the role of the courts in conflict resolution. Prerequisite: CRJ 104.

CRJ 239B Gaming Crimes 3 (3,0,0,0)

This course will provide a basic understanding of gaming crimes including the appropriate legal definitions and efforts made to reduce these crimes. Topics covered will include cheating and detection, Nevada's "Black Book", gambling addiction and treatment, criminal and civil penalties, and the role of the Nevada Gaming Commission. Prerequisite: CRJ 104.

CRJ 261 Intelligence Analysis and Security Management 3 (3,0,0,0)

This course examines intelligence analysis and its indispensable relationship to the security management of terrorist attacks, man-made disasters and natural disasters. It also explores vulnerabilities of our national defense and private sectors, as well as the threats posed to these institutions by terrorists, man-made disasters, and natural disasters. Students will discuss substantive issues regarding intelligence support of homeland security measures implemented by the United States and explore how the intelligence community operates. Prerequisite: CRJ 108 or EMA 101.

CRJ 270 Introduction to Criminology 3 (3,0,0,0)

A study of society's efforts to explain and control criminal behavior; discussion of the prevailing theories related to crime in organized society. Prerequisites: CRJ 104, 120, and 130.

CRJ 286 Sexual Abuse of Children 3 (3,0,0,0)

This course focuses on the complex issues associated with the sexual abuse of children. Emphasis will be on the definition of crimes against children, typology of offenders and victims, sex registration laws, and the roles of criminal justice agencies. Course meets police agency standards.

CRJ 290 Internship in Criminal Justice 3 (0,0,0,3)

Work with selected administration of justice agencies. This class can be repeated for a maximum of 6 credits. Prerequisites: CRJ 104 and permission of the instructor.

Cardiorespiratory Sciences

CRS 100B Introduction to Respiratory Therapy 1 (1,0,0,0)

Defines role of Respiratory Therapy. Education, job description, and outlook of the profession are presented. Fundamental equipment will be explored through hands-on manipulation.

CRS 111 Introductory Concepts of Cardiorespiratory Sciences 3 (3,0,0,0)

Presents an overview of health care delivery system and cardiorespiratory professional structures. Basic CRS care modalities are emphasized in context of clinical practice guidelines, therapist-driven protocols, and critical pathways. Prerequisite: Admission to CRS program.

CRS 112 Introductory Concepts of Cardiorespiratory Equipment 1 (0,4,0,0)

Emphasizes skill development of non-critical cardiorespiratory care treatment modalities. Equipment application and operation theory presented in context of guidelines, protocols, and pathways. Corequisite: CRS 111.

CRS 115 Clinical Practicum I 4 (0,0,16,0)

Introduces the non-critically ill cardiorespiratory patient in the clinical setting. Emphasizes hospital decorum, professionalism, equipment theory and application, guidelines, protocols and pathways. Corequisite: CRS 111.

CRS 121 Advanced Concepts of Cardiorespiratory Sciences 3 (3,0,0,0)

Introduces acute (critical) cardiorespiratory care emphasizing all aspects of mechanical ventilation and patient monitoring. Critical thinking skills will be further developed through simulated cardiorespiratory care plans. Prerequisite: CRS 115.

**CRS 122 Advanced Concepts
of Cardiorespiratory
Equipment 1 (0,4,0,0)**

Emphasizes skill development of critical cardiorespiratory care treatment modalities. Mechanical ventilation, physiological monitoring, and other application and operation theory presented in context of guidelines, protocols and pathways. Corequisite: CRS 121.

**CRS 123 Applied Cardiorespiratory
Assessment 3 (3,0,0,0)**

Presents cardiopulmonary disease assessment, including chest physical exam, chest x-ray, and physiological monitoring. Case studies will assist respiratory care plan development based on guidelines, protocols and pathways. Corequisite: CRS 121.

**CRS 124 Cardiorespiratory
Pharmacology 3 (3,0,0,0)**

Presents a pharmacological basis of cardiorespiratory interventions. Additionally, integrates this knowledge with aerosol, intramuscular, and intravenous medication administration techniques. Corequisite: CRS 123. Prerequisite: CRS 115.

CRS 125 Clinical Practicum II 4 (0,0,16,0)

Introduces the critically ill cardiorespiratory patient in the clinical setting. Emphasis on mechanical ventilation, physiological monitoring and other advanced therapeutic modalities. Corequisite: CRS 121.

CRS 135 Clinical Practicum III 3 (2,0,3,0)

Structured preparation for the Certified Cardiographic Technician Examination (Cardiovascular Credentialing International) and Advanced Cardiac Life Support; includes EKG interpretation and supportive clinical experience.

**CRS 211 Neonatal and Pediatric
Cardiorespiratory Care 3 (3,0,0,0)**

Emphasizes cardiorespiratory pathophysiology of the pediatric/neonatal patient. Introduction and advanced pediatric/neonatal concepts developed in context of clinical practice guidelines, therapist driven protocols and critical pathways. Prerequisite: CRS 125.

**CRS 212 Neonatal and
Pediatric Cardiorespiratory
Equipment 1 (0,4,0,0)**

Emphasizes skill development of neonatal/pediatric cardiorespiratory care. Equipment application and operation theory of mechanical ventilation and physiological monitoring presented. Corequisite: CRS 211.

**CRS 213 Cardiorespiratory
Diagnostics 3 (3,0,0,0)**

Presents theoretical aspects of the cardiorespiratory diagnostic procedures, Holter recording, echocardiography, pulmonary function testing, stress testing, and basic polysomnography. Emphasizes application of acquired data to care plans. Corequisite: CRS 211.

**CRS 214 Cardiorespiratory
Diagnostics Equipment 1 (0,4,0,0)**

Introduces skill development of non-invasive cardiorespiratory diagnostics. Equipment application and operation theory presented in context of care plan expectations. Corequisite: CRS 213.

CRS 215 Clinical Practicum IV 4 (0,0,16,0)

Emphasizes student exposure to multiple cardiorespiratory diagnostic laboratories. Rotations include non-invasive cardiorespiratory function, basic polysomnography and critical care. Continued application of guidelines, protocols and pathways. Corequisite: CRS 211.

**CRS 221 Continuity of
Cardiorespiratory Care 3 (3,0,0,0)**

Presents cardiorespiratory care needs of chronically ill, discharge planning, care management, patient education, alternative care sites, and home care. Psychological issues of geriatric care are discussed. Prerequisite: CRS 215.

CRS 222 Seminar for Success 1 (1,0,0,0)

Prepares student with a process and content review of the NBRC credentialing examinations. Successful passage of NBRC self assessment examination required. Corequisite: CRS 221.

CRS 225 Clinical Practicum V 4 (0,0,16,0)

Introduces student to chronically ill patient care in non-hospital and home settings. Successful passage of NBRC clinical simulation self-assessment examination required. Corequisite: CRS 221.

**CRS 312 Cardiorespiratory
Leadership Dynamics 3 (3,0,0,0)**

Prepares the student to be a department and community leader. Focus on techniques relevant to staffing, budgetary needs, inventory control, biomedical services, contractual processing and negotiations, lease and rental agreements.

**CRS 313 Education and Mentoring
in the Cardiorespiratory
Setting 3 (3,0,0,0)**

Prepares students to educate all populations from hospital inpatients, outpatients, hospital employees, and students in both the didactic and clinical settings.

CRS 315 Clinical Practicum VI 4 (0,0,16,0)

An advanced clinical practicum for the working Respiratory Therapist. Focus is individualized for each student. Corequisite: CRS 312.

CRS 322 Research and Evidence-Based Practice 3 (3,0,0,0)

An introduction to evidence-based practice and respiratory care research. Overview of research methodology, statistical analyses, ethical considerations, critical evaluation of peer-reviewed literature, systems change theories, and quality improvement.

CRS 412 Long-Term and Palliative Survey of Cardiorespiratory Care 3 (3,0,0,0)

Topics pertinent to long-term care facilities including ethics, care, rehabilitation, reimbursement, family interaction, psychology of long-term illness (both patient and family). Palliative care, hospice philosophy, end-of-life topics.

CRS 421 Essentials of Sleep 3 (3,0,0,0)

Emphasizes skill development in polysomnography. Introduction to sleep disorders, including monitoring techniques and instrumentation. Documentation of laboratory experience is required. Optional concentration on polysomnography in CRS 422 and CRS 425 as corequisite will prepare student for the NBRC Sleep Diagnostic Specialist exam.

CRS 422 Special Project in Cardiorespiratory Sciences 1 (0,0,0,3)

Students select area of desired specialty. Specialty must match area of desired clinical concentration in CRS 425. Development of faculty-guided research article, poster presentation, or community advocacy project required. Corequisite: CRS 425.

CRS 425 Clinical Practicum VII 4 (0,0,16,0)

Students may select area of clinical specialization which may prepare them for a national certification. Specialty areas include polysomnography, asthma/COPD, simulation, teaching practicum, adult critical care, neonatal or pediatric intensive care, pulmonary diagnostics, or point-of-care. Corequisite: CRS 422.

Computer Science

CS 117 Programming for Scientists and Engineers 3 (3,0,0,0)

This course is intended for students in science or engineering majors. It will cover structured approach to programming and problem solving in Fortran language, including use of standard library routines. Emphasis will be placed on techniques of good programming style and on solving numerical problems commonly encountered in science and engineering. Prerequisite: MATH 181.

CS 135 Computer Science I 3 (3,1,0,0)

This course is intended for students in computer science or engineering majors. It covers: a) Program development in a complex operating environment; b) Problem-solving methods and algorithm development in a high-level programming language; c) Program design, coding, debugging, and documentation using techniques of a good programming style. Prerequisite: MATH 127 or 128.

CS 202 Computer Science II 3 (3,0,0,0)

This course is the continuation of CS 135. It covers: a) Data structures and algorithms for manipulating linked lists; b) String and file processing; c) Recursion. Software engineering, structured programming and testing, especially larger programs are also covered in this course. Prerequisite: CS 135.

Cisco

CSCO 105B Fundamentals of Voice and Data Cabling 3 (2,2,0,0)

This course will provide the student academic knowledge and experience relating to the physical aspects of voice and data networks. Training will be given on how to identify cable types; design, install, and troubleshoot cabling plants. Training is in a hands-on, group oriented lab environment that will stress documentation, design, installation issues, and on the job safety. Successful students will be prepared to complete the BICSI Installer Level 2c certification exam.

CSCO 109B PC Troubleshooting and Repair 3 (2,2,0,0)

This hands-on, lab-oriented Cisco course will develop the necessary skills to enter this field by building a computer, installing the operating system, adding peripherals, connecting the computer to a local area network and to the Internet, while stressing laboratory safety and working effectively in a group environment.

CSCO 120 CCNA Internetworking Fundamentals 4 (3,2,0,0)

This is a networking fundamentals course that introduces students to the architecture, structure, functions, components, and models of the Internet and other computer networks. 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. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced.

CSCO 121 CCNA Routing Protocols and Concepts 4 (3,2,0,0)

This is one of four courses that apply toward the preparation for a CCNA certification. This course describes the architecture, components, and operation of routers, and explains the principles of routing and routing protocols. Students analyze, configure, verify, and troubleshoot the primary routing protocols RIPv1, RIPv2, EIGRP, and OSPF. Prerequisite: CSCO 120.

CSCO 130B Fundamentals of Wireless LANs 3 (2,2,0,0)

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. Prerequisite: CSCO 121B.

CSCO 205B Fiber Optic Cabling 1-4 (0-3,0-2,0,0)

Intermediate Cabling course on Fiber Optics system concepts, design, installation, and troubleshooting. Covered items include cable splicing, terminating and installing optical fiber cable, field terminology and using test equipment. This course can be repeated for up to a total of 4 credits.

CSCO 220 CCNA LAN Switching and Wireless Fundamentals 4 (3,2,0,0)

This is one of four courses that applies toward the preparation for a CCNA certification. This course helps students develop an in-depth understanding of how switches operate and are implemented in the LAN environment for small and large networks. Beginning with a foundational overview of Ethernet, this course provides detailed explanations of LAN switch operation, VLAN implementation, Rapid Spanning Tree Protocol (RSTP), VLAN Trunking Protocol (VTP), Inter-VLAN routing, and wireless network operations. Students analyze, configure, verify, and troubleshoot VLANs, RSTP, VTP, and wireless networks. Campus network design and Layer 3 switching concepts are introduced. Prerequisite: CSCO 120.

CSCO 221 CCNA WAN Fundamentals 4 (3,2,0,0)

This is one of four courses that applies toward the preparation for a CCNA certification. It explains the principles of traffic control and access control lists (ACLs) and provides an overview of the services and protocols at the data link layer for wide-area access. Students learn how to implement and configure WAN protocols. WAN security concepts, tunneling, and VPN basics are also introduced. Prerequisite: CSCO 220.

CSCO 230B Fundamentals of Network Security 4 (3,2,0,0)

The Fundamentals of Network Security course is designed to prepare students for certification in this field (Cisco and CompTIA security exams). The course teaches students to design and implement security solutions to reduce the risk of revenue loss and vulnerability. This course combines hands-on experience, instructor-led lectures, and a Web based curriculum for students. The course is an introduction to network security and overall security processes. This course prepares the student for successful completion of the Cisco CCNA Security certification exam. Students taking this course are assumed to have already obtained, through coursework or industry experience, the knowledge required to pass the Cisco CCNA exam.

CSCO 280 CCNP ROUTE 4 (3,2,0,0)

The CCNP ROUTE course prepares students with the knowledge and skills necessary to use advanced IP addressing and routing in implementing scalability for Cisco ISR routers connected to LANs and WANs. The course is recommended preparation for the CISCO CCNP Certification Exam, ROUTE. Prerequisite: CSCO 221 or CCNA certification.

CSCO 281 CCNP Implementing Secure Converged Wide Area Networks 4 (3,2,0,0)

This course prepares students with the knowledge and skills necessary to secure and expand the reach of an enterprise network to teleworkers and remote sites with focus on securing remote access and VPN client configuration. The course covers topics on the Cisco hierarchical network model as it pertains to the WAN, teleworker configuration and access, frame mode MPLS, site-to-site IPSEC VPN, Cisco EZVPN, strategies used to mitigate network attacks, Cisco device hardening and IOS firewall features. This course is recommended preparation for the Implementing Secure Converged Wide Area Networks exam required to become a Cisco Certified Network Professional (CCNP). Prerequisite: CSCO 221 or CCNA certification.

CSCO 282 CCNP Multilayer Switching 4 (3,2,0,0)

This course prepares students with the knowledge and skills necessary to implement scalable multilayer switched networks. This course includes topics on Campus Networks, describing and implementing advanced Spanning Tree concepts, VLANs and Inter-VLAN routing, High Availability, Wireless Client Access, Access Layer Voice concepts, and minimizing service Loss and Data Theft in a Campus Network. This course is recommended preparation for the Multi-layer Switching exam required to become a Cisco Certified Network Professional (CCNP). Prerequisite: CSCO 221 or CCNA certification.

CSCO 283 CCNP Optimizing Converged Internetworks 4 (3,2,0,0)

This course prepares students with the knowledge and skills necessary in optimizing and providing effective QoS techniques for converged networks. The course topics include implementing a VOIP network, implementing QoS on converged networks, specific IP QoS mechanisms for implementing the DiffServ QoS model, AutoQoS, wireless security and basic wireless management. This course is recommended preparation for the Optimizing Converged Cisco Networks exam required to become a Cisco Certified Network Professional (CCNP). Prerequisite: CSCO 221 or CCNA certification.

CSCO 284B CCNP TSHOOT 4 (3,2,0,0)

This course prepares the student for the Cisco TSHOOT certification exam. It teaches students how to monitor and maintain complex, enterprise routed and switched IP networks. Skills learned include the planning and execution of regular network maintenance, as well as support and troubleshooting using technology-based processes and best practices, based on systematic and industry recognized approaches. Extensive labs emphasize hands-on learning and practice to reinforce troubleshooting techniques.

Culinary Arts

CUL 100 Sanitation/HACCP 2 (2,0,0,0)

Theory and practice of Culinary Sanitation. Course covers proper food handling techniques, food borne illness prevention and introduction to “Hazard Analysis Critical Control Point” method of kitchen operations. Meets standards of National Sanitation Certification.

CUL 110 Basic Cookery 4 (2,4,0,0)

Introduction to culinary fundamentals, techniques and skills of modern cookery. Class covers procedures, ingredients and cooking theories.

CUL 115 Introduction to Butchery and Charcuterie 3 (2,3,0,0)

Students will learn proper receiving, inspection, and fabrication of meats, poultry, fish and shellfish. Basic techniques of smoking and force meat production will also be covered. Prerequisites: CUL 110, FAB 102.

CUL 125 Principles of Baking 3 (2,3,0,0)

This course will cover baking ingredients, use of equipment, proper storage and sanitation methods. Students will learn how to produce yeast products, pastries, pies, cookies and quick breads. Prerequisite: FAB 102.

CUL 130 Garde Manger 3 (2,3,0,0)

Fundamentals of pantry with proper techniques and procedures in egg cookery, hot and cold sandwiches, lunch and dinner salads and dressings, basic garnishes, canapés and hot and cold appetizer production. Prerequisites: CUL 110, FAB 102.

CUL 135 Breads of the World 3 (2,3,0,0)

Students will learn measuring methods and scaling techniques, proper handling of yeast doughs, specialty doughs, different batters, and laminated doughs. Prerequisite: FAB 102.

CUL 140 Catering Operations 3 (2,3,0,0)

This course teaches students how to plan and execute various types of catered events. The course will include planning, pricing, organization and preparation of the event. This includes planning and production of foods from assorted cuisines. Both front and back of the house operations will be covered. Prerequisites: CUL 110, FAB 102.

CUL 175 Cake Design 3 (2,3,0,0)

Students will learn basic mixing techniques, ingredients, measuring and scaling. Instruction includes production of icings, fillings, specialty cakes, and cake decorating. Prerequisites: CUL 125, FAB 102.

CUL 200 Aromatics/Restaurant Experience 4 (2,4,0,0)

Students will learn basic history and use of herbs and spices. They will learn how to enhance foods through proper usage. This class includes participation in actual restaurant operations. Prerequisites: CUL 110, FAB 102.

CUL 215 Plated Desserts 3 (2,3,0,0)

Introduction to hot, cold, and frozen desserts. Students will learn how to make ice creams, sorbets, and parfaits. This course will cover chocolate decorations and the creation of plate presentations using fresh fruits and dessert sauces. Prerequisites: CUL 125, FAB 102.

CUL 220 International Cuisine 4 (2,4,0,0)

Study of international foods with an emphasis on authentic ingredients and their proper usage. Participation in restaurant operations is included in this class. Prerequisites: CUL 110, 200, FAB 102.

CUL 225 Advanced Baking 3 (2,3,0,0)

This course will cover advanced and specialty breads, brioche and coffee cakes. Students will also learn how to make puff dough pastries, quiches, custards, and ice cream and sorbets. Prerequisites: CUL 125, FAB 102.

CUL 230 Pastry Arts 3 (2,3,0,0)

Course study will include European Pastries. Emphasis will be placed on ingredients, techniques, measuring, sealing, assembly and storage. Prerequisites: CUL 125, FAB 102.

CUL 235 Advanced Garde Manger 3 (2,3,0,0)

Preparation techniques for force meats, mousses, galantines, terrines and pates. Perform cheese, salt, tallow and ice sculpting. Discuss hot and cold food competition guidelines. Prerequisites: CUL 130, FAB 102.

CUL 240 French Cuisine 4 (2,4,0,0)

Culinary fundamentals of classical cuisines are practiced in a weekly preparation of gourmet menus in a restaurant setting. Special emphasis is placed on proper cooking techniques. Prerequisites: CUL 110, 200, FAB 102.

CUL 250 Saucier 3 (2,3,0,0)

Basic sauce concepts and technical guidelines to produce high quality sauces. Covers stocks, thickening agents, reductions, liaisons, purees, mother sauces and compound derivations. Prerequisites: CUL 110, 200, FAB 102.

CUL 255B Retail Bakery Management 3 (2,3,0,0)

This course introduces students to the application of baking and pastry arts production techniques in a wholesale and/or retail setting. The student is introduced to the theory regarding proper techniques for marketing and merchandising baked goods. Cost control for bakeries as well as recipe standardization and conversion, production planning, purchasing, costing and price for profit will be looked at. It will also feature the theory and practice of pastry buffet planning including themes and presentations. Prerequisites: CUL 125, FAB 102.

CUL 260 Introduction to Chocolate 3 (2,3,0,0)

This course will cover the use of tempered chocolate for dipping, molding, and decorating. Students will learn to develop creative skills using chocolate. This course also covers techniques in piping, modeling, cutouts and curls. Prerequisite: FAB 102.

CUL 265 Introduction to Sugar Arts 3 (2,3,0,0)

This course will cover the fundamentals of the art of pulled sugar including product identification, proper production techniques, and proper usage. Students will learn to create pulled sugar pieces, blown sugar pieces and poured pieces. They will also learn to use them in the design and production of centerpieces. Prerequisite: FAB 102.

CUL 270 Ice Carving 1 (1,1,0,0)

A basic class devoted to developing the skills necessary to plan and produce functional and decorative Ice Sculptures. The class covers the safe use of hand and power tools as well as methods and procedures for transport and display.

CUL 275 Advanced Cake Design 3 (2,3,0,0)

This course covers advanced techniques in cake decorating. Students will learn how to make advanced icings such as fondant and royal icing, and how to assemble and decorate advanced specialty and wedding cakes. Prerequisite: CUL 175.

CUL 280B Principles of Quantity Baking 3 (2,3,0,0)

This course will emphasize fundamental baking and pastry production techniques used in wholesale and/or retail bakeries. The student will participate in the production of scratch baking and commercial product usage. Group practice skills in team building and communication will be covered. American and European style pastry products will be featured. Baker's percentages and conversion will be emphasized. Prerequisites: CUL 125, FAB 102.

CUL 285B Advanced Chocolate 3 (2,3,0,0)

The various methods for tempering and the different types of chocolate will be reviewed. Students will learn advanced molding, shaping and texturing techniques. Creating an advanced showpiece will also be covered. Prerequisites: CUL 260, FAB 102.

CUL 290 Culinary Competition 3 (2,4,0,0)

Covers both category A and B for food shows based on the American Culinary Federation guidelines. Student may choose either category for the practical hands-on. Prerequisite: FAB 102.

CUL 295 Work Experience in Culinary Arts 1 (0,0,0,1)

In addition to the academic requirements, the Department of Hospitality Management requires 200 hours of acceptable employment in the hospitality industry. This work experience will be measured qualitatively as well as quantitatively. The work experience requirement should be met during the school year or in summers. Students who plan to transfer to UNLV will be able to transfer a maximum of 500 hours of employment toward UNLV's 1000-hour employment requirement. International students must go to the office of International Student Services to verify employment eligibility and obtain authorization. This course can be repeated up to a maximum of four credits. Grade will be given upon verification of employment.

Dental Assisting**DA 106B Radiation Protection for Dental Auxiliaries 1 (1,0,0,0)**

Course designed to acquaint the participant with radiation hazards and protection services for patient and operator.

DA 107B Intraoral Radiographic Technique 2 (1,2,0,0)

Production of dental radiographs including processing, mounting and eliminating errors. Participants will expose, mount and critique a complete radiographic survey of a mannequin and selected patients.

DA 108B Introduction to Dental Assisting 2 (2,0,0,0)

Overview of the dental occupations, dental terminology, dental history, interpersonal relationships and employment requirements.

DA 115B Dental Health Education 1 (1,0,0,0)

Principles of preventive dentistry to include: nutritional physiology, essentials and counseling effect of nutrition on dental health; epidemiology, etiology and prevention of dental disease; design and management of a plaque control program and additional preventive measures, i.e., fluoride and sealant utilization.

DA 118B Dental Materials for Dental Assistants 3 (2,3,0,0)

Composition, characteristics, physical properties and uses of materials commonly used in dental practice. Includes laboratory practice in manipulating dental materials.

DA 119B Dental Chairside Procedures 4 (2,8,0,0)

Development of the dexterity needed to assist in four-and six-handed dentistry, demonstrating proper posture and form at chairside. Positive communication, sterilization, disinfection, and neatness are stressed, plus knowledge of instruments, dental operative procedures, manipulation of cements, bases and impression materials.

DA 120B Introduction to Dental Insurance 1 (1,0,0,0)

Introduction to dental insurance processing including alternative payment plans. Introduction to CDT coding.

DA 123B Practice Management and Procedures 3 (3,0,0,0)

Principles of dental office routine, reception duties, book-keeping, appointment control, correspondence, telephone technique, filing, interview techniques, and computer applications.

DA 124B Integrated Science for Dental Assistants 4 (4,0,0,0)

Anatomy and physiology of the body systems, with special emphasis on the head and neck. Embryology, histology and tooth morphology are included.

DA 126B Clinical Externship 6 (1,0,0,20)

Supervised clinical dental assisting experience in selected private dental practices and public clinics.

DA 128B Dental Radiology 3 (2,3,0,0)

An introduction to basic concepts of radiology, including radiation protection, intraoral and panoramic techniques of film exposure, processing and mounting.

DA 136B Dental Specialties 3 (3,0,0,0)

A survey of the role of the dental assistant in the specialties of dentistry including orthodontics, pedodontics, oral surgery, periodontics, endodontics, and prosthodontics.

DA 299B Independent Study 1-5 (1-5,0,0,0)

Selected topics of interest to dental assisting students.

Dance

DAN 101 Dance Appreciation 3 (3,0,0,0)

A multicultural exploration of the world's first and most universal art form. Ballet history, sex and social dance, the politics of dance and 20th century self-expression among others are investigated through lecture, video and demonstration.

DAN 108 Pilates I 1 (1,2.5,0,0)

Pilates based floor work emphasizing increased flexibility and strength with application to dancers and non-dancers alike.

DAN 115 Middle Eastern Dance I 1 (1,2.5,0,0)

Learn to isolate and undulate gracefully to the mysterious sounds of Middle Eastern music. Explore the ancient arts of belly dance and the people throughout history who have contributed to its evolution.

DAN 119 Swing Dance 1 (1,2.5,0,0)

Further development of swing dance styles introduced in beginning ballroom dance. Students should have taken DAN 125 or equivalent. This course may be repeated to a maximum of four credits.

DAN 125 Ballroom Dance (Beginning) 1 (1,2.5,0,0)

Instruction in the major ballroom dances, including waltz, swing, fox trot, tango, rumba, and the cha-cha.

DAN 126 Ballroom Dance (Beginning/Intermediate) 1 (1,2.5,0,0)

Continuation of beginning ballroom dance. Students should have taken DAN 125 or equivalent. This course may be repeated to a maximum of four credits.

DAN 128 Latin Dance 1 (1,2.5,0,0)

Further development of Latin dances introduced in beginning ballroom dance. Students should have taken DAN 125 or equivalent. This course may be repeated to a maximum of four credits.

DAN 132 Jazz Dance (Beginning) 1 (1,2.5,0,0)

Beginning techniques of jazz dance.

DAN 133 Jazz Dance (Beginning/Intermediate) 1 (1,2.5,0,0)

Continuation of beginning jazz dance. Students should have taken DAN 125 or equivalent. This course may be repeated to a maximum of four credits.

DAN 135 Ballet (Beginning) 1 (1,2.5,0,0)

Beginning techniques and theory of classical ballet. This course may be repeated to a maximum of four credits.

DAN 136 Ballet (Beginning/Intermediate) 1 (1,2.5,0,0)

Continuation of beginning ballet with more demanding concepts and skills. Students should have taken DAN 135 or equivalent. This course may be repeated to maximum of four credits.

DAN 138 Modern Dance (Beginning) 1 (1,2.5,0,0)

Introductory technique and theory of modern concert dance. This course may be repeated up to a maximum of four credits.

DAN 139 Modern Dance (Beginning/Intermediate) 1 (1,2.5,0,0)

Continuation of Modern Dance (Beginning). Students should have taken DAN 138 or equivalent. This course may be repeated to a maximum of four credits.

DAN 144 Tap Dance (Beginning) 1 (1,2.5,0,0)

Beginning techniques of tap dancing.

DAN 145 Tap Dance (Beginning/Intermediate) 1 (1,2.5,0,0)

Continuation of beginning tap dance. Students should have taken DAN 144 or equivalent. This course may be repeated to a maximum of four credits.

DAN 175 Yoga for Dancers 1 (1,2.5,0,0)

Yoga techniques of stretching and breathing applied to the dancer's instrument with resultant stress relief, increased flexibility and enhanced physical alignment.

DAN 188 Dance Improvisation 2 (2,1.5,0,0)

Development of performance and compositional skills through the exploration and analysis of basic dance elements including time, shape, space, motion and dynamics.

DAN 215 Middle Eastern Dance II 1 (1,2.5,0,0)

A continuation of learning to isolate and undulate gracefully to the mysterious sounds of Middle Eastern music. A further exploration of the ancient arts of belly dance and the people throughout history who have contributed to its evolution. Students should have taken DAN 115 or equivalent. Course will build on the fundamentals of Middle Eastern dance technique.

DAN 225 Ballroom Dance (Intermediate) 1 (1,2.5,0,0)

Intermediate techniques of ballroom dance. Students should have taken DAN 125 or equivalent. This course may be repeated to a maximum of four credits.

DAN 232 Jazz Dance (Intermediate) 1 (1,2.5,0,0)

Intermediate techniques of jazz dance. Students should have taken DAN 132 or equivalent. This course may be repeated to a maximum of four credits.

DAN 235 Ballet (Intermediate) 1 (1,2.5,0,0)

Intermediate technique and theory of classical ballet. Students should have taken DAN 136 or equivalent. This course may be repeated to a maximum of four credits.

DAN 236 Ballet (Intermediate/Advanced) 1 (1,2.5,0,0)

A continuation of Ballet (Intermediate). Students should have taken DAN 235 or equivalent. This course may be repeated to a maximum of four credits.

DAN 238 Modern Dance (Intermediate) 1 (1,2.5,0,0)

Intermediate technique and theory of modern concert dance. Students should have taken DAN 138 or equivalent. This course may be repeated to a maximum of four credits.

DAN 239 Modern Dance (Intermediate/Advanced) 1 (1,2.5,0,0)

Continuation of Modern Dance (Intermediate). Students should have taken DAN 238 or equivalent. This course may be repeated to a maximum of four credits.

DAN 244 Tap Dance (Intermediate) 1 (1,2.5,0,0)

Intermediate techniques of tap dance. Students should have taken DAN 144 or equivalent. This course may be repeated to a maximum of four credits.

DAN 245 Repertory Tap Dance 1 (1,2.5,0,0)

Learning of tap repertory and new choreography leading to performance opportunities. Students should have taken DAN 144 or equivalent. This course may be repeated to a maximum of four credits.

DAN 281 Dance Performance 1 (1,2.5,0,0)

Learning of repertory and new choreography leading to performance opportunities. Students should have taken DAN 144 or equivalent. This course may be repeated to a maximum of four credits.

DAN 284 Dance Project 1 (0,1,0,0)

Complete production of a dance piece including choreography, sound score selection, costume design, and all production aspects to result in performance of the piece in the CSN Student Dance Concert. Restricted to AA Dance Emphasis candidates. Prerequisites: DAN 188, 288.

DAN 287 Concert Dance Company 1 (1,2.5,0,0)

Professionally structured rehearsals of repertory and new choreography in preparation for formal performances, educational outreach programs and possible touring. Students should also be registered for a combination of technique courses: DAN 138 and DAN 235, or DAN 136 and DAN 238, or DAN 235 and DAN 238. Class size for DAN 287 is limited and audition will be the first day of class.

DAN 288 Choreography 2 (2,1.5,0,0)

Introduction to the art of making dances with emphasis on the manipulation of time, shape, space, motion and dynamics.

Dental Hygiene

DH 100B Introduction to Dental Hygiene 1 (0.5,0,0,1)

Guided study of the role, responsibilities, and career opportunities of the dental hygienist. Field observation required.

DH 102 Oral Biology 3 (2,3,0,0)

Histology and embryology of oral structural formation. Clinical recognition of normal oral structures, study of physiological and structural functions of the teeth, head and neck and supporting tissues. Prerequisite: Any Anatomy and Physiology course with a lab.

DH 104 Dental Hygiene I 3 (3,0,0,0)

Introduction to dental hygiene practice. Use and care of instruments, medical and dental histories, emergencies, infection control, appointment procedures and clinical operations. Corequisite: DH 105.

DH 105 Introduction to Clinical Practice 2 (0,0,7,1)

Clinical application of diagnostic, preventive and therapeutic procedures utilized in patient care by a dental hygienist. Corequisite: DH 104.

DH 107 Legal and Ethical Implications in Dental Hygiene 2 (2,0,0,0)

Introduction to professional, legal and ethical concepts in Dental Hygiene.

DH 108B Concepts of Prevention 2 (2,0,0,0)

Basic concepts of oral hygiene care, adjunctive aids and foundations of preventive oral health services. Introduction to deposits, stains and fluorides.

DH 110 Concepts of Oral Health 2 (1,3,0,0)

Basic concepts of oral health care, adjunctive aids and foundation of preventive strategies. Introduction to product evaluation, disease process, needs assessment, behavior modification, learning principles, deposits, stains and fluoride.

DH 112 Oral Radiology 3 (2,3,0,0)

A study of the theory of radiology, the techniques of film exposure, processing, mounting and interpreting. Radiation dosage and hazards as well as protection services for patient and operator are stressed.

DH 115 Clinical Practice I 3 (0,0,10,2)

Practice in performing oral prophylaxis, sterilization, patient management, patient education, fluoride use, charting, inspection of teeth, patient scheduling and recare systems. Prerequisites: DH 104, 105.

DH 116B Supervised Clinical Practice 1 (0,0,4,0)

This course is designed to provide continuity of clinical practice. The student will continue to improve clinical skills. Graded Pass/Fail only. Course may be repeated up to 5 times.

DH 117 Periodontics I 2 (1,3,0,0)

Advanced instrumentation, ultrasonic devices, root planing, curettage, subgingival irrigation and hypersensitivity. Application of sealant material, instrument sharpening, dental implants and study of occlusion.

DH 119 General and Oral Pathology for Dental Hygienists 2 (2,0,0,0)

The fundamentals of microscopic and gross pathology disease, repair, healing and regression. Special emphasis: diseases, developmental disturbances, infection, lesions, and injuries to the oral cavity.

DH 122 Nutritional Aspects in Dentistry 2 (2,0,0,0)

Introduction to principles of basic biochemistry and the relationship of nutrition to oral health. Application of nutritional education to dental hygiene practice: provide nutritional assessment.

DH 202 Pharmacology 2 (2,0,0,0)

A study of drugs by groups with special emphasis on those used in dentistry including their physical and chemical properties, dosage and therapeutic effects.

DH 203 Special Patients 2 (2,0,0,0)

Considerations in the treatment of patients with specific physical and mental challenges with a special emphasis on the management of the geriatric patient.

DH 208 Community Dental Health I 2 (2,0,0,0)

Functions of health care agencies, literature, epidemiology of dental diseases, community preventive measures, program planning, the geriatric population and dental health educational methods.

DH 209 Pain and Anxiety Control 3 (2,0,3,0)

Administration of local anesthetics and nitrous oxide/oxygen analgesia. Pharmacological agents, physical and emotional evaluation of patients, anatomy and neurophysiology. Management of related medical emergencies.

DH 210 Clinical Dental Hygiene II 4 (0,0,14,2)

Clinical application of diagnostic, preventive, and therapeutic procedures utilized in patient care by a dental hygienist. Prerequisite: DH 115.

DH 211 Dental Materials and Techniques for Dental Hygienists 2 (1,3,0,0)

Study of dental materials including physical and chemical properties, manipulation, utilization, and application in dental and dental hygiene procedures.

DH 212 Periodontic Principles II 2 (2,0,0,0)

Fundamental principles of periodontics, etiology, histopathology, classification of gingival and periodontal diseases, prevention and non-surgical treatment.

DH 216 Principles of Dental Practice 1 (1,0,0,0)

Concepts of dental office management, productivity, marketing, interviewing and responsibilities of professionals.

DH 217 Periodontics III 1 (1,0,0,0)

Advanced study of periodontology with special emphasis on new surgical modalities and equipment. Orientation to all aspects of periodontal practice.

DH 219 Community Dental Health Field Experience 1 (0,0,4,0)

Prepares student to function as an effective oral health educator, practitioner, and resource person in public health settings. Prerequisite: DH 208.

DH 220 Clinical Dental Hygiene III 4 (0,0,14,2)

A continuation of Clinical Dental Hygiene II. Prerequisite: DH 210.

DH 296 Board Review 1 (1,0,0,0)

Covers a review of topics in preparation for the Dental Hygiene National Board Examination.

DH 297B Pain Management for the Dental Professional 3 (1,0,6,0)

Administration of local anesthetics and nitrous oxide analgesia. Pharmacologics, patient evaluation, anatomy and neurophysiology, management of medical emergencies. Prerequisite: Program Director permission.

DH 298B Dental Hygiene Career Skills 2 (1,0,3,0)

Review of essential dental hygiene skills for clinical examination preparation or re-entry into the dental hygiene profession. Graded Pass/Fail only. Prerequisite: Program Director permission.

DH 299B Independent Study 1-5 (1-5,0,0,0)

Covers selected topics of interest to dental hygiene students including review for Dental Hygiene National Board Examination. Graded Pass/Fail only. Prerequisite: Instructor permission and department chair.

DH 400 Group Dynamics and Human Relationships 3 (3,0,0,0)

Emphasis on interpersonal, intrapersonal, and group relationships. Students will develop skills in communication, leadership, and team building. Prerequisite: Admission to Dental Hygiene Bachelor of Science Program.

DH 402 Public Health and Special Populations 2 (2,0,0,0)

Historical and evolutionary concepts of public health. Exploration of social responsibility and population characteristics. A basic knowledge of working with special populations in Public Health. Prerequisite: Admission to Dental Hygiene Bachelor of Science Program.

DH 404 Research Methodology 2 (2,0,0,0)

Fundamental and working knowledge of the scientific method employed in oral health research. Critical analysis of research. Utilization of scientific research and supporting evidence-based publications. Prerequisite: Admission to Dental Hygiene Bachelor of Science Program.

DH 406 Health Care Administration 2 (2,0,0,0)

Introduction to health administration, evaluation of settings, and interventions. Emphasis on dental care in the United States and government policies that affect these areas. Prerequisite: Admission to Dental Hygiene Bachelor of Science Program.

DH 408 Teaching Concepts for the Oral Health Professional 2 (2,0,0,0)

Introduction to the basic concepts of teaching. Includes teaching philosophies and methodologies. Emphasis on units of learning, learning objectives, and lesson plans. Prerequisite: Admission to Dental Hygiene Bachelor of Science Program.

DH 410 Cross Cultural Communication in Health Care 3 (3,0,0,0)

Assists students with understanding of multi-cultural differences by integrating various cultural beliefs and attitudes with language skills. Prerequisite: Admission to Dental Hygiene Bachelor of Science Program.

DH 412 Dental Public Health Administration 2 (2,0,0,0)

Foundational concepts of leadership skills as applied to oral health programs, program management, legal, financial and ethical considerations. Communication with the grant writing process is presented. Prerequisites: DH 402, and 404 and admission to Dental Hygiene Bachelor of Science Program.

DH 418 Advanced Education Concepts 2 (2,0,0,0)

Emphasis will be placed on curriculum planning and implementation. New classroom technology will be emphasized. Prerequisites: DH 408 and admission to the Dental Hygiene Bachelor of Science Program.

DH 422 Oral Epidemiology and Biostatistics 2 (2,0,0,0)

Principles and methods of epidemiologic investigation and the use of classical statistical approaches to describe the oral health of populations. Prerequisites: DH 402 or consent of instructor and admission to Dental Hygiene Bachelor of Science Program.

DH 428 Clinical/Laboratory Teaching 2 (1,0,0,4)

Provides students with knowledge and skills in clinical instruction. Psychomotor skill development, analysis and remediation of performance problems. Includes seminar and student teaching externship. Drug test required for externship. Prerequisites: DH 418 and admission to Dental Hygiene Bachelor of Science Program.

DH 440 Capstone Seminar I 2 (2,0,0,0)

Provides opportunity to develop an action plan to solve a problem or meet the needs within one of the respective professional tracks. Prerequisites: Completion of all DH core courses and admission to the Dental Hygiene Bachelor of Science Program.

DH 442 Capstone Seminar II 2 (2,0,0,0)

Provides opportunity to implement action plan developed within one of the professional tracks. Final Course in BSDH Program. Prerequisites: DH 440 and admission to Dental Hygiene Bachelor of Science Program.

Diesel Technology

DT 104 Diesel Equipment Service 4 (1,6,0,0)

Preventive maintenance procedures of the major components of heavy equipment, use of hand and power tools service manuals, precision measurement, and equipment out of service standards.

DT 115 Diesel/Heavy Equipment Electrical Systems 4 (1,6,0,0)

This course introduces electrical systems on modern trucks and construction equipment. Theory of electricity and electronics, types of electrical circuits, wiring, components and use of test equipment are covered as well as diagnostics of batteries, starting and charging systems. Prerequisite: DT 104.

DT 117 Advanced Diesel/Heavy Equipment Electronics 4 (1,6,0,0)

Advanced troubleshooting of AC and DC, electronic circuits, on board computers, electronically controlled components including convenience accessories and hydraulic controls. This course prepares the student for the ASE T6 certification exam. Prerequisite: DT 115 or instructor approval.

DT 136 Diesel Engine Repair I 4 (1,6,0,0)

Students develop basic knowledge of design, construction and operating principles of diesel engines. This course emphasizes service, maintenance, diagnosis and repair of internal engine components including lubrication and cooling systems. Prerequisite: DT 104.

DT 138 Diesel Engine Repair II 4 (1,6,0,0)

Students study components, maintenance, diagnostics and repair of modern diesel engines with a specific focus on intake, fuel delivery, and exhaust systems. This course prepares the student for the ASE T2 certification exam. Prerequisite: DT 136 or instructor approval.

DT 145 Diesel Brake Systems 4 (1,6,0,0)

This course provides students with knowledge of medium and heavy duty hydraulic and airbrake systems including study in components, maintenance, diagnostics, and repair. This course prepares the student for the ASE T4 certification exam. Prerequisite: DT 115.

DT 155 Steering, Suspension and Hydraulic Directional Controls 4 (1,6,0,0)

Prepares the student with the knowledge and skills needed to adjust, diagnose, service and repair mechanical and hydraulic directional control, as well as suspension systems found on trucks and construction equipment. This course prepares the student for the ASE T5 certification exam. Prerequisite: DT 104.

DT 165 Diesel/Heavy Equipment Heating, Air Conditioning 4 (1,6,0,0)

This course covers theory, diagnostics, maintenance and service of air conditioning equipment found on truck cabs and off-road equipment. Emphasis is placed on diagnosis of various refrigerant systems while demonstrating knowledge and practice of EPA compliance requirements. Prerequisite: DT 115.

DT 205 Diesel/Heavy Equipment Drive Train and Axles 4 (1,6,0,0)

This course includes the study of heavy truck chassis heavy duty transmissions, drivelines, power dividers, differentials as well as torque converters, torque dividers, power shift transmissions, planetary and gear final drives, tracks, rollers and idlers. Emphasis is placed on troubleshooting and service procedures required. Prerequisite: DT 104.

DT 295 Internship Co-Op I 2 (0,0,0,10)

Cooperative education course, designed to provide the student with on-the-job supervised and educationally directed work experience. Each course except DT 295 will have a prerequisite of successful completion of the preceding Work Experience course.

DT 296 Internship Co-Op II 2 (0,0,0,10)

Cooperative education course, designed to provide the student with on-the-job supervised and educationally directed work experience. Each course except DT 295 will have a prerequisite of successful completion of the preceding Work Experience course.

DT 297 Internship Co-Op III 2 (0,0,0,10)

Cooperative education course, designed to provide the student with on-the-job supervised and educationally directed work experience. Each course except DT 295 will have a prerequisite of successful completion of the preceding Work Experience course.

Early Childhood Education

ECE 121 Parent Caregiver Relationships 1 (1,0,0,0)

A course designed for Early Childhood students in which they can acquire various communications skills to enhance parent/caregiver relationships.

ECE 122 Observation Skills 1 (1,0,0,0)

A course designed to expose parents and teachers to various formal and informal observation methods that will enhance their observation and recording skills.

ECE 123 Health and Nutrition for Young Children 1 (1,0,0,0)

Study includes nutrition, health safety, infectious disease, first aid, and preventative measures for accidents and spread of diseases.

ECE 127 Role of Play for Infants and Toddlers 1 (1,0,0,0)

Emphasis on techniques and play materials for use in the home and child care setting which will foster the child's total development from birth to 2 1/2 years.

ECE 130 Infancy 3 (3,0,0,0)

Study of social, emotional, language and sensorimotor development in infancy. Emphasis placed on skills and facilitating optimum infant development.

ECE 134 Guiding Infant/Toddlers 1 (1,0,0,0)

A guidance course based on knowledge of developmental levels coupled with realistic expectations for behavior. Emphasis on positive teaching and parenting approaches.

ECE 138 Step Families 1 (1,0,0,0)

A course for parents and teachers focusing on the unique dynamics of step families, and the special issues of adults and children living in them.

ECE 151 Math in the Preschool Curriculum 1 (1,0,0,0)

A study of mathematical development in young children. Emphasis on teaching techniques, materials and activities for supporting math development.

ECE 152 Science in the Preschool Curriculum 1 (1,0,0,0)

Study of young child's emerging awareness of the biological and physical environment. Emphasis on supportive teaching techniques, materials and activities.

ECE 153 Language Development in the Preschool 1 (1,0,0,0)

Study of the development of language in preschool children. Exposure to activities and materials for fostering development of receptive and expressive language skills in the preschool.

ECE 154 Literature for Preschool Children 1 (1,0,0,0)

Brief survey of literature and poetry for use with preschool children. Techniques for integrating literature into the preschool curriculum will be examined.

ECE 155 Literacy and the Young Child 1 (1,0,0,0)

The development of learning activities and materials which augment and enhance the development of literacy skills in the young child.

ECE 156 Music in the Preschool Curriculum 1 (1,0,0,0)

Teaching techniques and music activities for young children. Focus on listening, singing, rhythm and creative movement.

ECE 157 Art in the Preschool Curriculum 1 (1,0,0,0)

A study of artistic/creative development. Emphasis on teaching techniques for supporting and enhancing artistic/creative development using a range of materials and activities.

ECE 158 Activities for Physical Development in Young Children 1 (1,0,0,0)

A study of teaching techniques, materials and activities for supporting and enhancing gross motor development with a focus on both patterned and creative movement.

ECE 159 After School Activities 1 (1,0,0,0)

Developing curriculum for the school-aged child in after school programs. Emphasis on appropriate teaching techniques, materials, activities and nutritious snacks.

ECE 162 Teaching the Two-Year-Old 1 (1,0,0,0)

Study of the physical, cognitive, and social-emotional characteristics of two year old children. Emphasis on choosing learning materials and equipment and on planning appropriate activities for two year olds in music, art, physical education, math, science, language development, literature, and reading readiness.

ECE 163 The School Age Child 3 (3,0,0,0)

Study of the social, emotional, physical and cognitive development of the child from 6-12 years with emphasis on facilitation of optimum development.

ECE 200 The Exceptional Child 3 (3,0,0,0)

A survey of the characteristics and requirements of children with special needs. Focus on the various exceptionalities, legislation affecting persons with special needs, and the impact of special needs upon the family and the individual.

ECE 202 Understanding Human Growth and Development 3 (3,0,0,0)

The class will provide a comprehensive introduction to the principles and basic concepts of child development. The course integrates the dimensions of physical, cognitive and psychosocial development into each major state of the child's life – prenatal, infancy, preschool years, middle childhood and adolescence.

ECE 204 Principles of Child Guidance 3 (3,0,0,0)

A focus on support and enhancement of the child's social/emotional development, social skills, and self-esteem through the use of positive guidance.

ECE 231 Preschool Practicum 3-4 (0,0,0,9-12)

A student teaching experience either on or off campus. Instructor approval required. Must be concurrently enrolled in ECE 245 Practicum Seminar.

ECE 232 Practicum: Infant and Toddler 3-4 (0-1,0,0,6-12)

A student teaching experience in an infant/toddler setting either on or off campus. Concurrent enrollment in ECE 245 MAY be required. Instructor approval.

ECE 233 Practicum in Early Childhood Special Education 3 (0,0,0,9)

A practical course focusing on the development of techniques, strategies and adaptations needed to implement the inclusion of pre-school children with special needs.

ECE 235 Adapting Curricula for Young Children with Special Needs 3 (3,0,0,0)

Course focuses on adapting typical early childhood curricula to meet the needs of infants, toddlers and preschoolers with special needs. Prerequisites: ECE 200, and 251, or ECE 252.

ECE 238 Family and Community Relations 1 (1,0,0,0)

Requires participation in the Community College Early Childhood Education Lab. Class, conferences, discussion and community resources studied and applied to home and school needs. May repeat course once.

ECE 240 Administration of the Preschool 3 (3,0,0,0)

Principles and practices of preschool organization and administration; organizational structure, budgeting, personnel policies, record keeping, licensing regulations, safety, nutrition, and health issues.

ECE 241 Practicum for Teacher Aides 4 (0,0,0,16)

A teaching experience as an aide in an elementary classroom. Corequisites: ECE 245 and department approval.

ECE 245 Practicum Seminar 2 (2,0,0,0)

A required seminar for students concurrently enrolled in ECE 231, or 241. Instructor approval.

ECE 250 Introduction to Early Childhood Education 3 (3,0,0,0)

An introduction to early childhood education. A course which deals with the total program: types, objectives, philosophy, curriculum, physical plant and equipment as these aspects relate to needs and interests of adults and children involved in early childhood field.

ECE 251 Curriculum in Early Childhood Education 3 (3,0,0,0)

Study of curriculum models; developmental learning theories; and curriculum planning and implementation in early childhood programs. Prerequisite: ECE 250.

ECE 252 Infant/Toddler Curriculum 3 (3,0,0,0)

Planning and implementing a curriculum for children age 0-2 1/2 years emphasizing physical, emotional, social and cognitive development through daily routines and planned activities.

ECE 254 Applied Child Guidance 3 (3,0,0,0)

A course focusing on the practical application of positive guidance methods and the concept of family systems. Prerequisite: ECE 204.

ECE 260 Children's Literature 3 (3,0,0,0)

Survey of children's literature and poetry for teachers and parents. Emphasis on developing literacy and strategies for integrating children's literature into school and home environments.

ECE 273 Individual Child and Community 3 (3,0,0,0)

Study of the impact growing up in a changing world has on the development of children. Emphasis on the process of socialization.

ECE 274 Individual Child and Family 3 (3,0,0,0)

Study of the family as a system and the way it evolves and nurtures the child.

ECE 285 Current Issues in Infancy 2 (2,0,0,0)

Study of the current trends and issues in infancy and their impact on working with infants.

Economics

ECON 100 Introduction to Economics 3 (3,0,0,0)

This course is intended for students with no prior background in business or economics. It is study of basic macroeconomics, microeconomics, and international economics principles, as well as current global economic and social issues. The course introduces the student to basic economic concepts and applications emphasizing the economic way of thinking. The student will, therefore, relate principles such as scarcity, opportunity cost, and cost-benefit analyses to everyday real world economic situations.

ECON 102 Principles of Microeconomics 3 (3,0,0,0)

An examination of the price theory for product market models and consumer demand models with attention focused on the application of price theory in current economic issues. Prerequisite: MATH 124.

ECON 103 Principles of Macroeconomics 3 (3,0,0,0)

A study of the determination of levels of national income, employment, prices and basic causes of fluctuation of these levels. Prerequisite: MATH 124.

ECON 180 The Economics of Discrimination 3 (3,0,0,0)

The Discrimination of Economics investigates the economic causes, effects, and remedies of discrimination based on categories such as age, ethnicity, gender, religion, national origin, or sexuality. (Same as WMST 180.)

ECON 261 Principles of Statistics I 3 (3,0,0,0)

Introduction to descriptive statistics, probability and expectations, theoretical distributions, hypothesis testing and regression analysis. The emphasis is on use, application, and interpretation of statistical techniques. Prerequisite: MATH 124.

ECON 262 Principles of Statistics II 3 (3,0,0,0)

Advanced statistical techniques, including multiple regression, the classical time series model, analysis of variance and non-parametric statistics. Prerequisite: ECON 261 or instructor permission.

ECON 274 Investment Economics 3 (3,0,0,0)

This course will explore the basic scientific paradigms and applications to micro-finance and investing. Topics will include individual securities, equity, fixed income, governments, global issues, bond funds, limited partnerships, options, futures, monetary market systems, real estate investing, microbanking, precious metals, antiques and collectables, micro-financial planning and many others.

ECON 275 Risk Management Economics 3 (3,0,0,0)

This is a course of study in the theory and practice of risk management and insurance economics. Topics include risk management typology and Cyber risk models/applications, wealth creation and conversation, estate planning science, life insurance market, health risk management, senior risk management, basic insurance ethics, federal and state insurance laws and codes and many others.

ECON 276 Internship in Financial Economics 3 (1,0,0,8)

Interactive participation with numerous financial institutions in applying practical financial and investment tools and policies toward the completion of a research financial and investment project.

ECON 295 Special Topics in Economics 1-3 (1-3,0,0,0)

Topics of current interest in applied economics and finance. This develops awareness of and appreciation for applied economics. May be repeated for a maximum of six credits.

ECON 320 Economics of Health and Health Care 3 (3,0,0,0)

Economics of health care sector including physician, allied health professional, hospital and insurance markets. Emphasis on the role of government, private sector, information and externalities in health care outcomes. Prerequisites: ECON 102 or consent of the instructor and Admission to Dental Hygiene Bachelor of Science Degree Program.

Education

EDU 201 Introduction to Elementary Education 3 (3,0,0,0)

Introductory course in teacher education that examines the role of the elementary school teacher in today's society; historical, philosophical, cultural, and social domains are investigated. Strategies for effective interpersonal communication are explored. Foundations for the practice of teaching are explored and practiced at an introductory level. Observation in a local elementary school is required.

EDU 202 Introduction to Secondary Education 3 (3,0,0,0)

Introduction to the historical and philosophical foundations, settings, problems, and issues related to contemporary secondary schooling and its complexities. Current issues and educational foundations (multicultural, social, and psychological) emphasized. Observation in a classroom is required.

EDU 203 Introduction to Special Education 3 (3,0,0,0)

This course provides an overview of special education. Focus is on characteristics of learners with disabilities and on the historical, social and legal foundations of special education. The course is designed for undergraduate students in special education, general education, nursing, counseling, psychology and related fields. Observation in a classroom is required.

EDU 207 Exploration of Children's Literature 3 (3,0,0,0)

Survey of children's literature genres. Censorship, historical background, children's interests, literature programs and book evaluation.

EDU 210 Nevada School Law 2 (2,0,0,0)

This course is designed to acquaint prospective teachers with the legal aspects of the school setting.

EDU 214 Preparing Teachers to Use Technology 3 (3,0,0,0)

Overview of uses of computers in education, including the use of the computer as a teacher utility, the use of application programs, and the selection and use of educational software.

EDU 215 Substitute Teaching Essentials: Introduction 1 (1,0,0,0)

This course is designed to encourage students to consider substitute teaching. Focus will be on interviewing, first aid and CPR, communication, and code of ethics.

EDU 216 Substitute Teaching Essentials: Preparation and Planning 1 (1,0,0,0)

This course prepares the novice substitute teacher to become successful at planning, organizing and using skills and strategies that affect the classroom daily routine.

EDU 217 Substitute Teaching Essentials: School Procedures 1 (1,0,0,0)

This course is designed to give substitute teachers an insight on the best practices of the school environment and how to prepare and handle policies and procedures during the daily routine.

EDU 220 Principles of Educational Psychology 4 (4,0,0,0)

The psychology of learning, motivation, growth and development, personality, dynamics, and social adjustment. Prerequisite: 33 total credits.

EDU 240 Introduction to Classroom Management 3 (3,0,0,0)

This course will provide an introduction to classroom management theories and techniques: building a classroom management system, producing responsible behavior, and maintaining positive classroom management.

EDU 270 Internet Research in Education 3 (3,0,0,0)

This course is designed to help students learn more about information resources available when conducting research in the field of education and other subjects; identifying and mastering appropriate Internet research tools (search engines, directories, databases, digital libraries, e-journals, bibliographies, encyclopedias); developing research strategies, and critically evaluating Internet information.

EDU 280 Valuing Cultural Diversity 3 (3,0,0,0)

Introduces preservice educators to microcultures which may include class, ethnicity, gender, exceptionalities, religion, language, and age. Culturally appropriate pedagogical practices, dimensions of multicultural education and educational implications of diversity emphasized.

EDU 295 Special Topics in Education 1-6 (1-6,0,0,0)

This course will provide content benefitting preservice teachers in preparation for the classroom and a career in education.

EDU 298 Introduction to Gifted Education 3 (3,0,0,0)

Study of educational programs for gifted children, including identification, characteristics, history, philosophy and programming options. Investigations on research, creativity, intelligence and special populations will also be covered.

EDU 299 Education Portfolio 1 (1,0,0,0)

Students will compile a final portfolio of artifacts from their CSN education coursework for use in education department program assessment and for supporting students in applying for undergraduate teacher education program and/or for future employment. The Education portfolio serves as the capstone for the CSN Elementary, Secondary, Special Education, and Early Childhood Education Emphasis AA Degrees. Prerequisite: Instructor permission.

Electrical Engineering

EE 190 Electrical and Computer Engineering Freshman Design 1 (0,3,0,0)

This course is an introduction to history and overview, as well as design principle in electrical and computer engineering. It covers a) working safety, professional ethics lectured by guest engineers from local industries, b) various branches of electrical and computer engineering lectures lectured by various professors, c) construction and test of various electrical circuits and computer system.

EE 220 Circuits I 3 (3,0,0,0)

This course is an introduction to linear circuit analysis. It covers Kirchhoff's laws, node and loop analysis, Thevenin, Norton, and other circuit network theorems, operational amplifiers, first order RL and RC circuits, second order RLC circuits. Corequisite: EE 220L.

EE 220L Circuits I Discussion and Laboratory 1 (0,3,0,0)

This discussion and laboratory course covers: 1) Introduction to PSpice, a simulation tool for electrical circuits, problem solving using PSpice, 2) Multisim, schematic capture/simulation software, problem solving using Multisim, 3) Test equipment including power suppliers, multimeters, function generator, and oscilloscopes. Prerequisites: EE 190 and MATH 182.

EE 221 Circuits II 3 (3,0,0,0)

EE 221 is the second semester of a one-year course to study electrical circuits. It covers a) sinusoidal steady state analysis by using phasors, sinusoidal steady state power; b) the Laplace transform and its applications to circuit analysis and network function; c) magnetically coupled circuits and transformers; d) circuit analysis in s-domain, and frequency response. Prerequisite: EE 220.

EE 221L Circuits II Laboratory 1 (0,3,0,0)

This laboratory course covers operation of general and special purpose electrical test equipment in AC circuit. Students will design, build, and test 1) RL, DC and RLC circuits, 2) Transformer circuits to measure AC power, 3) Frequency response circuits. Computer simulation software PSpice and Multisim will also be used in this course. Corequisite: EE 221.

Engineering

EGG 125B Civil-Survey Design 3 (2,2,0,0)

Advanced subdivision, street and utility horizontal design and computations; basic map preparation; methods and procedures for construction surveying of civil-designed improvements.

EGG 131 Technical Physics I 4 (3,3,0,0)

This course is designed for students in technical areas to study physics. Numerical calculations are intensive. This is the first semester of a one-year course. It covers equilibrium, motion, dynamics, wave and fluid mechanics. Prerequisites: MATH 111B, 116 or above (except MATH 122, 123).

EGG 132 Technical Physics II 4 (3,3,0,0)

Continuation of EGG 131. Covers thermodynamics, electricity, magnetism, basic AC/DC circuits, solid state physics, optics, and an introduction to modern physics. Prerequisite: EGG 131.

EGG 206 Engineering Mechanics I 3 (3,0,0,0)

Engineering analysis of concentrated and distributed force systems at equilibrium. Prerequisites: MATH 181, DFT 207, or instructor approval.

Emergency Management Administration

EMA 101 Principles of Emergency Management 3 (3,0,0,0)

This course introduces students to the fundamental aspects of emergency management. Students will learn the principles of emergency management and be able to work with the main emergency management issues. The course also describes how various emergency management services work together in a system of resources and capabilities.

EMA 102 Disaster Mitigation and Preparedness 3 (3,0,0,0)

This course is designed to introduce students to the process and practice of emergency planning. The course covers a range of strategies and skills that planners require to achieve a successful planning process for dealing with disasters in future time, and those that must be considered when planning for implementing the emergency plan at the time of disaster impact. Prerequisite: CRJ 108 or EMA 101.

EMA 120 Emergency Operations Centers 3 (3,0,0,0)

This course provides information on how to determine the best location for an emergency operations center (EOC), and describes the factors that should be considered in choosing its physical design. It describes the most prevalent approaches to EOC functions and the reasons for using them in organizing an EOC. The course also stresses the importance of standard operating procedures (SOPs) in EOC operations, and the requirements for conducting exercises and evaluations of the EOC. Prerequisite: CRJ 108 or EMA 101.

EMA 130 Role and Scope of the Public Information Officer 3 (3,0,0,0)

This course provides students with the basic skills needed to perform public information duties as they relate to emergency management. It focuses on the definition of the job of the public information officer (PIO) as well as the skills needed for that position. The course also covers the Joint Information System element of the National Incident Management System. Prerequisites: CRJ 108 or EMA 101 and COM 101.

EMA 140 Disaster Response and Recovery 3 (3,0,0,0)

This course introduces the basic concepts of disaster response and recovery. Concepts include the roles and responsibilities of emergency management stakeholders. Describes how roles and responsibilities differ in response versus recovery. Prerequisite: CRJ 108 or EMA 101.

EMA 220 Emergency Simulations and Exercises 3 (3,0,0,0)

This course provides students with the knowledge and skills to develop and conduct disaster exercises that can be used to test emergency operations plans and operational response capabilities of organizations, businesses and communities. The course also addresses and satisfies the National Exercise and Evaluation Program criteria. Prerequisite: CRJ 108 or EMA 101.

EMA 230 Incident Command System (ICS) and National Incident Management System (NIMS) 3 (3,0,0,0)

The Incident Command System (ICS) National Training Curriculum covers introductory (overview, orientation and basics), intermediate and advanced elements of the National Incident Management System (NIMS). This course provides ICS management tools for all levels of users. Prerequisite: CRJ 108 or EMA 101.

EMA 250 Terrorism Response Planning 3 (3,0,0,0)

This course identifies policies and procedures for the emergency management administrator and staff. It evaluates Emergency Operations Plans (EOPs) as well as other government entities. The EMA manager will learn about hard and soft targets in his/her jurisdiction. Prerequisite: CRJ 108 or EMA 101.

Emergency Medical Services

EMS 108B Emergency Medical Technician Training 8 (7,3.5,0,0)

Basic emergency medical training in trauma and medical patient assessment, airway management, fracture and wound care, basic pharmacology and semiautomatic external defibrillation. Course satisfies local fire department testing prerequisite. Healthcare Provider CPR card, current immunizations, background check, drug screen and health insurance required. Corequisites: EMS 108L and EMS 150B.

EMS 109B Basic EMT Refresher 2 (1.5,1,0,0)

A 40-hour refresher course to update the skills of the Basic EMT. Required every two years for the Basic EMT in order to keep certification current. Review of the skills taught in basic course, new skills and new information that has become part of the EMS curriculum. Prerequisites: EMS 108B and/or current certification within the last two years as a Basic EMT.

EMS 110B Secondary EMS Instructor 2 (2,0,0,0)

A 24-hour course for experienced providers that presents introductory concepts, resources, and skills to effectively deliver quality EMS education. Includes essential instructor knowledge, such as: psychology of learning, classroom management, legal issues, and evaluation practices. Prerequisites: Currently certified as an AEMT or Paramedic with at least two (2) years of full-time or five (5) years of volunteer/part time EMS experience, or consent of EMS Program Director.

EMS 112B Primary EMS Instructor 1 (1,0,0,0)

A 16-hour course for experienced instructors that provides the fundamental knowledge essential to being a Primary EMS Instructor. Content will focus on the educational processes, and learning theories and practice. It will provide practical experience in teaching strategies and facilitation techniques. Approaches to assessment and evaluation using observation, practice and reflection are presented. Prerequisite: Currently certified as a Secondary EMS Instructor at any provider level, or consent of EMS Program Director.

EMS 115B Advanced Emergency Medical Technician 7 (6,3,0,0)

Instructs in the roles and responsibilities for the Advanced EMT. Skills include, but are not limited to patient assessment skills, intravenous therapy, advanced airway management, basic electrophysiology, radio communications, and pharmacology for the Advanced EMT. Current certification as an EMT, current immunizations, background check, drug screen and health insurance required. Corequisites: EMS 115L, and EMS 116B.

EMS 116B AEMT Clinical Practice 1 (0,0,7,0)

Field training for the Advanced EMT student. Will involve in-hospital rotations, field ambulance training, and community service. Corequisite: EMS 115B. Prerequisites: Current certification as an EMT, current immunizations, background check, drug screen and health insurance required.

EMS 117B Clinical Practicum 1 (0,0,4,0)

Supervised application of EMT Intermediate skills in the field and/or hospital setting. Emphasis will be on patient assessment, EKG interpretation, pharmacology applications, advanced and basic airway management. Prerequisites: Current enrollment or acceptance in the CSN Paramedic program. Current certification as an Intermediate EMT, current immunizations, health insurance required.

EMS 125B Pharmacology for Paramedics 3 (3,0,0,0)

A fundamental course in pharmacology for the prehospital health provider. Areas of emphasis are the pharmacodynamics and pharmacokinetics of drug therapy, roles and responsibilities of drug administration and dosage calculations. Covers common drug classifications found in the prehospital setting. Prerequisite: Current enrollment in CSN Paramedic training.

EMS 127B Paramedic Clinical Practice I 2 (0,0,16,0)

Supervised application in a hospital and prehospital setting of the skills learned in aggregate Paramedic Training. Emphasis will be on patient assessment, recognition and management of medical and trauma emergencies. Grading to be on a Pass/Fail basis. Prerequisite: Current enrollment in CSN Paramedic Training.

EMS 129B Paramedic Fundamentals 3 (2,3,0,0)

Basic aspects of patient assessment, airway management, communications, medical and legal considerations, and the moral and ethical aspects of pre-hospital emergency care. Prerequisite: Current enrollment in CSN Paramedic training.

EMS 130B Paramedic Assessment I 1 (0,3,0,0)

This course will develop introductory patient assessment and history taking skills necessary for further progression through the Paramedic program. Students shall build upon previously learned skills acquired within the EMT and/or AEMT coursework, while implementing ECG monitoring and pharmacological interventions as learned in other classes. Prerequisite: Current enrollment in CSN Paramedic Program.

EMS 145B Essentials of Paramedic Medicine 3 (3,0,0,0)

Course will allow the participant to apply the information gained from previous course work. Basic aspects of EMS systems, patient assessment skills, documentation, advanced airway procedures, and special circumstances such as assault and abuse, bioterrorism, and crime scene awareness will be addressed. This course will be tailored to advancing the students' understanding of these subjects through both lecture and hands-on practice. Prerequisite: Current enrollment in CSN paramedic program.

EMS 150B EMT Clinical Practice 1 (0,0,6,0)

This course places the EMT in the skill performance clinical arena. Areas of emphasis are to include, but are not limited to: Community Service Projects, Pre-Hospital EMS Ride-a-longs, Labor and Delivery rotations, In-hospital Emergency Department rotations, and Psychiatric observation rotations. Corequisite: EMS 108B and EMS 150B must be taken currently.

EMS 165B Pathophysiology for Paramedics 3 (3,0,0,0)

A correlative approach to pathophysiology employing both physical assessment skills and a basic cellular understanding to the various disease entities and trauma processes. Prerequisite: Current enrollment in CSN Paramedic Training.

EMS 166B Paramedic Technology 4 (3,3,0,0)

Instructs in the recognition and management of medical and traumatic emergencies, which includes advanced airway management, advanced invasive procedures, medication administration and electrical therapy modalities. Prerequisite: Current enrollment in CSN Paramedic Training.

EMS 167B Paramedic Clinical Practice II 2 (0,0,16,0)

Supervised application in a hospital and prehospital setting of the skills learned in aggregate Paramedic Training. Emphasis will be on patient assessment, recognition and management of medical and trauma emergencies. Grading to be on a Pass/Fail basis. Prerequisite: Current enrollment in CSN Paramedic Training.

EMS 168B Electrophysiology/ Electrocardiography 3 (3,0,0,0)

Instructs in the anatomy and physiology of the conduction system of the heart, the electrical system and electrocardiography, abnormal EKG patterns and the recognition and management of dangerous or life-threatening dysrhythmias. Includes an introduction to 12-lead ECG interpretation. Prerequisite: Current enrollment in CSN Paramedic Training.

EMS 169B Advanced Cardiac Life Support (ACLS) 1 (0.75,0.5,0,0)

Instructs in the most current standards of the American Heart Association for ACLS. Class is offered in seminar format over two days. Prerequisites: Admission to CSN Paramedic Training or permission, current AHA healthcare provider CPR card.

EMS 171B Prehospital Trauma Life Support (PHTLS) 1 (0.75,0.5,0,0)

Instructs in the assessment and management of the critical trauma patient according to national PHTLS format. Course is ALS in format, but may be suitable for very experienced Intermediate level providers. Class is offered in seminar format over two days. Prerequisite: Enrollment in CSN Paramedic Training or department approval.

EMS 172B Vehicle Extrication for Paramedics 2 (1.75,0.5,0,0)

Vehicle extrication operations level is a participative course designed for pre-hospital care providers in NFPA 1670. Enhances and incorporates new knowledge and skills necessary to access, extricate, and care for victims of crash incidents. Provides knowledge in scene management and familiarization with local resources needed to mitigate incidents. Provides knowledge for competence at hazardous materials awareness level. Includes National Fire Academy ICS for EMS training. Prerequisite: Enrollment in CSN Paramedic training.

EMS 173B Paramedic Field Internship 3 (0,0,0,24-32)

Field internship allowing students to practice and apply advanced life support knowledge and skills. Each student will be a third person on a Paramedic rescue unit and will work directly with a Paramedic preceptor. Grading to be on a Pass/Fail basis. Prerequisites: Completion of CSN Paramedic training to date, local provisional Paramedic Certificate, and six months of 911 transport experience.

EMS 174B EMT Paramedic Refresher 4 (3,2,0,0)

An 80-hour refresher course to update the skills of the EMT Paramedic. Required every two years for the EMT Paramedic in order to keep certification current. Review of the skills taught in basic and intermediate courses, new skills and new information that have become part of the program. Prerequisite: Current certification as an EMT Paramedic within the last two years.

EMS 176B Pediatrics for Paramedics 4 (3,3,0,0)

Instructs in a comprehensive approach to the pediatric patient from birth to adolescence. Course will include AHA-Pediatric Advanced Life Support Curriculum (PALS). Prerequisite: Current enrollment in CSN Paramedic training.

EMS 180B Intermediate EMT Refresher 3 (2.5,1,0,0)

A 60-hour refresher course to update the skills of the Intermediate EMT. Required every two years for the Intermediate EMT in order to keep certification current. Review of the skills taught in basic and intermediate courses, new skills and new information that have become part of the program. Prerequisites: EMS 115B and/or current certification within the last two years as an Intermediate EMT.

EMS 185B Advanced Emergency Care 3 (3,0,0,0)

Instructs in the recognition and management of medical and traumatic emergencies, which includes advanced care for hemorrhage and shock, traumatic brain injuries, burns, thoracic and abdominal trauma, allergies and anaphylaxis, toxicology, and hazmat operations. Prerequisite: Current enrollment in CSN paramedic program.

EMS 190B Emergency Medical Dispatch 3 (2,0,4,0)

Designed to perform emergency dispatch using the Emergency Priority Dispatch Systems. Students identify the correct chief complaint or incident type, prioritize response assignments, provide life-sustaining support, handle difficult callers and reduce the potential for life-threatening mistakes.

EMS 201B Operations and Management in EMS 1 (1,0,0,0)

Includes EMS system planning, organizing, directing, quality control, financing, stress management, and interagency communications. Will also address current issues in EMS locally and nationally. Prerequisite: Current EMT Paramedic certification or permission.

EMS 202B Advanced ECG Interpretation 1 (1,0,0,0)

Introduction to 12 lead ECG interpretation. Topics will include intraventricular conduction delays, myocardial ischemia, injury, and infarction. Will also include pre-excitation syndrome, bundle branch blocks, ectopy, and advanced dysrhythmia interpretation. Course may be offered in seminar blocks as necessary. Prerequisite: EMS 168B or current Paramedic certification.

EMS 210B EMS Instructor 4 (3,0,0,3)

An 80-hour program designed for the experienced provider who desires to assist and participate in the EMS education process. Involves learning how to teach adult students the cognitive, psychomotor, and affective domain skills in the EMS classroom. Effective evaluation tools and training in emotional intelligence is also included. Students will participate in a 40-hour mentoring practicum. Prerequisites: One year professional or volunteer EMS experience, demonstrated emotional intelligence and consent of EMS Program Director.

EMS 212B EMS Preceptor Training 2 (0,6,0,0)

A 16-hour training for the experienced provider that will enable them to monitor and evaluate progress of the EMS student. Management, discipline, and the development of an engaging learning environment will be presented. Student, preceptor, and patient emotional intelligence evaluation will be developed. Prerequisites: One year professional or volunteer EMS experience and demonstrated emotional intelligence.

EMS 220B Advanced Paramedic Skills 2 (0,6,0,0)

This course will allow the participant to apply the information gained from Pathophysiology, Electrophysiology, Pharmacology, Paramedic Fundamentals, Paramedic Technology, Pediatrics, ACLS, PHTLS, PALS/PEP, and CPR. All aspects of the EMS system will be addressed. This course will be tailored to advancing the students understanding of all Paramedic subjects through practical skill scenarios. Prerequisite: Current enrollment in CSN Paramedic Program.

EMS 230B Paramedic Assessment II 1 (0,3,0,0)

This course will allow the participant to apply the information gained from Pathophysiology, Electrophysiology, Pharmacology, Paramedic Fundamentals, Paramedic Technology, ACLS, PHTLS and the Pediatric course in a manner that emphasizes proper patient assessment, the development of a proper treatment plan and implementation of that plan. This course will be tailored to advancing the students understanding of all Paramedic subjects through practical skills scenarios in preparation for EMS 173B. Prerequisites: Current enrollment in CSN Paramedic Program, EMS 130B.

English

ENG 092 College Prep English I 5 (5,0,0,0)

Emphasis on college-level reading and writing. Practice in paragraph construction and the introduction to the complete essay. Review of grammar/punctuation skills and sentence structure. Guidance and instruction in integrating reading and writing skills. Prerequisite: Placement Test.

ENG 098 Preparatory Composition 3 (3,0,0,0)

Intensive reading and writing course focusing on college-level critical reading and essay writing strategies. This course was designed for students whose ACT or SAT scores indicate that they would benefit from an additional semester of English before beginning their college-level work. Students who successfully complete ENG 098 with a grade of C- or better will be eligible to enroll in ENG 100, 101, or 113. Prerequisite: C- or better in ENG 092 or Placement Test.

ENG 100 Composition Enhanced 5 (5,0,0,0)

A writing intensive course designed to strengthen college-level composition skills, with particular attention to audience, purpose, and context for writing. Students receive extensive background in strategies of planning, drafting, and revising. Research, primary and/or secondary, is introduced as a means by which students can extend their own understanding through the use of outside resources. Additionally, critical reading and thinking strategies are developed. Extra assistance with English writing skills (grammar, sentence structure, usage, and punctuation) is provided. Students who successfully complete ENG 100 with a grade of "C-" or higher will satisfy the ENG 101 requirement and will be eligible to enroll in ENG 102. Prerequisite: English Placement Test or ENG 098 or ESL 139 with a grade of "C-" or higher.

ENG 101 Composition I 3 (3,0,0,0)

English 101 is designed to strengthen college-level writing skills, with particular attention to audience, purpose and rhetorical situation. Students receive extensive background in strategies of planning, drafting and revising. Research is introduced as a means by which students can extend their own understanding through the use of outside resources. Additionally, critical reading and thinking strategies are developed. Students who successfully complete ENG 101 with a grade of "C-" or higher will be eligible to enroll in ENG 102. Prerequisite: English Placement Test or completion of ENG 098 or ESL 139 with a grade of "C-" or higher.

ENG 101H Composition I - Honors 3 (3,0,0,0)

A writing intensive, Honors-level course designed to strengthen college-level composition skills, with particular attention to audience, purpose, and context for writing. Limited class size ensures workshop environment and activities including extensive work on planning, drafting and revising. In addition, research techniques for primary and secondary sources are introduced as a means by which students can extend their understanding through outside resources. Critical thinking and reading skills are developed and deepened through oral and written presentations. Prerequisites: Instructor approval or English Placement Test, reflecting placement in ENG 101 and admission to the Honors program.

ENG 102 Composition II 3 (3,0,0,0)

ENG 102 is a continuation and extension of ENG 101 and equivalents with attention to analytical reading and writing, critical thinking, and research methodologies, while emphasizing interpretation, analysis, synthesis, and argument. Prerequisite: C- or higher in ENG 100, 101, 101H, or 113.

ENG 102H Composition II - Honors 3 (3,0,0,0)

An Honors-level version of ENG 102 Composition II, with a more in-depth focus on workshop and research techniques. Class will continue to emphasize rhetorical methodology, while deepening a student's ability to read and write analytically, think critically, and interpret effectively. Prerequisites: C- or higher in ENG 100, 101, 101H, or 113, and admission to the Honors program.

ENG 107 Technical Communications I 3 (3,0,0,0)

Apply the techniques of the professional writing process to real world documents such as e-mails, business correspondence, proposals, reports, and web sites. Prerequisite: Placement into ENG 100, 101, 113 or a "C" or better in ENG 098 or ESL 139.

ENG 113 Composition I for International Students 3 (3,0,0,0)

A writing intensive course designed to strengthen college-level composition skills, with particular attention to audience, purpose, and context for writing. Students receive extensive background in strategies of planning, drafting, and revising. Research, primary and/or secondary, is introduced as a means by which students can extend their own understanding through the use of outside resources. Additionally, critical reading and thinking strategies are developed. Students who successfully complete ENG 113 with a grade of C- or better will satisfy the ENG 101 requirement. Prerequisite: English Placement test reflecting placement in ENG 113 or grade of C- or better in ESL 139 or ENG 098.

ENG 114 Composition II for International Students 3 (3,0,0,0)

Continuation and extension of ENG 113 and equivalents with attention to analytical reading and writing, critical thinking, and research methodologies, while emphasizing interpretation, analysis, synthesis and argument. Prerequisite: ENG 100, 101, or 113 with a C- or better.

ENG 181 Vocabulary and Meaning 2 (2,0,0,0)

Problems of meaning, word derivation and word formation are investigated with a view to enlarging and refining a working English vocabulary.

ENG 190 Science Fiction/Fantasy Literature 3 (3,0,0,0)

Reading and discussion of selected novels and short stories, with emphasis on the relationship between futuristic and imaginative concepts, the real world and traditional literature.

ENG 205 Introduction to Creative Writing: Fiction and Poetry 3 (3,0,0,0)

A course designed to give students writing experience, introduce them to marketable types of writing and sharpen their writing to commercially acceptable quality.

ENG 211 Introduction to Linguistics 3 (3,0,0,0)

An introduction to the study of language from the perspective of Modern Linguistics. The class studies the formation of sounds, words, sentences, and meaning; as well as aspects of language variation and acquisition.

ENG 220 Writing Poetry 3 (3,0,0,0)

The study of poetry writing methods and forms with concentration on the student's creative writing. This course can be repeated once. Prerequisite: ENG 205, or instructor approval.

ENG 221 Writing Fiction 3 (3,0,0,0)

A course for learning the craft of fiction writing in a workshop setting with a goal of refining the creative process, implementing critical self-editing, and developing an understanding of the aesthetics of fiction as art. This course can be repeated once for credit. Prerequisite: ENG 205, or instructor approval.

ENG 223 Themes of Literature 3 (3,0,0,0)

Themes and ideas significant in literature. May be repeated for a maximum six credits. Prerequisite: Satisfactory completion of ENG 101 or department chair or instructor approval.

ENG 224B Introduction to Screenwriting 3 (3,0,0,0)

The study of screenwriting methods and forms with a concentration on the student's creative writing.

ENG 230 Writing Creative Non-Fiction 3 (3,0,0,0)

The study of creative non-fiction writing methods and the art of the personal essay with concentration on the student's creative writing. Prerequisite: ENG 205, or instructor approval.

ENG 231 World Literature I 3 (3,0,0,0)

World Literature I explores literature from our earliest texts to c1651. Individual sections will include texts selected from around the world, and incorporate prose, poetry, and drama. Discussing the central themes of the global literary discourse will help students discover how authors have contributed to the literary tradition, recognize the influence of literature on contemporary thought, and form connections across historical, geographical, and cultural boundaries. Prerequisite: C- or better in ENG 100, 101, 101H, or 113, or Department Chair or instructor approval.

ENG 231H World Literature I - Honors 3 (3,0,0,0)

A reading intensive, Honors-level course designed to introduce students to the major figures, movements and ideas in world literature from ancient times to 1650. Prerequisites: Instructor approval or C- or better in ENG 100, 101, 101H, or 113 and admission to the Honors program.

ENG 232 World Literature II 3 (3,0,0,0)

World Literature II explores literature from c1651 to current times. Individual sections will include texts selected from around the world, and incorporate prose, poetry, and drama. Discussing the central themes of the global literary discourse will help students discover how authors have contributed to the literary tradition, recognize the influence of literature on contemporary thought, and form connections across historical, geographical, and cultural boundaries. Prerequisite: C- or better in ENG 100, 101, 101H, or 113, or Department Chair or instructor approval.

ENG 232H World Literature II - Honors 3 (3,0,0,0)

A reading intensive, Honors-level course designed to introduce students to the major figures, movements and ideas in world literature from 1650 to the present. Prerequisites: Instructor approval or C- or better in ENG 100, 101, 101H, or 113 and admission to the Honors program.

ENG 235 Survey of English Literature I 3 (3,0,0,0)

Reading and discussion of major British works and writers from Early English through the 18th Century. Prerequisite: Satisfactory completion of ENG 101 or department chair or instructor approval.

ENG 236 Survey of English Literature II 3 (3,0,0,0)

Reading and discussion of major British works and writers from late 18th Century through modern literature. Prerequisite: Satisfactory completion of ENG 101 or department chair or instructor approval.

ENG 241 Survey of American Literature I 3 (3,0,0,0)

Includes major American works and writers, Colonial Period to the Civil War, with emphasis on both enjoyment and critical appreciation of literature. Prerequisite: Satisfactory completion of ENG 101 or department chair or instructor approval.

ENG 242 Survey of American Literature II 3 (3,0,0,0)

Includes major American works and writers, Civil War to present, with emphasis on both enjoyment and critical appreciation of literature. Prerequisite: Satisfactory completion of ENG 101 or department chair or instructor approval.

ENG 243 Introduction to Short Story 3 (3,0,0,0)

Short stories read and discussed, with special emphasis on analysis and interpretation of plot, character, point of view, theme, symbol and tone. Prerequisite: Satisfactory completion of ENG 101 or department chair or instructor approval.

ENG 252 Introduction to Drama 3 (3,0,0,0)

Reading and discussion of works selected from among the best in Western Culture, including but not restricted to ancient Greek comedy and tragedy, Shakespeare, 18th Century Comedy and 19th Century Expressionism. Critical reviewing of drama, both live and on film, is promoted and encouraged. Prerequisite: Satisfactory completion of ENG 101 or department chair or instructor approval.

ENG 256 Introduction to the Literature of King Arthur 3 (3,0,0,0)

Readings in primary and secondary materials relating to the Arthurian Cycle. Prerequisite: C- or better in ENG 100, 101, 101H, or 113, or Department Chair or instructor approval.

ENG 257 Introduction to Classical Mythology 3 (3,0,0,0)

Readings in primary and secondary materials relating to the Classical Mythology. Prerequisite: C- or better in ENG 100, 101, 101H, or 113, or Department Chair or instructor approval.

ENG 261 Introduction to Poetry 3 (3,0,0,0)

Lectures and discussions about poetry intended to develop the student's ability to read, understand and evaluate a poem. Prerequisite: Satisfactory completion of ENG 101 or department chair or instructor approval.

ENG 265 Nature in Literature 3 (3,0,0,0)

Students will read, analyze, and discuss various literary expressions of our conceptions of nature. Prerequisite: C- or better in ENG 100, 101, 101H, or 113, or Department Chair or instructor approval.

ENG 267 Introduction to Women and Literature 3 (3,0,0,0)

Study of a variety of important women authors. Some semesters, offered as a study of important female characters taken from famous plays and novels. Prerequisite: C- or better in ENG 100, 101, 101H, or 113, or Department Chair or instructor approval.

ENG 268 Introduction to Migrant Literature 3 (3,0,0,0)

Themes and ideas significant in immigrant literature related to voluntary and compulsory migration. Prerequisite: Satisfactory completion of ENG 101 or department chair or instructor approval.

ENG 271 Introduction to Shakespeare 3 (3,0,0,0)

Shakespeare's principal plays read for their social interest and their literary excellence. Prerequisite: Satisfactory completion of ENG 101 or department chair or instructor approval.

ENG 271H Introduction to Shakespeare - Honors 3 (3,0,0,0)

An honors level study of Shakespeare's principal plays read for their social interest and literary excellence. Honors emphasizes an in-depth study of Shakespeare's work focusing on its relevance to modern life. Courses with "H" suffixes are designated honors level courses and can be used to fulfill equivalent general education requirements. Prerequisite: Admission to the Honors program.

ENG 272 Queer Literature 3 (3,0,0,0)

Overview of gay and lesbian literary figures from Western antiquity to present. Instruction explores love and sex between same-sex relationships through a historical and theoretical framework. Emphasis on rereading texts to discover gay and lesbian themes ignored or concealed in more traditional textual analyses.

ENG 273 Comic Books as Literature 3 (3,0,0,0)

This course will examine the power of comic books as they create and manipulate the significance of historical, social, political, and cultural issues within the framework of critical reading and literary analysis. Prerequisite: C- or better in ENG 100, 101, 101H, or 113, or Department Chair or instructor approval.

ENG 275 Contemporary Literature 3 (3,0,0,0)

Reading and discussion of recent literature of various types to acquaint students with contemporary writers. Prerequisite: Satisfactory completion of ENG 101 or department chair or instructor approval.

ENG 278 Readings in the Contemporary Novel 3 (3,0,0,0)

Study of the post-World War II novel, its development, and direction. Prerequisite: Satisfactory completion of ENG 101 or department chair or instructor approval.

ENG 284 Introduction to the Bible as Literature 3 (3,0,0,0)

Readings in primary and secondary materials relating to the Bible as Literature. Prerequisite: C- or better in ENG 100, 101, 101H, or 113, or Department Chair or instructor approval.

ENG 289 Holocaust and Genocide Literature 3 (3,0,0,0)

Focuses on literature of the World War II Holocaust and other previous and subsequent genocidal literature. Reading, discussion of selected works in social, historic, literary, comparative contexts. Prerequisite: C- or better in ENG 100, 101, 101H, or 113, or Department Chair or instructor approval.

ENG 290 Introduction to African-American Literature 3 (3,0,0,0)

Introduction to the poetry, fiction, drama, and non-fiction of African Americans.

ENG 292 Introduction to Chicano Literature 3 (3,0,0,0)

Introduction to Chicano literature through the study of classic and contemporary works of prose, poetry, and theater. Course conducted in English. Prerequisite: Satisfactory completion of ENG 101 or equivalent, or instructor approval.

ENG 293 Latin American Literature 3 (3,0,0,0)

An introduction to a rich and complex tradition of literary production from Latin America (including the Caribbean) that dates back from the pre-Columbian period to the present. Course will be conducted in English. Prerequisite: C- or better in ENG 100, 101, 101H, or 113, or Department Chair or instructor approval.

ENG 296 Portfolio Assessment 1 (0,0,0,1)

A one-credit, independent study undertaken to satisfy the exit requirement of the Associate of Arts degree in English with a creative writing emphasis. Prerequisite: Instructor approval.

ENG 298 Writing About Literature 3 (3,0,0,0)

English 298 focuses on prose, poetry, and drama in order to provide the tools students need for continued literary study. The course introduces basic literary terms, and various methods for analyzing texts. Prerequisite: ENG 100, 101, or 113.

ENG 299 Special Topics in English 3 (3,0,0,0)

Investigates a special topic and/or area of interest within the field of English language, creative writing, or composition. Prerequisite: ENG 101 or 113.

ENG 333 Professional Communications 3 (3,0,0,0)

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. Prerequisites: ENG 100, 101, or 113, and admission to the Bachelor of Science program in Dental Hygiene, or the Bachelor of Applied Science program in Cardiorespiratory Science or Medical Lab Technology.

Environmental Science

ENV 101 Introduction to Environmental Science 3 (3,0,0,0)

A survey of basic ecological principles and an examination of selected environmental issues including overpopulation, pollution and energy alternatives.

ENV 220 Introduction to Ecological Principles 3 (3,0,0,0)

An introduction to the major principles and underlying processes of organismal, population, community and ecosystem ecology. (Same as BIOL 220.)

ENV 299 Special Topics in Environmental Studies 1-3 (0,3-9,0,0)

Covers selected topics of interest to students in environmental sciences. Prerequisite: ENV 101.

Education Professional Development

EPD 111B The Paraprofessional in Education 3 (3,0,0,0)

A course designed to acquaint students with the role of a paraprofessional in education.

EPD 113B Assisting in Math and Science Instruction 3 (3,0,0,0)

A course designed to introduce the student paraprofessional to current practices and tutoring strategies for math and science.

EPD 114B Assisting in Language Arts/Literacy Instruction 3 (3,0,0,0)

An introductory course addressing the language arts curriculum and tutoring strategies for the student paraprofessional assisting in the classroom.

EPD 115B Spanish for the School Professional 3 (3,0,0,0)

Basic conversational Spanish appropriate for the school professional.

EPD 116B Classroom Technology 3 (3,0,0,0)

The class will provide the student experience with technology commonly used in the classroom.

EPD 117B Understanding Special Education 3 (3,0,0,0)

An overview of the basics of special education including the IEP, IDEA and related services essential for education paraprofessionals.

EPD 118B Effective Communication Strategies 3 (3,0,0,0)

This course will explore effective communication strategies such as conflict resolution and effective means of communicating in writing in the school setting.

EPD 119B Understanding Assessment 3 (3,0,0,0)

This course will explore the role of assessment as it relates to the public school setting.

EPD 121B Diversity in the Classroom 3 (3,0,0,0)

This course is primarily designed for paraprofessional support teachers to explore the basic principles of diversity in schools and of teaching diverse learners. Observation in school is required.

EPD 122B Legal Issues in the Classroom 3 (3,0,0,0)

This course will explore the legal implications of working in a public school setting as a paraprofessional.

EPD 130B Supervising Education Paraprofessionals in School Settings 3 (3,0,0,0)

This course will provide teachers with supervisory skills and tools to work effectively with paraprofessionals in education.

EPD 131B Health and Safety Issues in School Settings 3 (3,0,0,0)

A course addressing the basic health and safety practices of the school setting.

EPD 162B PPST/Praxis I Reading Review 1 (1,0,0,0)

Review of reading and test taking skills to assist the student in approaching the PPST/Praxis I Reading Exam with confidence. This course is Pass/Fail.

EPD 163B PPST/Praxis I Writing Review 1 (1,0,0,0)

Review of writing and test taking skills to assist the student in approaching the PPST/Praxis I Writing Exam with confidence. This course is Pass/Fail.

EPD 164B PPST/Praxis I Math Review 1 (1,0,0,0)

Review of math and test-taking skills to assist the student in approaching the PPST/Praxis I Math Exam with confidence. Education majors are required to pass the PPST/Praxis I before completing their degree program. This course is Pass/Fail.

EPD 350 Teaching with Technology - Level I 1 (1,0,0,0)

Overview of teaching with technology utilizing online learning styles, discussing digital technologies and experiencing with software programs as teacher resources. This course is taught exclusively online for practicing teachers. Prerequisites: Basic computer and word processing skills.

EPD 351 Teaching with Technology - Level II 1 (1,0,0,0)

Overview of teaching with technology utilizing online web and educational resources and exploring distance education related articles. This course is taught exclusively online for practicing teachers.

EPD 352 Teaching with Technology - Level III 1 (1,0,0,0)

Overview of teaching with technology utilizing online web resources, teacher utilities, and educational resources. Course taught exclusively online to practicing teachers. Must possess basic computer/word processing skills and access to current office programs.

EPD 353 Orientation to Online Learning 1 (1,0,0,0)

Overview of the course management system, WebCT, used in online course development, including Email, Discussion Board and Chatroom.

EPD 354 Student Assessment in Online Courses 3 (3,0,0,0)

This online course addresses various assessment formats that can be used for evaluating students in online courses.

EPD 355 Instructional Design for Online Course Development 3 (3,0,0,0)

Introduces instructional design principles and relates the principles to the development of online courses.

EPD 356 Special Topics: Technology Innovations in Online Learning 2 (2,0,0,0)

This course introduces the emerging technologies for online teaching and learning. The list of technologies is subject to change based on professor discretion, as the course progresses, in terms of both additions and deletions of technologies. Technologies include: Web-Blogs, voice over Internet protocol (VOIP), and Podcasts.

EPD 357 Teaching and Learning in the Online Classroom - Level I 1 (1,0,0,0)

This course introduces pedagogical principles, skills and strategies for effective online teaching and online course management. Participants gain hands-on experience in using web-based chat rooms, email and discussion boards to increase student interaction in their online courses. Participants begin revising course content for the web and developing activities and assignments appropriate for specific disciplines. Course is taught exclusively within WebCT to practicing educators.

EPD 358 Teaching and Learning in the Online Classroom - Level II 1 (1,0,0,0)

Introduction to instructional strategies for online instruction. Students will explore the differences between live and online instruction, gain experience in using search engines/subdirectories to conduct research and critically evaluate online resources for instruction. Course is taught exclusively online to practicing educators.

EPD 359 Teaching and Learning in the Online Classroom - Level III 1 (1,0,0,0)

Participants learn how to revise course content, develop activities and assessment methods appropriate for specific disciplines. Ethical and legal issues associated with online learning will also be discussed. Course is taught exclusively online.

Educational Psychology

EPY 303 Educational Psychology 4 (4,0,0,0)

General principles, theories and recent research evidence regarding human development, human learning and human motivation, especially as they pertain to classroom instruction. Prerequisites: PSY 101 or SOC 101 or ANTH 101 and Admission to Dental Hygiene Bachelor of Science Degree Program.

Environmental Safety and Health

ESH 130 Introduction to Hazardous Materials Management 3 (3,0,0,0)

This course is designed to provide a general overview of the hazardous materials management field with emphasis on hazardous materials, hazardous waste, laws and regulations, and its effects on the environment and worker health and safety. Discussions on federal, state, and local regulations involving hazardous materials and the implementation of pollution prevention and waste minimization will be stressed. (Same as CONS 288B.)

ESH 201 40 Hour Hazwoper Certification 3 (3,0,0,0)

Introduces basic health and safety skills to meet requirements of OSHA 1910.120. A 40-hour certificate will be issued for successful completion. An annual refresher course (ESH 200B) will be required to maintain competency.

ESH 202 Environmental Laws and Regulations 3 (3,0,0,0)

Overview of the development and contents of current federal, state and local laws, regulations and ordinances that control the handling, storage, and disposal of hazardous materials and wastes.

ESH 205 Transportation of Hazardous Materials 3 (3,0,0,0)

Explains regulations governing the transportation of hazardous materials and wastes. Course includes preparing manifests, hazard classifications, placarding, labeling, spill response and driver safety needs. Prerequisite: ESH 130.

ESH 207B Introduction to Safety Management 3 (3,0,0,0)

This course covers the requirement of 29 CFR 1910 and 1926. Topics include interpretation of OSHA standards, record keeping, OSHA inspection procedures, coordination and use of safety committees and writing an effective safety program and policy.

ESH 208B Safety Management II 3 (3,0,0,0)

The focus will be on behavioral safety and identifying the importance of a safety program to an employer and motivation of workers to work safely. Cost analysis and safety program validation to executive management is included. Prerequisite: ESH 207B.

ESH 211B Industrial Hygiene I 3 (3,0,0,0)

Describes basic Industrial Hygiene issues including history and development, anatomy and physiology, hazard recognition and evaluation and hazard control.

ESH 212B Industrial Hygiene II 3 (3,0,0,0)

Continuation of ESH 211B. Includes topics on hazard control and methods, occupational safety and health programs, and governmental regulations. Prerequisite: ESH 211B.

ESH 222B OSHA Construction Standards 3 (3,0,0,0)

This course includes 30 hours of authorized training addressing the 29 CFR 1926 OSHA Construction Industry Regulation Standards. The identification of asbestos, lead, mold, radon and other hazardous materials in potential construction projects will also be covered in this course. Upon completion, students will receive a certificate from the U.S. Department of Labor's Occupational Safety and Health Administration. (Same as CONS 205B.)

ESH 223B OSHA General Industry Standards 3 (3,0,0,0)

This course includes 30 hours of authorized training addressing the 29 CFR 1919 OSHA General Industry Standards. Hazards identification, job safety analysis, risk management and hazardous materials in industry will also be covered. Upon successful completion of this course, students will receive a certificate from the U.S. Department of Labor's Occupational Safety and Health Administration.

ESH 240B Wastewater Treatment I 3 (3,0,0,0)

Basic knowledge for the safe operation of municipal wastewater treatment plants. Topics include flow measurement, screening, grit removal, sedimentation basins, solids handling, secondary biological processes and disinfection.

ESH 241B Wastewater Treatment II 3 (3,0,0,0)

Continuation of Wastewater Treatment I. Covers conventional activated sludge, solids handling, effluent disposal, laboratory procedures, analysis and presentation of data, records and recordkeeping. Prerequisite: ESH 240B.

ESH 242B Wastewater Treatment III 3 (3,0,0,0)

Continuation of Wastewater Treatment II. Covers odor control, activated sludge, operational control alternatives, solids handling and disposal, phosphorus removal, nitrogen removal, wastewater reclamation. Prerequisite: ESH 241B.

ESH 243B Water Treatment Plant Operations I 3 (3,0,0,0)

Basic knowledge for safe operation of water treatment plants. Topics include waste resources, reservoir management, coagulation and flocculation, sedimentation, filtration, disaffectation, corrosion control and taste and odor control.

ESH 244B Water Distribution I 3 (3,0,0,0)

Basic knowledge for the safe operation and maintenance of water treatment plants. Topics include storage facilities, distribution facilities, water quality considerations, disaffectation and safety.

ESH 245B Water Treatment Plant Operations II 3 (3,0,0,0)

Continuation of ESH 243B, emphasizing the skills needed by operators of conventional surface water treatment plants. Includes information needed by operators responsible for the administration and management of treatment facility. Prerequisite: ESH 243B.

ESH 246B Water/Wastewater Mathematics I 3 (3,0,0,0)

Basic review of mathematical skills used routinely in the water and wastewater treatment, including areas, volumes, flows, velocities, loading rates and dosages. Prerequisite: ESH 240B, or 243B.

ESH 247B Water/Wastewater Mathematics II 3 (3,0,0,0)

Continuation of Water/Wastewater Mathematics I. Includes calculation for treatment efficiencies, pumping rates and pump calibration, horsepower, effluent disposal, solids handling and activated sludge. Prerequisite: ESH 246B.

ESH 248B Water Quality Analysis and Laboratory 4 (2,4,0,0)

Lab tests required for water and wastewater treatment process control. Covers approved analytical procedures, quality control, and interpretation of data. Prerequisites: ESH 241B, 246B.

ESH 249B Industrial Pretreatment Programs and Inspection 3 (3,0,0,0)

This course is designed to train inspectors in the safe and efficient procedures for inspecting industrial pretreatment facilities and to provide industrial users with an understanding of local limit requirements.

ESH 250B Pump Operation and Maintenance 3 (3,0,0,0)

Operation and maintenance of pumps, motors and valves in water and wastewater treatment plants and in collection and distribution systems.

ESH 251B Current Issues 3 (3,0,0,0)

Discussion of current issues in the field of water and wastewater technology.

ESH 265B Safety Laws and Regulations 3 (3,0,0,0)

Course covers the processes, sources and applications for minimum requirements established by laws, regulations, statutes, and codes.

English as a Second Language**ESL 110B English as a Second Language I 3 (3,0,0,0)**

This course focuses on the student's acquisition and control of the basic sound structures and sentence patterns of English. Prerequisite: Placement Test.

ESL 111B English as a Second Language II 3 (3,0,0,0)

This course focuses on the student's acquisition and control of the basic sentence patterns of English. Prerequisite: Placement Test or ESL 110B.

ESL 115B Reading and Communication for International Students I 3 (3,0,0,0)

Development of reading and communication skills through analysis of assigned texts, study of vocabulary and idioms; explanation of grammar difficulties as needed, and guided discussion. Prerequisite: Placement Test.

ESL 118B Reading and Communication for International Students II 3 (3,0,0,0)

Development of reading and communication skills through analysis of assigned texts; study of vocabulary and idioms; explanation of grammar difficulties as needed; and guided discussion. Prerequisites: Placement Test or both ESL 110B, and 115B.

ESL 119B Reading and Communication for International Students III 3 (3,0,0,0)

Development of reading and communication skills through analysis of assigned texts; study of vocabulary and idioms; explanation of grammar difficulties as needed; and guided discussion. Prerequisites: Placement Test or both ESL 111B and 118B.

ESL 120 English as a Second Language III 3 (3,0,0,0)

An intermediate level course that continues the development of the basic sentence patterns of English in increasingly difficult contexts. Prerequisite: Placement Test or ESL 111B.

ESL 121 English as a Second Language IV 3 (3,0,0,0)

An intermediate level course that continues the development of the basic sentence patterns of English in increasingly difficult contexts. Prerequisite: Placement Test or ESL 120.

ESL 122 Pronunciation and Listening Skills for International Students I 3 (3,0,0,0)

Focuses on improvement of sound production and listening comprehension; attention given to the vowel/consonant system, reduced forms, stress and intonation. Prerequisite: Placement Test or ESL 120.

ESL 123 Reading for International Students I 3 (3,0,0,0)

Development of reading skills through analysis of assigned texts; systematic study of vocabulary and idioms; explanation of grammar difficulties as necessary. Prerequisite: Placement Test or ESL 120.

ESL 124 Grammar for International Students I 3 (3,0,0,0)

A beginning course focusing on the forms and meanings of English structure. Emphasis is on writing skills; however, attention is also given to oral skills. Prerequisites: Placement Test or ESL 121 and 123.

ESL 125 Reading for International Students II 3 (3,0,0,0)

Development of reading skills through analysis of assigned texts; systematic study of vocabulary and idioms; explanation of grammar difficulties as necessary. Prerequisites: Placement Test or ESL 123 and 124.

ESL 126 Grammar for International Students II 3 (3,0,0,0)

An intermediate course focusing on the forms and meanings of English structure. Emphasis is on writing skills; however, attention is also given to oral skills. Prerequisite: Placement Test or ESL 124.

ESL 127 Pronunciation and Listening Skills for International Students II 3 (3,0,0,0)

Emphasis is on improvement of listening comprehension; attention given to consonant system and reduced forms. Prerequisites: Placement Test or ESL 125 and 126.

ESL 128 Grammar for International Students III 3 (3,0,0,0)

An advanced course focusing on the forms and meaning of English structure. Emphasis is on writing skills; however, attention is also given to oral skills. Prerequisites: Placement Test or ESL 125 and 126.

ESL 129 Written English for International Students 3 (3,0,0,0)

For ESL students who need further practice in advanced grammar and writing; focuses on sentence combining and analysis of rhetorical modes used in paragraph development. Prerequisite: Placement Test or ESL 128.

ESL 132 Reading for International Students III 3 (3,0,0,0)

Development of reading skills through analysis of assigned texts; systematic study of vocabulary and idioms; explanation of grammar difficulties as necessary. Prerequisites: Placement Test or ESL 125 and 128.

ESL 133 Speech Communication 3 (3,0,0,0)

For advanced ESL students who need practice speaking English in public. This course includes reading/writing, research, debates, and speeches in English. Prerequisite: Placement test or completion of ESL 129.

ESL 134 Beginning Conversation 3 (3,0,0,0)

ESL students will learn 100+ vocabulary words, correct grammar for question formation, and the importance of eye contact and will also gain confidence and fluency in speaking. Basic reading, vocabulary, and grammar are required for group discussions. Prerequisite: Placement test or ESL 124.

ESL 135 Reading and Conversation for International Students 3 (3,0,0,0)

Development of reading skills through analysis of assigned texts, systematic study of vocabulary and idioms; explanation of grammar difficulties as necessary. Prerequisites: Placement Test or ESL 129 and 132.

ESL 136 Intermediate Conversation 3 (3,0,0,0)

Students will research and summarize stories, form/support/argue their opinions, and increase fluency in speaking. Intermediate reading, vocabulary, and grammar are required for group discussions. Prerequisite: Placement test or ESL 125.

ESL 138 Intermediate Writing for International Students 3 (3,0,0,0)

For non-native students who need further practice in expressing their ideas in written form. Includes practice in grammar, editing, sentence combining, and word choice. Prerequisites: Placement Test or ESL 129 and 132.

ESL 139 Composition for International Students 3 (3,0,0,0)

Improvement of writing skills for non-native speakers; emphasis on writing for academic purposes; attention given to sentence combining and grammatical errors made by ESL students. Prerequisites: Placement Test or ESL 135 and 138.

**ESL 140 Advanced
English Editing 3 (3,0,0,0)**

For advanced ESL speakers who need to learn to self-correct their written work. Individualized assignments help each student overcome his/her English writing problems. Prerequisite: Placement test.

Electronics Engineering Technology**ET 100B Survey of Electronics 3 (3,0,0,0)**

Introduces modern electronics technology and electronics concepts including voltage, current, resistance, power and frequency and functional analysis of simple analog and digital systems.

**ET 104B Fabrication and Soldering
Techniques 0.5-6 (0,1-12,0,0)**

Introduces electronic fabrication skills, tool operations applied to fabrication techniques of simple circuit boards, reading of schematic diagrams, soldering, drafting and wire wrapping.

**ET 106B Test Equipment
Operation 3 (2,2,0,0)**

An introduction to the use and operation of general and special purpose electronic test equipment, includes oscilloscope, multimeters, electronic multimeters, signal generators and transistor/capacitor testers.

**ET 108B Telecommunications and
the Information Age 3 (3,0,0,0)**

An introductory course that looks at the Telecommunications Industry from a technology standpoint. The student will learn about the telephone and telephone system, local area networks, fiber optics, how a modem works, wireless communications and other related topics.

ET 113B Introduction to Radar 3 (3,0,0,0)

This course is an introduction to fundamental principles of radar. Topics include keys to a fundamental understanding of radar, directivity and the antenna beam, pulsed-delay and FM ranging, pulse compression, the Doppler effect, the pulsed spectrum, measuring range rate, choice of low and high PRFs, automatic tracking, and resolution requirements. Prerequisite: ET 132B.

**ET 125B RF and
Microwave Devices 3 (3,0,0,0)**

This course includes a close look at various semiconductor RF and microwave devices, including microwave vacuum tubes, oscillators, amplifiers and power supplies.

ET 131B DC for Electronics 4 (3,3,0,0)

Basic concepts of passive electronic circuits to include laws, measurements, and calculations relating to direct current. Components and general purpose test equipment are used in practical experimentation. Students in this course should have a working knowledge of algebra.

ET 132B AC for Electronics 4 (3,3,0,0)

Basic concepts of passive electronic circuits to include laws, measurements, and calculations relating to alternating current. Components and general purpose test equipment are used in practical experimentation. Prerequisites: MATH 111B or MATH 127, and ET 131B or MT 102B with a grade of B or higher.

**ET 138B Introduction to Slot Machine
Technology 0.5-3 (0.5-3,0,0,0)**

An introduction course detailing the theory and operation of typical slot machines. Installation, maintenance and troubleshooting of slot machines and their peripherals will also be covered in this course. This course can be repeated for up to a total of 3 credits.

**ET 155B Home Technology
Convergence 3 (3,0,0,0)**

This course prepares students for the CompTIA's Home Technology Integration (HTI+) certification exam (HTO-10, HTI+ Residential System Examination and the HTO-102 HTI+ Systems Infrastructure and Integration Examination for HTI+ certification) and provides hands-on exercises in home technology integration skills. Topics covered include integration and internet control of residential subsystems, structured wiring systems integration, and an introduction to computer networking, safety, and troubleshooting. Subsystems discussed are home security, audio/video, computer networks, electrical wiring, HVAC (Heating Ventilation/Air Conditioning), irrigation, cable/satellite, broadband, and telecommunications. Hands-on lab experiences cover commercial wiring and the installation and troubleshooting of integrated system.

**ET 205B Power Supply
Theory and Repair 1-4 (1-3,0-2,0,0)**

The course covers the theory, operation, troubleshooting, and repair of unregulated, series linear and switching power supplies. A basic understanding of DC circuit theory and a rudimentary understanding of AC from work experience is recommended for students of this course. This course can be repeated for a total of 4 credits.

**ET 206B Video Monitor
Theory and Repair 1-4 (0-3,0-3,0,0)**

Covers the theory, operation, repair, and troubleshooting of CRT displays, LCDs, and the power supplies which are found in most CRT and LCDs. The hands-on labs will include troubleshooting on equipment from various manufacturers. This course is designed for students who have completed courses on DC and digital electronics or have at least 2 years of electronic experience. This course can be repeated for up to a total of 4 credits.

ET 212B Digital Logic I 4 (3,3,0,0)

This course is the first semester of one-year course to study digital logic. It covers number system, logic gates, Boolean algebra and Karnaugh mapping, binary arithmetic and adders, combinational/sequential circuits and their applications. Students taking this course should have a basic understanding of electrical/electronics theory.

ET 213B Digital Logic II 4 (3,3,0,0)

Counters and registers, TTL and CMOS integrated circuits, MSI logic circuits, analog/digital interfacing circuits, memory devices, and introduction to microprocessors and microcomputers. Prerequisite: ET 212B.

ET 220B Solid State Devices and Circuits I 4 (3,3,0,0)

Covers characteristics, analysis and operation of rectifier diodes, zener and other diodes; BJT transistor small-signal and power amplifiers; FET and MOSFET transistors and circuitry. Prerequisite: ET 132B or instructor permission.

ET 222B Solid State Devices and Circuits II 4 (3,3,0,0)

This course covers amplifier-frequency responses for both discrete and integrated circuits, op-amp circuits, thyristors, oscillators, active filters, and voltage regulators. Prerequisite: ET 220B.

ET 224B Vacuum Tube Theory 1-4 (1-3,0-2,0,0)

This course covers the theory of operation for all electronic tube devices and focuses on the operation of tube based devices Diodes, Triodes, Tetrodes, and Pentodes. The course also covers the use of tube devices in basic circuits such as power supplies. The course is designed for students who have completed courses in electronic devices or have at least 2 years of electronic experience. This course can be repeated for a total of 4 credits. Prerequisite: ET 132B.

ET 228B Data Acquisition 3 (2,3,0,0)

This course provides a detailed look at data acquisition components: analog-to-digital converters (ADCs), digital-to-analog converters (DACs), sample and hold amplifiers, sensors, and PLLs. Op-amp theory and applications are also covered. Prerequisites: ET 132B, 212B.

ET 238B Device Peripherals 3 (2,2,0,0)

Covers the key components and sub-assemblies used in slot machines and other self-service devices such as Kiosks, and ATMs. Instruction includes topics such as opto-couplers, thyristors, bill acceptors, and interface standards, microprocessors/controllers, power supplies, switches, and displays. Prerequisites: ET 131B and 212B.

ET 270B Electronics Bench Servicing Techniques 4 (3,3,0,0)

Troubleshooting and servicing television, radio and other home entertainment equipment utilizing general purpose and special purpose test equipment. Prerequisite: ET 262B.

ET 276B Telecommunications 4 (3,3,0,0)

Topics covered include the Public Switched Telephone Network, the subscriber loop interface, the telephone instrument, trunk circuits, T-Carrier, switching, Voice over IP (VoIP) and telephone company operations. Prerequisite: ET 131B.

ET 282B Microprocessors I 3 (2,3,0,0)

A course on microprocessor machine and assembly language programming. A microprocessor's instruction set will be covered along with its architecture and interface. Prerequisite: ET 212B.

ET 285B Electronics Certification/ Examination Preparation 3 (3,0,0,0)

The course is a review of DC and AC Electronic theory; solid state devices and circuits; digital circuits; microprocessor/microcontroller circuits; operation of test instruments and measurement methods, and troubleshooting of electronics circuits. The course prepares students for certification and employment tests in electronics.

ET 289B Electrical Troubleshooting 1-4 (1-3,0-3,0,0)

Maintenance and service of electronic equipment and troubleshooting techniques using electrical measuring and test devices. This course is designed for students who have completed courses on DC and digital electronics or have at least 2 years of experience in electronics. This course can be repeated for up to a total of 4 credits.

ET 293B Telecommunication Transmission Methods 3 (2,3,0,0)

Topics include: Amplitude, Frequency and Pulse Modulation, Modem technologies (wireline, cable and DSL), error control, cyclic codes: (CRC-16, Hamming, etc.). Circuit switched and packet transmission of voice and data over SONET and wireless media (fiber optic and microwave) are emphasized. Prerequisite: ET 132B.

ET 294B EET Capstone 3 (2,2,0,0)

Review of electrical circuits, analog and digital electronics, microprocessors; design, fabrication and testing of an emphasis/concentration based project including schematics, wiring diagrams, and software; brief presentation and demonstration of working prototype. Prerequisite: ET 193B or 238B.

Food and Beverage

FAB 102 Food Service Sanitation II 2 (2,0,0,0)

The theory and practice of food and environmental sanitation in the Culinary field. Food-related diseases, disease origins and personal hygiene are given special attention. Meets standards of National Sanitation Certification.

FAB 112 Restaurant Management I 3 (2,3,0,0)

Overview of the basic principles of restaurant management, operations and front-of-the-house training and development. Course contains laboratory work in Russell's Restaurant. Prerequisite: Choose one: ENG 100, 101, 102, 107, 113, 205 or higher with a grade of "C" or better.

FAB 160 Hospitality Purchasing 3 (3,0,0,0)

Basic principles of purchasing food, beverage, equipment, contract services and supplies. Primary focus on product identification, supplier selection, and the ordering, receiving, storing and issuing process.

FAB 167 Food Service Nutrition 2 (2,0,0,0)

Students learn the basics of nutritionally balanced menu planning and methods of promoting and producing healthy alternative food plans.

FAB 190B Bartending 3 (2,2,0,0)

A basic class devoted to developing the skills necessary to function as a bartender in a Hospitality operation. This is a hands-on course covering mixology of liquors and the handling of all types of alcoholic beverages. Must be 21 or older

FAB 210 Fundamentals of Food and Beverage Control 3 (3,0,0,0)

Cost control in the food service operation through sound procedures, controlled food production, inventories, store-room issues, standardized recipes, effective labor practices and maintenance of records. Prerequisites: FAB 160, MATH 104B, 120, 124, or 126.

FAB 230 Menu Planning 3 (3,0,0,0)

The basics of planning menus for a variety of food service establishments. Students will learn marketing and merchandising menus, menu development and costing, basic menu printing software and develop their own individual menus. Prerequisite: FAB 112 with a grade of "C" or better.

FAB 260 Hotel Restaurant Facilities, Planning and Equipment 3 (3,0,0,0)

Planning of hotel restaurant facilities with emphasis on equipment selection, layout, staffing, budgets, menus and work analysis.

FAB 271 Wine Appreciation 3 (3,0,0,0)

A comprehensive course on the wines of the world. The art of wine making, geographical identification of wine regions, ordering and serving of fine wines, history of wines and the proper matching of wines with foods. Each class meeting will include the tasting of several wines. Minimum age for enrollment is 21.

FAB 272 Liquor and Bar Management 3 (3,0,0,0)

A survey of the service and control of wines, liquors and beers, including discussion of taxes and local, state and national laws relating to the liquor industry. Student must be 21 or older.

FAB 285 Catering Management 3 (3,0,0,0)

Course teaches students how to market, sell, organize, plan, and execute catered affairs. Includes various types of meeting room set-ups used to meet customer requirements. Prerequisite: FAB 112.

FAB 295 Work Experience in Food Service 1 (0,0,0,1)

In addition to the academic requirements, the Department of Hospitality Management requires 200 hours of acceptable employment in the hospitality industry. This work experience will be measured qualitatively as well as quantitatively. The work experience requirement should be met during the school year or in summers. Students who plan to transfer to UNLV will be able to transfer a maximum of 500 hours of employment toward UNLV's 1000 hour employment requirement. International students must go to the office of International Student Services to verify employment eligibility and obtain authorization. This course can be repeated up to a maximum of four credits. Grade will be given upon verification of employment.

Filipino**FIL 101B Basics of Filipino I 3 (3,0,0,0)**

A course emphasizing spoken communication. Focus is on speaking, listening, reading and writing skills. A vocabulary of Filipino-English words developed.

FIL 102B Basics of Filipino II 3 (3,0,0,0)

A course continuing the development of skills acquired in FIL 101B. Increased fluency and further vocabulary development stressed. Prerequisite: FIL 101B.

FIL 111 First Year Filipino I 4 (4,0,0,0)

The development of language skills in listening, speaking, reading and writing. Oral emphasis.

FIL 112 First Year Filipino II 4 (4,0,0,0)

A second-semester course designed to continue the development of language skills learned in FIL 111. Prerequisite: FIL 111.

Banking and Finance**FIN 101 Personal Finance 3 (3,0,0,0)**

A study of the techniques of managing personal income, savings and expenses, making wise purchase decisions, insuring, investing and controlling financial resources.

FIN 102B Principles of Banking Operations 3 (3,0,0,0)

Presents the fundamentals of bank functions in a descriptive fashion so that the beginning banker may view his or her chosen profession in a broad and operational perspective.

FIN 103B Analyzing Financial Statements 3 (3,0,0,0)

Characteristics of financial statements for students who have studied accounting and financial statement analysis. Prerequisite: ACC 201.

FIN 104B Consumer Lending 3 (3,0,0,0)

Techniques of installment lending presented concisely. Emphasis on establishing credit, obtaining and checking information, servicing the loan and collecting the amount due, inventory financing, special loan programs, business development, advertising, the public relations aspect of installment lending and most efficient methods to maximize profits.

FIN 107B Bank Management 3 (3,0,0,0)

Presents new trends which have emerged in the philosophy and practice of management to provide new and experienced bankers with a working knowledge of bank management. Court case problems used as a management learning technique.

FIN 109B Marketing for Bankers 3 (3,0,0,0)

Discusses the basis of public relations both internal and external and seeks to explain the why, the what and some of the how of public relations and marketing. Intended as an overview for all bankers in terms of what everyone in banking should know about the essentials of bank public relations and marketing.

FIN 115 Introduction to Investments 3 (3,0,0,0)

Major types of investment securities and the markets in which they are traded. Mechanics of making an investment, including basic analytical and valuation techniques and a survey of investment literature and terms.

FIN 210B Money and Banking 3 (3,0,0,0)

Presents basic economic principles as they relate to banking. Provides the essential understanding necessary to further banking study.

FIN 216B Commercial Lending 3 (3,0,0,0)

Teaches bank employees the essential facts about promissory notes including: calculating interest and discounting commercial paper, guarantees, general collateral agreements, examining and processing documents accompanying notes secured by stocks, bonds and savings accounts and the concepts of attachment, perfection, priority default and foreclosure.

FIN 255B International Banking 3 (3,0,0,0)

Introduction to a vast field for those working in international departments as well as for those involved in the domestic activities of their banks. Presents the basic framework and fundamentals of international banking, how money is transferred from one country to another, how trade is financed, what the international agencies are and how they supplement the work of commercial banks and how money is changed from one currency to another.

Floral Design

FLOR 102B Introduction to Floral Design 3 (3,1,0,0)

Introductory course covering floral design theory, history, techniques and the skills currently required for employment in the floral design industry. Lab experience covers construction of basic floral products. Successful completion of course offers entry-level employment in field.

FLOR 106B Permanent Botanicals 3 (3,1,0,0)

Designed to provide the student with theory and lab experience in the use of artificial materials and dried flowers. Emphasis on mechanics and techniques of construction for home interiors, as well as commercial applications. Preservation processes and interiorscapes included. Prerequisite: FLOR 102B.

FLOR 108B Event Balloon Sculptures 1.5 (1,1,0,0)

Course will address the planning, purchasing, construction, installation and strike of large event balloon decor. Arches, themed decor, props and large sculptures will be constructed.

FLOR 115B Mega-Department Practices 3 (3,1,0,0)

Addresses workplace practices common to mega-floral settings like those found in resorts and supermarkets. Job application, task analysis and interiorscape planning/installation are covered. Prerequisite: FLOR 102B.

FLOR 202B Tributes and Traditions 3 (3,1,0,0)

A study of the effects of international influences on florals. Cultural differences in expression through floral tributes will be explored through customs, practices and traditions of many countries. Retail practices in the handling and styling of floral tributes specific to funerals with cross applications to other situations. Prerequisite: FLOR 102B.

FLOR 204B Traditional Weddings 3 (3,1,0,0)

Designed to provide the student with theory and lab experience in the styling of floral pieces specific to weddings. Body flowers, carrying pieces, ceremony and reception designs will be executed. Consultation, service and delivery procedures will be covered, as well as ordering and pricing. Prerequisite: FLOR 102B.

FLOR 206B Beginning Ikebana 3 (3,1,0,0)

Course includes history, techniques and skills specific to the Japanese art of floral design with direct application to commercial floristry. Specialized tools and containers will be required to complete lab projects reflecting the many styles of Ikebana designs. Prerequisite: FLOR 102B.

FLOR 208B Creativity and Competition 3 (3,1,0,0)

Principles and practices of the creative process will be developed to enhance design skills. Students will apply these skills to prepare for industry competition. Prerequisite: FLOR 102B.

FLOR 216B Advanced Ikebana 3 (3,1,0,0)

A continuation of FLOR 206B Beginning Ikebana. In-depth study of advanced styles and masters of Ikebana. Prerequisite: FLOR 206B.

FLOR 220B Events and Display 3 (3,1,0,0)

Comprehensive information regarding planning, organizing, managing and delivering designs for special occasions. Party props, room decor, table treatments, lighting and display elements are emphasized along with art principles and creative thematic approaches to floral design. Prerequisite: FLOR 102B.

FLOR 224B Techniques and Mechanics 1.5 (1.5,0.5,0,0)

Course addresses unique approaches to floral design mechanics and techniques for advanced design situations, including working in glass, hi-style, bridal/body flowers, naturalistic applications and European design. Prerequisite: FLOR 102B or instructor permission.

FLOR 225B Color and Product Mix 1.5 (1.5,0.5,0,0)

Course addresses the use of color as an aesthetic sales tool in the manufacture of floral products. Focus is on selection of product as it relates to color, as well as combining materials to maximize each composition in respect to texture, unity, rhythm, line, form, and balance. Prerequisite: FLOR 102B or instructor permission.

FLOR 295B Floral Careers Internship 1-4 (0,0,0,5-20)

Designed to provide the student with on-the-job supervised and educationally directed work experience in the floral industry. One credit may be earned for each 75 hours worked. Variable to four credits per semester, repeatable not to exceed eight credits total. International students must go to the International Center to verify employment and obtain authorization. After registering, contact Floral Design Program for placement. Instructor permission required.

FLOR 299B Selected Topics 1-5 (1-3,0-4,0,0)

Topics will vary and cover both business and design information relevant to commercial floristry, including industry experts and hands-on labs. Dates and times will vary.

French

FREN 101B Conversational French I 3 (3,0,0,0)

A course emphasizing spoken communications. Speaking skills, oral listening skills, reading and writing skills explored. A vocabulary of French-English words developed.

FREN 102B Conversational French II 3 (3,0,0,0)

A course emphasizing a continuation of skills acquired in FREN 101B. Increased fluency and further vocabulary development stressed.

FREN 103 First Year Business French I 4 (4,0,0,0)

A course that deals intensively with French business practices and French business language intended for students who encounter French-speaking clients in various professional situations.

FREN 104 First Year Business French II 4 (4,0,0,0)

An applied language course for learners who want to communicate with ease with French-speaking clients and further their knowledge of commercial and managerial French. Prerequisite: FREN 103.

FREN 107 French for Hotel, Restaurant and Tourism I 3 (3,0,0,0)

Students with no prior knowledge of French who work in hotels, restaurants or in tourist settings learn to communicate effectively with their French-speaking clientele.

FREN 111 First Year French I 4 (4,0,0,0)

The development of language skills in listening, speaking, reading and writing. Emphasis is placed on communication in all four language acquisition skills.

FREN 112 First Year French II 4 (4,0,0,0)

The further development of language skills in listening, speaking, reading and writing. Emphasis is placed on more sophisticated communication in all four language acquisition skills. Prerequisite: FREN 111 or equivalent.

FREN 203 Second Year Business French I 4 (4,0,0,0)

An applied intermediate language course for learners who want to further perfect their ability in business French and their knowledge of French business practices.

FREN 204 Second Year Business French II 4 (4,0,0,0)

An applied intermediate language course for learners who want to perfect their language abilities and knowledge of business French and French business practices. Prerequisite: FREN 203.

FREN 207 French for Hotel, Restaurant and Tourism II 2 (2,0,0,0)

Students with previous knowledge of French in the area of hotel, restaurant and tourism increase their communication skills in their respective employment fields. Prerequisite: FREN 107.

FREN 211 Second Year French I 3 (3,0,0,0)

Continuation of French language skills and intensive reviews of grammatical structures, listening, speaking, reading and writing skills through an introduction to French literary readings. Prerequisite: FREN 112 or equivalent.

FREN 212 Second Year French II 3 (3,0,0,0)

Further amelioration and perfection of grammatical, listening, speaking, reading and writing skills through selected French literary readings. Prerequisite: FREN 211 or equivalent.

Fire Science Technology

FT 101 Principles of Emergency Services 3 (3,0,0,0)

This course provides an overview to fire protection and emergency services; career opportunities in fire protection and related fields; culture and history of emergency services; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics; life safety initiatives. FESHE Core Course.

FT 104 Nevada Firefighter I 3 (3,0,0,0)

This course will familiarize the student with the general rules and regulations of fire fighting, use and explanation of forcible entry, protective breathing apparatus, fire streams, first aid, ropes, salvage, fire hose, nozzles and apparatus, ladders, ventilation, inspection, rescue, sprinklers, fire alarms and communications, safety and fire behavior.

FT 105 Fire Behavior and Combustion 3 (3,0,0,0)

This course explores the theories and fundamentals of how and why fires start, spread and are controlled. FESHE Core Course.

FT 109B Internship in Firefighting 1 (0,0,0,4)

This course will provide students with work experience and skills sign-offs that meet the National Fire Protection Association's Firefighter I criteria. This course will make the student eligible to take the Nevada Fire Fighter I exam. Students must have proof of insurance. Prerequisites: FT 101, 104, 131, EMS 108B.

FT 110 Basic Wildland Firefighting 4 (3,0,0,2)

Addresses the basic elements of wildland fire protection, fire behavior, department organization, apparatus and equipment, fire safety and incident command organization. Fieldwork is required. Satisfies Wildland Training Series for S-110, S-130, and S-190. Note: Satisfactory completion qualifies the student for National Wildland Fire Certification (Red Card).

FT 121 Fire Prevention 3 (3,0,0,0)

This course provides fundamental knowledge relating to the field of fire prevention. Topics include: history and philosophy of fire prevention; organization and operation of a fire prevention bureau; use and application of codes and standards; plans review; fire inspections; fire and life safety education; and fire investigation. FESHE Core Course.

FT 125 Building Construction for Fire Protection 3 (3,0,0,0)

This course provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. FESHE Core Course.

FT 126 Fire Investigation I 3 (3,0,0,0)

This course is intended to provide the student with the fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing and conducting origin and cause, preservation of evidence and documentation, scene security, motives of the firesetter, and types of fire causes. FESHE Non-Core Course. Prerequisites: FT 104, 105, 125, or instructor approval.

FT 131 Hazardous Materials Chemistry 3 (3,0,0,0)

This course provides basic chemistry relating to the categories of hazardous materials including recognition, identification, reactivity, transportation, and health hazards encountered by emergency services. FESHE Non-Core Course.

FT 150 Apparatus and Equipment 3 (3,0,0,0)

Operation of fire department apparatus and equipment. Driving techniques, traffic laws and restrictions relating to fire apparatus. Construction and maintenance of equipment also stressed.

FT 151 Fire Protection Hydraulics and Water Supply 3 (3,0,0,0)

This course provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems. FESHE Non-Core Course. Prerequisites: FT 101, 104, MATH 120, or instructor approval.

**FT 152B Legal Aspects of
Emergency Services 3 (3,0,0,0)**

This course will address the Federal, State, and local laws that regulate emergency services and include a review of national standards, regulations, and consensus standards. FESHE Non-Core Course. Prerequisite: FT 104, or instructor approval.

**FT 153B Occupational Safety and Health
for Emergency Services 3 (3,0,0,0)**

This course introduces the basic concepts of occupational health and safety as it relates to emergency service organizations. Topics include risk and hazard evaluation and control procedures for emergency service organizations. FESHE Non-Core Course. Prerequisite: FT 104, or instructor approval.

**FT 154B Principles of Fire and
Emergency Services Safety
and Survival 3 (3,0,0,0)**

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services. FESHE Core Course. Prerequisite: FT 104, or instructor approval.

FT 190 Fire Instructor I 3 (3,0,0,0)

Topics included are the role of the instructor, preparing instructional objectives, communication skills, use of visual aids, and practice teaching techniques. Meets NFPA Standard 1041, Fire Instructor Training. Those completing the course will be certified as Fire Instructor I by the Nevada State Fire Marshal.

**FT 191 Introduction to
Company Officer 3 (3,0,0,0)**

This is an entry-level course which prepares the students to recognize the fire service company officer's role. It will examine group dynamics, communication, fire department organizational structure, fire ground and station management. This course partially meets the National Fire Protection Association's standard for Fire Officer.

FT 224 Fire Protection Systems 3 (3,0,0,0)

This course provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers. FESHE Core Course.

FT 226 Fire Investigation II 3 (3,0,0,0)

This course is intended to provide the student with advanced technical knowledge on the rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation and court-room testimony. FESHE Non-Core Course. Prerequisite: FT 126.

FT 243 Strategy and Tactics 3 (3,0,0,0)

This course provides the principles of fire ground control through utilization of personnel, equipment, and extinguishing agents. FESHE Non-Core Course. Prerequisites: FT 101, 104, or instructor approval.

**FT 291 Fire and Emergency
Services Administration 3 (3,0,0,0)**

This course introduces the student to the organization and management of a fire and emergency services department and the relationship of government agencies to the fire service. Emphasis is placed on fire and emergency service, ethics, and leadership from the perspective of the company officer. FESHE Non-Core Course. Prerequisites: FT 101, 104, or instructor approval.

**FT 298 Seminar in
Fire Management 3 (3,0,0,0)**

Selected topics in Fire Management.

Casino Management

**GAM 103 Casino Cage
Operations 3 (3,0,0,0)**

Structured to provide students with knowledge and skills directly relevant to employment as a casino cage cashier. Practical application of the material presented. Emphasis on "learning by doing."

**GAM 106 Supervision of
Casino Games 3 (3,0,0,0)**

Basic casino managerial techniques with an emphasis on protection of casino games, staffing, labor/management relations, floor, pit, and shift supervision, credit and market control, cash and chip control and internal control forms.

GAM 108 Slots Management I 3 (3,0,0,0)

Basic slots management techniques with an emphasis on supervision of slot shift managers, mechanics, floor persons, change persons, booth cashiers, carousel attendants, coin room manager, slot drop, count room, jackpot fills and credits.

GAM 109 Slots Management II 3 (3,0,0,0)

Advanced slots management techniques with an emphasis on labor/management relations, productivity, staffing and directing, analysis of the slot report, marketing and promotions of slots and the detection of slot scams.

GAM 119 Blackjack Dealing 3 (3,0,0,0)

Fundamentals of dealing Blackjack with an emphasis on card totaling, chip handling and cutting, shuffling, multiple deck delivery, the shoe, call bets, procedures, accuracy and game speed. Special attention given to the management aspects of Blackjack.

GAM 121 Craps Dealing 3 (3,0,0,0)

Fundamentals of dealing Craps with an emphasis on accurate and quick mental multiplication, chip handling, knowledge of odds on a variety of bets, procedures and game speed. Special attention given to the managerial aspects of Craps.

GAM 122 Roulette Dealing 3 (3,0,0,0)

Fundamentals of dealing Roulette with an emphasis on accurate and quick mental computations, chip handling, memorization of wheel and table layouts, procedures and game speed. Special attention given to the managerial aspects of Roulette.

GAM 123 Baccarat Dealing 3 (3,0,0,0)

Fundamentals of dealing Baccarat with an emphasis on the knowledge of commissions, percentages, mental computations, procedures, accuracy, game speed and the importance of customer relations, a significant component of the game. Special attention given to the managerial aspects of Baccarat.

GAM 124 Poker Dealing 3 (3,0,0,0)

Fundamentals of dealing Poker with an emphasis on accurate and quick mental computations, card handling, the rake, side pots, brushing, shilling, proposition players, procedures, game speed and the various forms of Poker. Special attention given to the managerial aspects of Poker.

GAM 126 Pai Gow Tiles Dealing 3 (3,0,0,0)

Fundamentals of dealing Pai Gow Tiles with an emphasis on tile rankings, house ways, exceptions, tile handling techniques, player banking procedures, various tile deliveries, commissions, mental computations, accuracy, game speed and the importance of customer relations. Special attention given to the managerial aspects of Pai Gow Tiles.

GAM 131 Race and Sports Book Management 3 (3,0,0,0)

This course prepares students in the specific techniques and methods of the daily operations of Nevada race and sports books. Students will be made aware of supervision and managerial responsibilities of book operations. Topics include operating budgets, marketing, state regulations and bookmaking theory.

GAM 204 Introduction to Casino Marketing 3 (3,0,0,0)

An overview of casino marketing and how the marketing function impacts the casino organization. Topics include casino promotions, database marketing techniques, dead chip programs, discounting, casino hosting, credit procedures, marketing policies and procedures, amenities, and the casino marketing plan.

GAM 206 Casino Surveillance 3 (3,0,0,0)

All aspects of modern casino surveillance including: slots, table games, cage, sports books and keno. Also covers gaming control board requirements.

GAM 207 Table Games Management 3 (3,0,0,0)

Advanced table games management techniques with an emphasis on game productivity, gaming mathematics, table games marketing and promotions, advanced game protection strategies, customer service, table games human capital management, and an in-depth analysis of table games profitability factors.

GAM 208 Casino Business Strategy 3 (3,0,0,0)

Fundamentals of the strategic business processes of a casino organization from internal and external perspectives. Topics include casino economics, environmental factors including social, political, legal and competitive forces, consumer behaviors, development of a corporate culture, internal controls, and the future of the gaming industry.

GAM 210 Casino Customer Service 3 (3,0,0,0)

Fundamentals of the theory, practice and management of guest service and how it impacts the success of a casino organization with an emphasis on service strategies, staffing issues, and service systems. Topics include the dynamics of guest satisfaction, service quality and value, planning and analysis, the service environment, training and motivation, establishment of a total service culture, guest co-production, communications, service failure recover techniques, delivery systems, and measurement of service results.

GAM 222 European Roulette Dealing 3 (3,0,0,0)

Fundamentals of dealing European Roulette with an emphasis on progressive limits, complete bets, paying by station, section bets, neighbor bets, overages, finales, mathematical computations, procedures, accuracy, and game speed. Special attention given to the managerial aspects of European Roulette. Prerequisite: GAM 122.

GAM 225 Introduction to Gaming Management 3 (3,0,0,0)

Overview of the casino; topics include the economics of the casino, its interface with the hotel, organizations and terminology.

GAM 235 Gaming Laws and Regulations 3 (3,0,0,0)

A survey of the laws and regulations pertaining to the gaming and hospitality industry. Specific emphasis include the history and development of Nevada gaming laws, regulations, and statutes, compliance requirements of gaming licensees, legal aspects pertaining to licensee/guest relations, labor laws, gaming crimes, tort laws, and liabilities of the licensee.

**GAM 295 Work Experience
in Casino/Gaming 1 (0,0,0,1)**

In addition to the academic requirements, the Department of Hospitality Management requires 200 hours of acceptable employment in the hospitality industry. This work experience will be measured qualitatively as well as quantitatively. The work experience requirement should be met during the school year or in summers. Students who plan to transfer to UNLV will be able to transfer a maximum of 500 hours of employment toward UNLV's 1000 hour employment requirement. International students must go to the office of International Student Services to verify employment eligibility and obtain authorization. This course can be repeated up to a maximum of four credits. Grade will be given upon verification of employment.

Geography

GEOG 103 Physical Geography 3 (3,0,0,0)

Physical geography examines the spatial relationships between humans and the environment. A comprehensive and integrating science, physical geography allows the integration of earth systems such as weather, land formations, and earth patterns. Continuous integration of maps atlases, internet and geographic information system technology.

**GEOG 104 Physical Geography
Laboratory 1 (0,3,0,0)**

Course provides an opportunity to apply concepts in physical geography, including map interpretation, computer GIS, meteorological processes, development of landforms and an understanding of the dynamics of the earth. Prerequisite: GEOG 103, which may be taken concurrently.

GEOG 106 World Geography 3 (3,0,0,0)

An analysis of the cultural regions of the world; physical settings, peoples, settlements, economic activities and historical and political factors.

GEOG 109 Economic Geography 3 (3,0,0,0)

Emphasizes worldwide patterns of economic activity. World population, food and development problems, natural and economic factors related to economic activity, study of selected agricultural and industrial commodities.

GEOG 116 Oceanography 3 (3,0,0,0)

In this course we will explore our world's oceans and the role of the ocean in the Earth's system. Topics covered will include the flow and transformations of water and energy into and out of the ocean, the physical and chemical properties of seawater, ocean circulation, marine life and its adaptations, interactions between the ocean and the other components of the Earth system, and the human/societal impacts on and in response to Earth's System interactions.

**GEOG 117 Meteorology/
Climatology 3 (3,0,0,0)**

Studies the composition, structure, and dynamics of the earth's atmosphere that influences global weather patterns. Meteorology defines weather concepts that provide the basis for forecasting, weather analysis and understanding atmospheric phenomena such as hurricanes, tornadoes and extreme weather. Discussion on human impact of the atmosphere, ozone depletion, greenhouse effect and air pollution.

**GEOG 299 Selected Topics in
Physical Geography 1-6 (0,3-18,0,0)**

Covers selected topics of interest to students in physical geography. Prerequisite: GEOG 101 or instructor approval.

Geology

**GEOL 100 Earthquakes, Volcanoes
and Natural Disasters 3 (3,0,0,0)**

Causes of natural disasters and their impact on people and property. Focuses on geological hazards such as earthquakes, volcanic eruptions, landslides, and floods.

**GEOL 101 Geology:
Exploring Planet Earth 4 (3,3,0,0)**

Fundamentals of geology including mineral and rock origins through various earth processes. Laboratories include rock identification and interpretation of topographic and geologic maps. Required weekend field trips.

**GEOL 102 Earth and Life
Through Time 4 (3,3,0,0)**

The history of Earth through geological time including methods used to recognize fossils and their significance. Laboratories involve paleontology methods, maps and fossil studies. Required weekend field trips. Prerequisite: GEOL 101 (with lab) or equivalent.

**GEOL 103 Physical Geology
Laboratory 1 (0,1,0,0)**

Designed to introduce basic techniques in identification of minerals and rocks, and in the reading and interpretation of topographic and geologic maps. Includes some field exercises. Prerequisite or Corequisite: GEOL 101.

**GEOL 105 Introduction to Geology
of National Parks 3 (3,3,0,0)**

Geology of selected national parks and monuments in North America with emphasis on surface processes including the causes and effects of Pleistocene glaciation and major tectonic events that have shaped the topography of the United States and Canada.

GEOL 115 Introduction to Gemology 3 (3,0,0,0)

An introduction to the nature, formation, description, identification, fashioning, and uses of gemstones, including a survey of the major groups of natural gemstones as well as synthetics. Covers basic terminology, the processes by which gem species can be discriminated from each other, fundamental chemical and physical principles, and the scientific method.

GEOL 299 Special Topics in Geology 1-5 (0,3-15,0,0)

Covers selected topics of interest to students in the geological sciences. Prerequisite: GEOL 101 or instructor approval.

German**GER 101B Conversational German I 3 (3,0,0,0)**

A course emphasizing spoken communication. Speaking, listening, reading and writing skills explored. German culture also emphasized.

GER 102B Conversational German II 3 (3,0,0,0)

A course emphasizing a continuation of the skills acquired in GER 101B. Increased fluency and further vocabulary development stressed.

GER 107 German for Hotel, Restaurant and Tourism I 3 (3,0,0,0)

Students with no prior knowledge of German who work in hotels, restaurants, or tourist settings learn to communicate effectively with their German-speaking clientele.

GER 111 First Year German I 4 (4,0,0,0)

The development of language skills in listening, speaking, reading, and writing. Emphasis is placed on communication in all four language acquisition skills.

GER 112 First Year German II 4 (4,0,0,0)

The further development of language skills in listening, speaking, reading, and writing. Emphasis is placed on more sophisticated communication in all four language acquisition skills. Prerequisite: GER 111 or equivalent.

GER 207 German for Hotel, Restaurant and Tourism II 2 (2,0,0,0)

Students with previous knowledge of German in the area of hotel, restaurant and tourism increase their communication skills in their respective employment fields. Prerequisite: GER 107.

GER 211 Second Year German I 3 (3,0,0,0)

Continuation of German language skills and intensive review of grammatical structures, listening, speaking, reading and writing skills through an introduction to German literary readings. Prerequisite: GER 112 or equivalent.

GER 212 Second Year German II 3 (3,0,0,0)

Further amelioration and perfection of grammatical structures, listening, speaking, reading and writing skills through selected German literary readings. Prerequisite: GER 211 or equivalent.

GER 232 German Resistance to the Nazis and Hitler 3 (3,0,0,0)

This course explores the various forms of resistance (religious, communist, union, socialist, military, and political) to National Socialism and Hitler during the Third Reich (1933-1945).

Geographic Information Systems**GIS 109 Introduction to Geographic Information Systems 3 (3,0,0,0)**

This class serves as an introduction into Geographic Information Systems (GIS). This course covers the basic concepts of a GIS. Principles of cartography and spatial analysis will also be covered. The intent of this class is to prepare the student for advanced training using specific GIS software packages. Prerequisite: IS 100B or IS 101.

GIS 111 Introduction to Remote Sensing 3 (3,0,0,0)

This class is designed to give students an introduction to basic remote sensing aerial photograph interpretation, satellite image processing. Students will learn the basic concepts and techniques of remote sensing and integration of remote sensing into GIS database. Prerequisite: GIS 109.

GIS 115 Principles of Geodesy 3 (3,0,0,0)

Items covered in this course will include: basic concepts of geodetic datums, coordinate systems, ellipsoids, satellite geodesy, theoretical and practical aspects of Global Positioning Systems (GPS). Students will also be introduced to concepts of projections and projecting the earth's surface to a plane. Prerequisite: GIS 109.

GIS 205 GIS Applications 3 (3,0,0,0)

The course is designed to give students an exposure to GIS software and its applications. Students will become familiar with the basic aspects of ESRI and ArcGIS Software with introduction to spatial analysis. Prerequisite: GIS 109.

GIS 214B Customizing ArcGIS Using .NET Framework 3 (3,0,0,0)

This course will introduce students to programming concepts in ArcGIS within ArcObjects environment. Students will learn to customize ArcGIS Desktop and integrate ArcObjects using Visual Studio .NET and geoprocessing tools. Prerequisites: IS 115 (or other programming experience) and GIS 109.

GIS 236 GIS Applications II 3 (3,0,0,0)

This is an advanced course designed to give students an in-depth understanding of spatial analysis. Students will functionally create spatial models to solve real world problems. Topics will emphasize problem solving skills in raster and vector environments using spatial analysis tools.

**GIS 240 Advanced Techniques
 of Surveying 3 (3,0,0,0)**

This course will focus on the basic concepts of geospatial phenomena and applications of GIS in surveying. Varying aspects of surveying will be discussed within the framework of GIS technology, such as, infrastructure development using surveying data, data collection, land development, Parcel management and survey data management. Students will be introduced to ArcGIS Surveying Analyst extension to incorporate and analyze surveying data into GIS. Prerequisite: GIS 115.

Global Studies

**GLO 101 Introduction to
 Global Studies 3 (3,0,0,0)**

This course explores globalization and analyzes issues with global implications through a myriad of academic and theoretical frameworks.

**GLO 295 Topical Issues
 In Global Studies 1-3 (1-3,0,0,0)**

This course explores an issue of current interest in global studies. The topic is chosen by the instructor. Can be repeated for up to 6 credits with department chair approval.

**GLO 299 Capstone in
 Global Studies 3 (0,0,0,3)**

The capstone in global studies involves students conducting an individual research project designed in cooperation with the course instructor and focused on a global issue.

Graphic Technology

**GRC 101 Introduction to Graphic
 Communications 3 (2,2,0,0)**

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 Introduction to
 Computer Graphics 3 (2,2,0,0)**

Hands-on approach to fundamental concepts and terminology for creating and editing basic electronic paint and draw type graphics. Includes software, hardware and operating system basics.

**GRC 104 Layout and Typography
 Fundamentals 3 (2,2,0,0)**

Introduction to typography and page layout rendered traditionally and manipulated by computer. Typographic theory, copy acquisition, proofreading, and fundamentals of typographic layout and design for publications and collateral pieces.

GRC 105 History of Graphic Design 3 (2,2,0,0)

An introduction to the evolution of graphic design with emphasis on acquiring knowledge of the basic visual and conceptual skills necessary for understanding the relationship between design, its audience and technology.

GRC 107 Design Fundamentals 3 (2,2,0,0)

An introductory course in the application and appreciation of the basic principles and elements of design, including form, shape, value, space, color and composition.

GRC 109 Color and Design 3 (2,2,0,0)

Color theories, color technologies and the application of color in art and design. Intermediate two-dimensional design problems focusing on the compositional, optical and psychological aspects of visual communication. Prerequisite: GRC 107.

GRC 110 Rendering and Illustration 3 (2,2,0,0)

Introductory class in developing techniques for visualizing and rendering images in 2D and 3D presentations using a variety of manual techniques and applications in the electronic environment.

**GRC 119 Computer Graphics/
 Digital Media 3 (2,2,0,0)**

Introduction to the basic concepts of multimedia development using computers. An introduction to basic concepts related to multimedia development including storyboarding, image preparation, importing, working with audio and video files, animation, web publishing and more. Hands-on projects using popular multimedia authoring software for publishing to the Web. Prerequisite: GRC 103.

GRC 125B Graphics Software 1 (0.5,1,0,0)

A variety of short courses in software packages specific to graphic communications and digital media applications. Classes will include current software packages and upgrade-specific training. Verify type of software and levels of instruction in current schedule of classes. Grading to be on a Pass/Fail basis.

**GRC 140 Print Production
 with InDesign 3 (2,2,0,0)**

Mastering the industry-standard page layout application InDesign to produce single and multiple-page documents for print reproduction. Emphasis on the complete print production work flow using Adobe software to prepare and manage assets and to plan, design, and assemble layouts. Prerequisites: GRC 101, 103, 104.

GRC 156B Computer Illustration I 3 (2,2,0,0)

Thorough exploration of a bézier-curve based application as a professional illustration and design tool. Hands-on projects using Adobe Illustrator. Prerequisite: GRC 103.

GRC 158 Cartooning 3 (2,2,0,0)

Cartooning characters, newspaper comics, editorials, caricatures, and mascots denoting humorous people and situations.

GRC 161 Advertising Design I 3 (2,2,0,0)

Introduction to basic layout and design principles and concepts, applied to advertising. Creative evaluation of marketing strategies, conceptual thinking, and use of color and design is stressed. Hands-on, problem-solving approach involving logo development, typographical design, story boarding, print and billboard ads. Various graphic techniques explored. Prerequisite: GRC 104.

GRC 165B Electronic Painting 3 (2,2,0,0)

Using professional painting software as a professional tool to create advanced bitmapped artwork used as textures, backgrounds and images in game and educational CDs, web pages, 3D animation, and print productions. Prerequisite: GRC 103.

GRC 173B Digital Photo Retouching 2 (1,2,0,0)

Hands-on projects to master the techniques necessary to retouch photographs using Photoshop, including colorizing B&W, fixing focus, removing scratches, adjusting contrast and color. Prerequisite: GRC 103.

**GRC 175B Web Design
and Publishing I 3 (2,2,0,0)**

Creating and managing web pages and sites using Dreamweaver software. Emphasis on the design, usability, and features of professional web page layout and site production process. Prerequisite: GRC 103.

**GRC 179 Multimedia Design
and Production I 3 (2,2,0,0)**

Overview of Multimedia design and development. Emphasis on how to design real world interactive projects that combine text, graphics, animation, audio, video, and more. Hands-on projects using popular multimedia authoring software for publishing to CD, DVD, and the Web. Prerequisite: GRC 119.

GRC 183B Electronic Imaging I 3 (2,2,0,0)

Scanning and working with photographic and illustrative images using Adobe Photoshop. Hands-on projects dealing with photo correction, manipulation, compositing, and illustrative design explore the tools and basic features of this industry-leading image manipulation application. Prerequisite: GRC 103.

GRC 185 Computer Animation I 3 (2,2,0,0)

Beginning 3D animation for multimedia, including modeling, lighting, rendering, and project management. Emphasis on creating content for multimedia, importing 3D files into common authoring programs and publishing to the Web. Prerequisite: GRC 119.

**GRC 188 Web Animation
and Interactivity I 3 (2,2,0,0)**

Creating and publishing vector-based web Animations using the Flash authoring program. Students create web viewable Flash movies that combine bitmap and vector graphics, audio, animations, and scripting.

**GRC 191B JavaScript Applications
for Designers 3 (2,2,0,0)**

Overview of popular JavaScript applications being used in Web Design. JavaScript the most popular client side scripting language in Web Development will be discussed. Students complete hands-on projects for non-programmers, learning to implement powerful visualizations and interactions.

**GRC 192B Flash Action Script
for Designers 3 (2,2,0,0)**

Continued exploration of Flash using ActionScript. Hands-on projects using popular ActionScript techniques for Flash Designers. Students become more experienced in ActionScript, Flash's internal scripting language. Prerequisite: GRC 188.

GRC 207 Electronic Design 3 (2,2,0,0)

Basic design concepts, principles, and methodology for effective visual communications in print and multimedia. Class projects involve using the computer exclusively as the tool for preparing design materials and/or as the final medium. Prerequisites: GRC 104, 107, 119.

GRC 228B 3D Electronic Design 3 (2,2,0,0)

Explores the design concepts and process related to creating effective 3D digital images and scenes. Class projects involve using 3D software for preparing design materials for print, multimedia, and animation. Prerequisites: GRC 107, 119.

GRC 229 Advanced Typography 3 (2,2,0,0)

Study of typography's informative, expressive, and experimental potential. Hands-on projects, using the computer as a design tool, include typesetting, designing with type, and creating special type effects. Students learn both technical and creative ways type can be crafted. Prerequisites: GRC 104, 107.

GRC 256B Computer Illustration II 3 (2,2,0,0)

Advanced illustration techniques on Macintosh computers with emphasis on special projects and graphic solutions using Illustrator. Prerequisite: GRC 156B.

GRC 264B Advanced Illustration 3 (2,2,0,0)

A continuation of Rendering and illustration. Emphasis is placed on developing problem solving strategies for the individual interested in the field of illustration. Various medium will be explored including: water medium, colored pencil and electronic media. Effective use of color in illustration will be an important aspect of the course. Prerequisite: GRC 110.

GRC 271 Advertising Design II 3 (2,2,0,0)

Continuation of Advertising Design I principles, methods, components, materials and media of advertising design. Recommended for those seeking to specialize as a graphic designer. Prerequisite: GRC 161.

GRC 275B Web Design and Publishing II 3 (2,2,0,0)

Intermediate to advanced techniques for creating web sites using XHTML, CSS, and Dreamweaver. Emphasis on design and usability to produce real world projects demonstrating the site production process, project management, Web Design, popular CSS techniques, search engine optimization, and more. Prerequisite: GRC 175B.

GRC 276B Web Design and Publishing III 3 (2,2,0,0)

Development of advanced professional web sites, using popular web scripting technologies, using PHP, MySQL and JavaScript to create dynamic web sites. Advanced technologies will be discussed as well as an overview of industry trends related to web development. Prerequisite: GRC 275B

GRC 278B Electronic Prepress 3 (2,2,0,0)

Creating, preparing, and managing desktop files to assure that they correctly output. Includes electronic stripping, art preparation, advanced type handling and scanning, color management, separations, and pagination. Prerequisites: GRC 140, 156B.

GRC 279B Multimedia Design and Production II 3 (2,2,0,0)

Intermediate and advanced multimedia design and development using popular multimedia authoring software. Emphasis on design, interactivity, usability, and scripting to produce highly engaging projects for publishing to CD, DVD, and the Web. Prerequisite: GRC 179.

GRC 283B Electronic Imaging II 3 (2,2,0,0)

Advanced techniques working with both photographic and illustrative images in B&W and color, using Photoshop and related third-party software. Prerequisite: GRC 183B.

GRC 286B Digital Video Post-Production 3 (2,2,0,0)

Creating and publishing motion graphics using popular video post production software. Students learn to author motion graphics combining graphics, text, animation, audio, video and more. Students create and publish highly visual programs usable with digital video, common authoring programs, and the web. Prerequisite: PHO 220B.

GRC 288B Web Animation and Interactivity II 3 (2,2,0,0)

Intermediate and advanced Flash techniques with an emphasis on ActionScript, importing and using video, and producing highly interactive projects for the Web. Prerequisite: GRC 188.

GRC 289B Special Projects in Graphic Communications 1-3 (0,0,0,5-15)

Students work on individual design and communications projects under the direction of a faculty advisor; projects, provided by real world businesses and organizations, relate to the student's selected major emphasis. Prerequisite: 21 GRC course credits.

GRC 290 Internship in Graphic Communications 1-8 (0,0,0,5-40)

Supervised work experience within a selected graphic communications firm, dependent upon student's major emphasis. Designed by company official and faculty advisor to apply knowledge to on-the-job situation. Available to students entering their last semester of instruction for degree. Contact department for applications, screening and required skills evaluation.

GRC 293B Job Preparation for Graphic Communications 3 (2,2,0,0)

Students will be required to learn job application skills and interview for employment. Includes field trips to sites in the design/graphics industry. Prerequisite: 15 hours of GRC credits.

GRC 294B Portfolio Workshop 1-3 (0.5-1.5,1-3,0,0)

Development of a customized, professional portfolio of the student's work for prospective clients and employers. Prerequisite: 15 hours of GRC credits

Greek**GRE 111 First Year Modern Greek I 4 (4,0,0,0)**

A course emphasizing the development of language skills in listening, speaking, reading and writing. Emphasis is placed on communication in all four language skills.

Health and Human Performance**HHP 110B Introduction to the Health Professions 3 (3,0,0,0)**

This course is designed to provide the student with a survey of the various health careers and subject matter involving the health field today.

HHP 123B Introduction to the Human Body 4 (4,0,0,0)

Introductory study of the structural and functional characteristics of the human body and their relationships to health and disease.

HHP 124B Introduction to the Human Body Computer Lab 1 (0,2,0,0)

A computer-based laboratory course designed to complement instruction in HHP 123B. Students required to take the lab must do so concurrently with HHP 123B.

HHP 150 Living Healthy and Well 3 (3,0,0,0)

This course is a study of healthy living principles as they apply to adult life. Emphasis is placed on the recognition of individual decisions that affect one's overall health.

HHP 190 Exercise, Nutrition and Weight Control 3 (3,0,0,0)

A basic overview of principles of fitness as they apply to exercise and good nutrition. Emphasis will be placed on the practical application of sound exercise and eating habits and the development of a personalized fitness program. This course is designed for the average person who wishes to gain the knowledge necessary for improved health.

HHP 201B Stress Management 2 (2,0,0,0)

An overview of stress, its manifestations, and methods of managing it. Particular emphasis will be placed on the role of exercise in controlling stress and the development of a balanced life-style.

HHP 203B Sports Nutrition 3 (3,0,0,0)

A course designed for the fitness professional that explores the link between nutrition, energy metabolism, and exercise. Optimizing exercise performance and making prudent decisions in the nutrition marketplace will be discussed.

HHP 206B Prevention and Care of Exercise Injuries 2 (2,0,0,0)

Overview of safety and injury management for the fitness professional. Includes injury prevention, safe use of exercise equipment, contraindicated exercise, facility safety requirements and liability issues.

HHP 213 Healthy Aging 4 (4,0,0,0)

A course designed to address the factors affecting the health and fitness status of an individual as that person progresses from early to late adulthood. Recognition and prevention of health and personal fitness problems will be emphasized.

HHP 227B Topics in Alternative Medicine 1 (1,0,0,0)

An examination of modern definitions of health; a comparison of traditional and alternative health care; an overview of alternative choices; trends in health care. May be repeated up to a maximum of three credits.

HHP 291 First Aid 2 (2,0,0,0)

Study of various emergency medical problems and their management by application of basic First Aid and Cardiopulmonary Resuscitation.

History

HIST 101 U.S. History I 3 (3,0,0,0)

A survey of United States political, social, economic, diplomatic, and cultural development from colonial times to 1877. Satisfies the United States Constitution requirement. History 101 and 102 need not be taken in sequence; either class may be taken alone. Prerequisite: C or better in ENG 100, 101, 101H, or 113.

HIST 101H U.S. History I - Honors 3 (3,0,0,0)

An honors level survey of United States political, social, economic, diplomatic, and cultural development from colonial times to 1877. This course emphasizes interactive and independent learning through readings, discussion, and writing. Satisfies the United States Constitution requirement. History 101H and 102H need not be taken in sequence; either class may be taken alone. Prerequisites: ENG 100, 101, 101H, or 113 and admission to the Honors program.

HIST 102 U.S. History II 3 (3,0,0,0)

A survey of United States political, social, economic, diplomatic, and cultural development from 1877 to present. Satisfies the Nevada Constitution requirement. History 101 and 102 need not be taken in sequence; either class may be taken alone. Prerequisite: C or better in ENG 100, 101, 101H, or 113.

HIST 102H U.S. History II - Honors 3 (3,0,0,0)

An honors level survey of United States political, social, economic, diplomatic, and cultural development from 1877 to present. This course emphasizes interactive and independent learning through readings, discussion, and writing. Satisfies the Nevada Constitution requirement. HIST 101H and 102H need not be taken in sequence; either class may be taken alone. Prerequisites: ENG 100, 101, 101H, or 113 and admission to the Honors program.

HIST 105 European Civilization to 1648 3 (3,0,0,0)

A survey of the development of Western civilization from the dawn of history to 1648.

HIST 106 European Civilization Since 1648 3 (3,0,0,0)

A survey of the development of Western civilization from 1648 to the present.

HIST 107 Women in American History 3 (3,0,0,0)

A study of the role of women in the creation of America. Includes a look at legal status, life style and the unique status of minority women.

HIST 111 Survey of American Constitution History 3 (3,0,0,0)

Origins and history of the United States Constitution; surveys the development of American judicial interpretations and institutions. Satisfies the U.S. Constitutions requirement.

HIST 150 Introduction to Chinese Civilization 3 (3,0,0,0)

An introductory survey of the growth and development of Chinese civilization with an emphasis on philosophy, literature, society and political development from 2200 B.C. to the present.

HIST 151 Introduction to Japanese Civilization 3 (3,0,0,0)

An introductory survey of the growth and development of Japanese civilization with an emphasis on philosophy, literature, society and political development from 8000 B.C. to the present.

HIST 202 American Military History 3 (3,0,0,0)

U.S. military history from the colonial period onward emphasizing war strategies, military thought, and policy in the armed forces and American society.

HIST 208 World History I 3 (3,0,0,0)

A survey of the societies and cultures of Asia, Africa, the Middle East, Europe, the Americas, and Oceania to 1600.

HIST 209 World History II 3 (3,0,0,0)

A review of the principal developments in world history since 1600, including scientific and technological revolutions, social revolutions, nationalism, immigration, colonialism, world wars, decolonization, modernization, democracy, and dictatorships.

HIST 210 Southwest Heritage 3 (3,0,0,0)

A study of the American Southwest and its cultures placed in historical perspective.

HIST 217 Nevada History 3 (3,0,0,0)

A study of Nevada from early exploration to the present. Satisfies the Nevada Constitution requirement. Prerequisite: C or better in ENG 100, 101, 101H, or 113.

HIST 217H Nevada History - Honors 3 (3,0,0,0)

An honors level survey of Nevada from early exploration to the present. This course emphasizes interactive and independent learning through readings, discussion, and writing. Satisfies the Nevada Constitution requirement. Prerequisites: ENG 100, 101, 101H, 113 and admission to the Honors program.

HIST 220 History of Las Vegas 3 (3,0,0,0)

An introduction to Las Vegas from prehistoric times to the present, emphasizing recent developments.

HIST 222 Terrorism and Political Violence 4 (4,0,0,0)

This interdisciplinary course focuses on the motivation for terrorism and political violence. It addresses the question, "What makes an otherwise ordinary person deliberately attack unarmed civilians who have personally done the perpetrator no wrong and is in no position to redress the perpetrator's grievances?" The course approaches the issue from four different academic perspectives: history, psychology, sociology, and political science. (Same as PSC 222, PSY 222, or SOC 222.)

HIST 227 Introduction to Latin American History and Culture I 3 (3,0,0,0)

Survey of the development of Spain and Portugal as colonizing powers, the discovery and conquest of America, and the growth of political, social, and economic institutions during the Colonial Period.

HIST 228 Introduction to Latin American History and Culture II 3 (3,0,0,0)

Survey of Latin American independence movements, the major Latin American republics, and Latin American indigenous history and culture

HIST 247 History of the Mexican Nation 3 (3,0,0,0)

An introduction to pre-Columbian Mexico, Colonial New Spain and Mexican National History to the present.

HIST 250 Introduction to the Study of History 3 (3,0,0,0)

Introduction to the research methods commonly used by historians. Practical application of these methods to everyday life is emphasized.

HIST 251 Historical Investigation 3 (3,0,0,0)

Introduction to the basic concepts and techniques of historical investigation and writing. This course is writing intensive and is intended for students majoring in history or related disciplines. Prerequisite: Permission of department chair.

HIST 260 Introduction to Native American History 3 (3,0,0,0)

An examination of significant events and trends in Native American life. The course will focus on the contributions made by American Indians to the development of our history and contemporary society.

HIST 275 The Wild West - Myth and Reality 3 (3,0,0,0)

Designed to acquaint the student with the history of the American West, the course will typically examine and compare the often romanticized themes of early novels and Hollywood films with the harsh reality of frontier life. The topics that may be examined include the Spanish Southwest, the fur trapping mountain men, the Indians and the army, outlaws, the mining men, cattle, timber, and farming frontiers, and the introduction of capitalism and large scale industrialization.

HIST 280 History of American Immigration 3 (3,0,0,0)

A study of why people came to the United States, how they established a new life and what contributions they made to the development of the United States.

HIST 285 History of Witchcraft 3 (3,0,0,0)

The study of the figure of the witch from ancient times to the present, and the historical, religious and social context from which it emerged. The course includes Paleolithic and Neolithic religion, witches in ancient cultures, formulation of the Christian witch concept, the witch hunt in Early Modern Europe and in the British North American colonies, and modern neo pagan witchcraft. (Same as WMST 285.)

HIST 286 Goddess Traditions 3 (3,0,0,0)

A study of goddess images in a variety of cultures from prehistory to the modern age including the history, values, beliefs, practices and ethics systems associated with goddess imagery. (Same as WMST 286.)

HIST 293 The African American Experience 3 (3,0,0,0)

Survey of the history of African Americans from their origins on the west coast of Africa to the present.

HIST 295 Topical Issues in History 1-3 (1-3,0,0,0)

Study of a selected issue or topic of significance in history. The particular topic will vary, however, the intent of the study will be to develop an awareness of and appreciation for the complex forces which have shaped the modern world. Material for the study will be drawn from a wide variety of sources and may be interdisciplinary in nature. The course may be repeated up to a total of six credits, with the permission of the department chair. Prerequisite: Permission of the department chair.

HIST 299 Internship 3 (2,0,0,6)

Supervised work experience with selected community businesses. Complete 30 credit hours, minimum 2.5 GPA. Prerequisites: Department chair approval, 15 HIST credits including HIST 101, 102, 217.

Health Information Technology

HIT 102B Coding for Medical Offices 2 (1,3,0,0)

Introduction to ICD and CPT coding as they relate to the medical office setting. Corequisite: HIT 118B.

HIT 103B Customer Service Skills in a Healthcare Setting 1 (1,0,0,0)

Designed to develop and practice customer service skills as needed in a healthcare setting.

HIT 105B Healthcare Delivery Systems 2 (2,0,0,0)

An introduction to the organization and functioning of the healthcare delivery system. Professional, legal, and ethical aspects of the health occupations. Prevention, community health needs, psychosocial factors in healthcare, and community agencies.

HIT 106B Healthcare Reimbursement 2 (2,0,0,0)

An introduction to the complex financial and reimbursement systems of the healthcare environment. This course includes the basics of health insurance, public funding programs, managed care contracting, and how services are paid.

HIT 107B Patient Registration Practicum 2 (0,0,10,0)

Provides the student with practical experience in performing patient registration duties. The practicum assignments are eighty (80) hours in a hospital admitting department. Grades assigned on a pass/fail basis. Students must attend a mandatory orientation. Corequisite: HIT 106B.

HIT 108B Interpersonal Communication Skills in the Health Care Setting 3 (3,0,0,0)

Designed for the development and practice of a set of interpersonal and human relation skills as needed among health care providers.

HIT 117B Medical Terminology I 1 (1,0,0,0)

Study of word derivations and formation with emphasis upon understanding common usage in the field of health care.

HIT 118B Language of Medicine 3 (3,0,0,0)

Application of medical language by body system and appropriate use within the accepted nomenclature and classification systems. This course is designed to meet professional program requirements.

HIT 119B Introduction to Pharmacology and Laboratory Tests 2 (2,0,0,0)

Advanced application of medical language specific to clinical specialties inclusive of pharmacology, laboratory, and diagnostic testing. Mathematical calculation is used to solve medication dosage problems and to convert between different systems of measurement. Prerequisite: HIT 118B.

HIT 120B Medical Transcription I 4 (2,6,0,0)

Basic medical transcription skills. Corequisites: HIT 118B, ENG 100 or ENG 101 or satisfactory performance on English placement test and COT 200.

HIT 122B Medical Transcription II 5 (1,6,6,0)

Advanced medical transcription skills. Prerequisite: Instructor permission. Grades assigned on a Pass/Fail basis.

HIT 130B Procedural Terminology 1 (1,0,0,0)

In-depth study of medical terminology used in the procedural coding classification system. Analysis of standardized vocabulary of surgical concepts, body part terms, operative approaches, devices and other qualifiers from which codes are built. Prerequisite: HIT 118B.

HIT 165B Pathophysiology 4 (4,0,0,0)

Introduction to concept of disease process in specific body systems. Prerequisite: BIOL 223 or HHP 123B.

HIT 170B Healthcare Computer Applications 3 (2,3,0,0)

This course develops students' knowledge and skills in hardware and software components of computers for health-care applications. The students will also explore methods of controlling the accuracy and security of data in computer systems, record linkage and data sharing concepts, and information systems in healthcare. Prerequisites: COT 127B, HIT 180B.

HIT 180B Introduction to Health Information Management 2 (1,3,0,0)

Introduction to Health Information Management procedures including professional ethics and processes to assure quality health care through quality information. Prerequisites: HIT 105B, 118B.

HIT 184B Introduction to ICD Coding 2 (1,3,0,0)

Introduction to the mechanics of using the ICD diagnostic coding system. Analysis of the organization and classification of all chapters, evaluation of coding guidelines, and documentation guidelines. Prerequisites: HHP 123B, 124B, HIT 118B, 130B, 165B.

HIT 185B Introduction to CPT Coding 3 (2,3,0,0)

Introduction to outpatient and physician procedural coding. The student will be introduced to CMS's HCPCS two-level coding system, including basic coding guidelines and practice using CPT-4. Prerequisites: HHP 123B, 124B, HIT 118B, 165B.

HIT 186B Advanced Outpatient Coding 2 (1,3,0,0)

This course is designed to be an intermediate study and practice of coding systems utilized in outpatient healthcare facilities. Using ICD diagnostic codes, CPT, HCPCS Level II codebooks, and automated encoders, the student will be provided with knowledge and opportunities to further develop skills acquired in basic coding classes. Prerequisites: HIT 119B, 165B, 180B, 184B, 185B.

HIT 187B Introduction to ICD-PCS Coding 2 (1,3,0,0)

Introduction to the mechanics of using the ICD procedural coding system (PCS). Analysis of the seven character structure, the organization and classification within all sections, evaluation of coding guidelines, and documentation guidelines. Prerequisites: HHP 123B, 124B, HIT 118B, 130B, 165B.

HIT 201B Advanced Coding Systems 3 (2,3,0,0)

In-depth practice in assigning diagnostic and procedure codes according to ICD. Prerequisites: HIT 184B, 185B, 187B.

HIT 205B Privacy, Legal, and Ethical Issues in Healthcare 2 (1,3,0,0)

In-depth study of patient privacy and confidentiality of health information. Review of legal responsibilities of healthcare workers and facilities with emphasis on HIM. Health professional ethics issues are discussed and evaluated.

HIT 206B Professional Practice Experience I 3 (0,0,10,0)

Practical experience in the acute care setting performing Health Information Departmental duties. Corequisite: HIT 205B. Grades assigned on a Pass/Fail basis.

HIT 207B Health Information Management 2 (1,3,0,0)

Study of Organizational Resources with emphasis on Human Resources, Financial Resources, and Physical Resources as related to Health Information Management. Prerequisite: Acceptance into HIT Program.

HIT 208B Professional Practice Experience II 2 (0,0,6,0)

Management and practical experience in specialized care settings. Prerequisite: HIT 206B. Grades assigned on a Pass/Fail basis.

HIT 210B Coding Practice Experience 3 (0,0,12,0)

Practical coding experience in a variety of health care settings. Corequisite: HIT 201B. Grades assigned on a Pass/Fail basis.

HIT 240B Healthcare Statistics and Research 1 (1,0,0,0)

Computation and interpretation of healthcare statistics. Introduction to knowledge based research techniques and guidelines regarding research and IRB processes. Prerequisite: Instructor permission.

HIT 245B Healthcare Quality Management 2 (1,3,0,0)

Methodologies for conducting quality improvement activities including collecting, organizing and presenting data. Prerequisite: Instructor permission.

HIT 290B RHIT Exam Prep 2 (2,0,0,0)

This course is a review of HIM topics covered in the HIT Program. It is designed to prepare students for the national certification examination. Grades assigned on a Pass/Fail basis. Prerequisite: Instructor approval.

HIT 291B Coding Exam Prep 2 (2,0,0,0)

This course is a review of coding topics covered in the Medical Coding Program. It is designed to prepare students for the national coding certification examination. Grades assigned on a Pass/Fail basis. Prerequisite: Instructor approval.

HIT 299B Selected Topics in Health Information Technology 2 (0,0,0,2)

Covers selected topics of interest to students of health information technology. Grades assigned on Pass/Fail basis. Prerequisite: Instructor permission.

Hotel Management

HMD 101 Introduction to the Hospitality Industry 3 (3,0,0,0)

Survey of the history, likely direction, and dynamics of the hospitality industry from the perspective of the global economy, with emphasis on the wide variety of career opportunities.

HMD 103 Introduction to the Lodging Industry 3 (3,0,0,0)

Detailed presentation of lodging operations management in specific areas including front-office operations, housekeeping and sanitation, food and beverage, and facility operations, including risk management/security, accounting/financial operations, and hospitality services. In addition to the hotel and lodging industry, other topical areas also include vacation ownership (time-share) industry, casino and resort industry. Prerequisite: HMD 101.

HMD 202 Housekeeping Operations 3 (3,0,0,0)

Application of various systems, procedures, and controls associated with a modern hotel or hospital housekeeping department. Emphasis on management delegation, scheduling, systems, routines, and equipment. Laundry operations and hotel recreation departments also reviewed.

HMD 203 Front-Office Operations 3 (3,0,0,0)

Study of front-office procedures from reservations through check-out including the night audit and the property management system and their impacts on other lodging operations. Special emphasis placed on guest-employee relations. Prerequisites: HMD 101 and ENG 100, or 101, or 113.

HMD 226 Industry Computer Applications for Hospitality and Tourism 3 (3,0,0,0)

Survey of computer applications, issues, and trends in the hospitality industry. Emphasis placed on the role of technology in operations and management of technology as a strategy. Prerequisite: HMD 101.

HMD 235 Hotel, Restaurant and Gaming Law 3 (3,0,0,0)

Legal aspects of the innkeeper/guest relationship with particular attention to personal liability, property liability, labor law, crimes, torts, evictions, negligence, administrative agencies and gaming regulations.

HMD 253 Hospitality Services Management 3 (3,0,0,0)

Exploration of how services are different from goods, service procedures for various functional areas of hospitality, and how key factors contribute to service quality and guest satisfaction in services. Prerequisites: HMD 101 and ENG 102 or 114.

HMD 259 Human Resources Management in the Hospitality Industry 3 (3,0,0,0)

Recruitment, selection, compensation, training, and performance appraisal of employees and managers in the hospitality industry's culturally diverse work place. Prerequisites: HMD 101 and ENG 100, or 101, or 113.

HMD 295 Work Experience in Lodging Operations 1 (0,0,0,1)

In addition to the academic requirements, the Department of Hospitality Management requires 200 hours of acceptable employment in the hospitality industry. This work experience will be measured qualitatively as well as quantitatively. The work experience requirement should be met during the school year or in summers. Students who plan to transfer to UNLV will be able to transfer a maximum of 500 hours of employment toward UNLV's 1000 hour employment requirement. International students must go to the office of International Student Services to verify employment eligibility and obtain authorization. This course can be repeated up to maximum of four credits. Grade will be given upon verification of employment.

Human Services

HMS 101B Introduction to Human Services 3 (3,0,0,0)

An introductory course identifying the multifold programs and activities of social welfare and helping services and their key role in modern society; observation and reporting techniques emphasized.

HMS 102B Introduction to Counseling 3 (3,0,0,0)

Designed to provide an overview of the historical, philosophical and theoretical foundations of counseling. Students will examine the counselor as a person and explore the role of self-awareness in the field of counseling.

HMS 103B Creative Self Awareness 3 (3,0,0,0)

Course includes clarifying values, setting goals, exploring self, expanding options, overcoming barriers, working effectively, enhancing relations, planning and decision making.

HMS 104B Small Group Interaction Techniques 3 (3,0,0,0)

Introduces the student to the theories and techniques which relate to working with individuals. Personality theories presented in terms of their applicability to change processes.

HMS 106B Human Services Practicum I 3 (0,0,0,8)

Human Services work experience. The student works in a helping services facility eight hours a week under the supervision of a facility employee to gain practical work experience. Prerequisites: HMS 102B, 103B, 130, 265B.

HMS 107B Community Resources in Human Services 3 (3,0,0,0)

A course designed to acquaint the student with resources available for substance abuse programs.

HMS 116B Substance Abuse 3 (3,0,0,0)

Explores the emergence of substance abuse as a sociological and cultural phenomenon in the United States. Identifies the development in legal policy, social history and the treatment and research dimensions.

HMS 130 Human Sexuality 3 (3,0,0,0)

Designed to provide each student with the necessary biological, historical, psychological and sociological perspective for personal positive changes. Provides a forum for discussion on issues of common concern.

HMS 135B Cross Cultural Relations 3 (3,0,0,0)

A study of American Ethnic groups within contemporary American society. A practical "road map" leading to an overall picture of the complexity of the problems facing the United States society in attempting to alleviate the continuing social problems of cultural ethnic relations.

HMS 152B Divorce Adjustment 3 (3,0,0,0)

Designed to help people adjust to divorce and build their new life styles and systems in a positive creative way.

HMS 206B Human Services Practicum II 3 (0,0,0,8)

Human Services work experience. The student works in a helping services facility eight hours a week under the supervision of a facility employee to gain practical work experience. Prerequisite: HMS 106B.

HMS 265B Death and Dying 3 (3,0,0,0)

Designed to provide the student with the necessary information to both understand and cope with the social processes of dying, death and bereavement from an academic as well as a personal perspective.

HMS 266B Mind/Body Health 3 (3,0,0,0)

This class explores the many approaches to healing and maintaining wellness of the mind, body and spirit. Lectures, guest teachers and videos will be used in this interesting experiential class.

HMS 267B Solutions for Stress 3 (3,0,0,0)

This course deals with how stress affects health and quality of life and will be complimented by addressing methods of coping with stress in all areas of life. Exercise, nutrition, interpersonal skills and Eastern and Western forms of relaxation will be addressed.

HMS 268B Developing Self-Esteem 3 (3,0,0,0)

This course will help students enrich their lives, and increase their happiness. Students will learn how to identify personal problems and how to effectively change their lives for the better. The course includes both group and experiential exercises.

HMS 295B, 296B, 297B, 298B Work Experience I, II, III, IV 1-4 (0,0,0,1-4)

Cooperative Education courses designed to provide the student with on-the-job supervised and educationally directed work experience.

Humanities**HUM 298 Phi Theta Kappa Honors Topic 3 (3,0,0,0)**

The Honors Study Topic course is dedicated to the examination and illumination of the Phi Theta Kappa Honors Study Topic – providing ideas for scholastic enrichment. Open for general registration; may be taken twice for credit.

Insurance**INS 105 Insurance Principles 3 (3,0,0,0)**

Understanding the basic concepts of risk and insurance doctrines. Explore the various areas of family risk management with emphasis in life, health, auto and home risks. Review applicable Nevada Revised Statutes.

INS 110B Life and Health Insurance 3 (3,0,0,0)

The purpose of the course is to satisfy the spirit and letter of NRS 683A and NAC 683A, requiring life and health prelicensing education. General product knowledge, terms, and concepts of life insurance, annuity contracts, and accident and health insurance are covered. Nevada insurance laws and regulations are discussed generally as well as specifically relating to life and health insurance.

INS 210B Property and Liability Insurance 3 (3,0,0,0)

Facts, principles, basic concepts and Nevada statutes covering property and liability insurance. Designed for the person who contemplates engaging in the insurance industry as a professional or for those who desire to understand insurance for making informed business or personal decisions.

Interior Design

INTD 105B History of Furniture and Interiors I 3 (3,0,0,0)

A study of the history of furniture and interiors from antiquity to the 19th Century.

INTD 106B History of Furniture and Interiors II 3 (3,0,0,0)

A study of furniture and interiors from the 19th century to the present. Prerequisite: INTD 105B.

INTD 216 Textiles 3 (2,2,0,0)

Consumer orientation to textiles. Serviceability, concepts of durability, care, comfort and aesthetic appearance are used to evaluate textiles alternatives for various end uses.

INTD 218B Methods and Materials 3 (2,2,0,0)

A study of interior furnishings, materials, processes and applications.

INTD 255B Interior Design Studio I 3 (2,2,0,0)

Application of design concepts of interior spaces. Short exercises precede residential projects. Prerequisites: INTD 210B, 216, 220B.

INTD 257B Interior Design Studio II 3 (2,2,0,0)

Advance problem solving in interior design. Prerequisites: INTD 218B, 220B, 255B.

INTD 258B Business Practices 3 (3,0,0,0)

This course is an overview of interior design business principles and practices. Prerequisite: INTD 255B.

INTD 260B Contract Documents 3 (2,2,0,0)

Working drawing, related schedules, interior specifications, project management. Prerequisites: INTD 220B, 266B.

INTD 262B Interior Design Drawing II 3 (2,2,0,0)

Advanced study of sketching, perspective and rendering techniques focusing on color media. Prerequisite: INTD 210B.

INTD 264B Kitchen Design Studio 3 (2,2,0,0)

Design of residential kitchen. Prerequisites: ADT 100B, INTD 218B.

INTD 266B Building Codes and Standards for Interior Designers 3 (3,0,0,0)

Comprehensive study of major codes, standards and federal regulations affecting the interior design and construction of commercial and residential. Special emphasis on application as it affects the health, safety and welfare of the human user.

INTD 270 Field Experience 1-4 (0,0,0,5-20)

Provides students the opportunity to work in the interior design industry directed by a qualified professional and supervised by the instructor. Maximum of 4 credits. Prerequisite: Instructor permission.

INTD 272B Lighting Theory 3 (2,2,0,0)

Study of lighting design and applications for interior spaces. Prerequisites: ADT 100B, INTD 101B, 115.

INTD 278B Hospitality Design Studio 3 (2,2,0,0)

Design of hospitality spaces such as guestrooms, suites, restaurants, public spaces. Prerequisites: INTD 216, 218B, 220B.

Information Systems

IS 100B Core Computing Competency 0 (0,0,0,0.25)

This course verifies a student's core computing competencies. Knowledge and skills will be tested in the areas of computing fundamentals, key applications, and the Internet at current collegiate/professional levels. Students must pass all required exams to earn an internationally recognized digital literacy certification to pass the course. Students should have strong knowledge and skills in the specified computing areas. Graded Pass/Fail.

IS 101 Introduction to Information Systems 3 (3,0,0,0)

Concepts and applications of Information Systems. Introduction to hardware, software, data, and file concepts. Microcomputer applications software including word processing, spreadsheet, database, Internet, and presentation software.

IS 115 Introduction to Programming 3 (3,0,0,0)

A first course in programming, problem-solving and algorithm development using a modern programming language. Students should have basic computer skills. Prerequisite: MATH 095 with a grade of C or better; or a satisfactory ACT/SAT/Placement Test score.

Italian

ITAL 101B Conversational Italian I 3 (3,0,0,0)

A course emphasizing spoken communication. Speaking skills, oral listening skills, reading and writing skills explored. A vocabulary of Italian-English words developed.

ITAL 102B Conversational Italian II 3 (3,0,0,0)

A course emphasizing a continuation of skills acquired in ITAL 101B. Increased fluency and further vocabulary development stressed. Prerequisite: ITAL 101B.

ITAL 111 First Year Italian I 4 (4,0,0,0)

The development of language skills in listening, speaking, and writing. Oral emphasis.

ITAL 112 First Year Italian II 4 (4,0,0,0)

A second semester course designed to continue and improve the skills learned in ITAL 111. Prerequisite: ITAL 111 or permission of the department.

ITAL 211 Second Year Italian I 3 (3,0,0,0)

Continuation of Italian language skills with intensive review of grammatical structures. Emphasis on speaking, reading and writing skills. Introduction to Italian prose writing. Prerequisite: ITAL 112.

ITAL 212 Second Year Italian II 3 (3,0,0,0)

Continuation of review of grammatical structures. Structured conversation, reading of one novel and writing based on assigned topics. Prerequisite: ITAL 211.

ITAL 221 Italy and Its Culture 3 (3,0,0,0)

Introduction to Italian Culture and its influence on the World Community: a general examination of Italy's physical, historical, political, and administrative identity. An introduction to and assessment of the contributions of its major achievers in various areas of human endeavor: Art, Religion, Science, etc. A glance at Italy's popular culture as reflected in its films and other documents of contemporary daily life. Taught in English, no knowledge of Italian required.

Journalism

JOUR 100 Introduction to Journalism and Media Studies 3 (3,0,0,0)

This required course introduces prospective majors to the pragmatic, performative and presentational aspects of journalism and media studies.

JOUR 101 Critical Analysis of the Mass Media 3 (3,0,0,0)

Analysis of the development of newspapers, magazines, motion pictures, radio, and telecommunications. Overview of institutional structure and theoretical perspectives.

JOUR 102 News Reporting and Writing 3 (3,0,0,0)

Provides fundamental instruction and pre-professional practice in writing as a basis for upper-division courses in journalism and media studies. Analysis of news content and how news is obtained and written. Discussions and laboratory. Prerequisite: ENG 100, 101, or 113.

JOUR 105 News Production I 3 (3,0,0,0)

Introduction to news and features gathering, writing and presentation with practical application demonstrated in production of campus print publications, web pages and electronic programming (e.g. podcasts).

JOUR 121 Radio Production 3 (3,0,0,0)

A study and practical use of radio broadcast equipment, announcing techniques, programming concepts, functions of a disc jockey (DJ), and researching, writing and producing a newscast.

JOUR 201 Television Studio Production I 3 (3,0,0,0)

Study and training in basic television studio production for live or live-to-tape programming. Emphasis on producing and directing with training in various studio, control room, and engineering functions. Students are encouraged to take JOUR 220 either before or while taking this course.

JOUR 202 Electronic Media Production I 3 (3,0,0,0)

Lecture and lab for the study of and training in studio and field video production, basic post-production, and resource utilization across electronic platforms.

JOUR 204 Introduction to Media Production 3 (3,0,0,0)

Introduction to production tools and computer interfaces; emphasis on visual literacy, imaging, video and audio editing, Internet authoring, and creating multimedia documents.

JOUR 210 Introduction to Public Relations 3 (3,0,0,0)

Study of the practice of public relations including media, employee, consumer, community, shareholder, and customer relations. Emphasis is on the history of public relations, its role, and impact on today's society.

JOUR 212 Principles of Advertising 3 (3,0,0,0)

Examination of the purpose, function, and role of advertising in society. Emphasis is on the practical application of advertising as part of the marketing mix including customer identification, branding, message development, and media selection.

JOUR 220 Fundamentals of Applied Media Aesthetics 3 (3,0,0,0)

Survey of the various fields that use visual imagery for communicative purposes. Graphic design, film, and television imagery covered. Emphasis on television and film aesthetics and picture composition.

JOUR 223 Contemporary Radio 3 (3,0,0,0)

Examination of the structure, programming, regulation, and problems of radio in today's world and the role the medium plays in informing and entertaining modern listeners.

JOUR 241 News and the News Media 3 (3,0,0,0)

Survey of the history, purposes, functions, and effects of journalism.

JOUR 261 Introduction to IMC 3 (3,0,0,0)

Examination of the function of advertising and public relations in the media and society. Emphasis on the application of theory and its relationship to the IMC elements; public relations, advertising, promotion, direct marketing, interactive, and their ability to reach customers/publics

JOUR 276 Design Principles of Advertising/Publications 3 (3,0,0,0)

History of design periods and styles. Introduction to five basic types of print advertising: periodicals, direct mail, point of purchase, sales-promotion, and merchandising.

Japanese

JPN 101B Conversational Japanese I 3 (3,0,0,0)

A course emphasizing spoken communication. Speaking skills, oral and listening skills, reading and writing skills explored. A vocabulary of Japanese-English words developed.

JPN 102B Conversational Japanese II 3 (3,0,0,0)

Students will continue to develop speaking, oral and listening skills and vocabulary. Prerequisite: JPN 101B.

JPN 111 First Year Japanese I 4 (4,0,0,0)

The development of language skills in listening, speaking, and writing. Oral emphasis.

JPN 112 First Year Japanese II 4 (4,0,0,0)

A second semester course designed to continue and improve the skills learned in JPN 111. Prerequisite: JPN 111.

JPN 120 Kanji and Japanese Vocabulary I 2 (2,0,0,0)

Elementary level kanji course designed to teach writing of JPN 111 and JPN 112 vocabulary and bring students to the level of passing Kanji Kentei 10-kyu Exam. Prerequisite: JPN 111 or departmental approval.

JPN 121 Kanji and Japanese Vocabulary II 2 (2,0,0,0)

A continuation of Kanji and Japanese Vocabulary I designed to teach kanji at the level of Kanji Kentei 9-kyu Exam and vocabulary that utilizes 240 kanji. Prerequisite: JPN 120 or departmental approval.

JPN 211 Second Year Japanese I 3 (3,0,0,0)

Designed to continue the development of language skills in listening, speaking, reading and writing. Contextual studies. Prerequisite: JPN 112.

JPN 212 Second Year Japanese II 3 (3,0,0,0)

Designed to continue the development of language skills learned in JPN 211. Prerequisite: JPN 211.

Korean

KOR 101B Conversational Korean I 3 (3,0,0,0)

A course emphasizing spoken communication. Speaking skills, oral and listening skills, reading and writing skills explored. A vocabulary of Korean-English words developed.

KOR 102B Conversational Korean II 3 (3,0,0,0)

Students will continue to develop speaking, oral and listening skills and vocabulary. Prerequisite: KOR 101B.

KOR 111 First Year Korean I 4 (4,0,0,0)

The development of language skills in listening, speaking, and writing. Oral emphasis.

KOR 112 First Year Korean II 4 (4,0,0,0)

A second semester course designed to continue and improve the skills learned in KOR 111. Prerequisite: KOR 111.

KOR 211 Second Year Korean I 3 (3,0,0,0)

Designed to continue the development of language skills in listening, speaking, reading, and writing. Contextual studies. Prerequisite: KOR 112.

KOR 212 Second Year Korean II 3 (3,0,0,0)

Designed to continue the development of language skills learned in KOR 211. Prerequisite: KOR 211.

Landscape

LAND 100 Introduction to Landscape Architecture 3 (3,0,0,0)

Exploration of the relationship between landscape design and a range of disciplines, including health, psychology, environmental studies, science, education, engineering, tourism, and sports. Includes a discussion of the design principles which are the basis of design interventions, sample built projects in each area, and social, natural, and technical issues which are commonly addressed.

LAND 180 Fundamentals of Landscape Architectural Design I 3 (2,2,0,0)

Introduction to the principles and theories of design methodology in the “making” and representations of form and space. Focus on two-dimensional representation.

LAND 182 Fundamentals of Landscape Architectural Design II 3 (2,2,0,0)

Continuation of LAND 180, with emphasis on three-dimensional representation. Prerequisite: LAND 180.

LAND 200B Landscape Management 3 (3,1,0,0)

Investigation of best management practices for the installation and care of landscape ornamentals, including annual color plants, herbaceous perennials, shrubs, turf and trees with emphasis upon plant selection, fertilization, irrigation, pest management and pruning.

LAND 214B Irrigation Systems 3 (3,1,0,0)

A survey of the components of irrigation systems, function of components, performance evaluation, scheduling and troubleshooting. Prerequisite: MATH 104B or higher.

LAND 223B Integrated Pest Management 3 (3,1,0,0)

Survey of plant diseases, disorders and pest focused on control strategies that employ best management practices to minimize the use of chemical pesticides. Pesticide law, application equipment and application techniques are included.

LAND 241 Grading and Drainage 3 (2,2,0,0)

Basic skills in site grading techniques, calculation of cut and fill volumes, compaction of soil, run-off coefficients, sizing of drainage structures and pipes, layout of roads, walkways and parking lots.

LAND 242 Irrigation 3 (2,2,0,0)

Introduces basic design of irrigation, fountain and lighting systems. Sizing of components calculated and available products introduced.

LAND 257 Ornamental Plant Materials 3 (3,1,0,0)

Identification, distribution, growth, characteristics, adaptation, and use of ornamental plants. Emphasizes bedding plants, shrubs and trees.

LAND 258 Xeric Plant Materials 3 (3,1,0,0)

Identification, distribution, growth, characteristics, adaptation, and usage of xeric plants. Emphasizes bedding plants, shrubs and trees.

LAND 262 CAD for Landscape Architecture 3 (2,2,0,0)

Beginning application of computer-aided design software, particularly AutoCAD, focusing on the needs of the landscape architect, two-dimensional CAD drawing tools and techniques, complex object creation, information management, and common situations encountered in a professional environment explored. Other CAD software and three-dimensional design techniques also explored.

LAND 284 Landscape Architectural Design I 6 (3,6,0,0)

Elements, principles and theories of landscape design with emphasis on design at the human scale. Prerequisite: LAND 182.

LAND 286 Landscape Architectural Design II 6 (3,6,0,0)

Elements, principles and theories of landscape design with emphasis on design for humans and special populations. Prerequisite: LAND 284.

Latin American Studies**LAS 100 Introduction to Latina/o Studies 3 (3,0,0,0)**

An introduction to the field of Latina/o Studies through a multidisciplinary approach to provide students an integrated exploration of the complexities of this dynamic population.

LAS 101 Introduction to Latin American Studies 3 (3,0,0,0)

Interdisciplinary introduction to the culture, history, and political economy of contemporary Latin America; examines topics such as colonialism and independence, values and social structures, political institutions, and economic relations in the region; presents an overview of the history and conditions of U.S. Latinos.

LAS 210 Hispanic Groups in the United States 3 (3,0,0,0)

This course studies the Hispanic populations of the United States, focusing especially on the three largest Hispanic groups: Mexicans, Puerto Ricans, and Cubans. The class analyzes and compares how the different Hispanic groups handle reality, immigration, and the processes involved in adapting to life in the U.S.

LAS 223 Spanish Caribbean Culture 3 (3,0,0,0)

This course examines historical, cultural, and social developments of the Spanish Caribbean from pre-Hispanic times to the present. Topics include history, traditions, ethnicity, literature, arts, religion, politics, music, and food. (Same as SPAN 223.)

LAS 224 Mexican Culture 3 (3,0,0,0)

This course focuses on elements that contribute to the formation of the culture and identity of the Mexican nation: history, religion, music, art, food, movies and TV, traditions, celebrations and folklore, social realities, and the relationship with the U.S. Taught in English. (Same as SPAN 224.)

LAS 299 Capstone Class in Latin American Studies 1 (0,0,0,1)

As the last course of special program's requirements, it integrates coursework covered in the Latin American and Latina/o Studies AA degree program and independent work involving reading, writing, and research. Prerequisite: Enrollment by instructor approval only.

Latin

LAT 111 First Year Latin I 4 (4,0,0,0)

A beginning level Latin course emphasizing the development of reading and writing skills and cultural understanding. Emphasis on basic comprehension and communication.

LAT 112 First Year Latin II 4 (4,0,0,0)

A second-semester course of beginning-level Latin emphasizing the development of reading and writing skills and cultural and historical understanding. Emphasis on basic comprehension and communication. Prerequisite: LAT 111.

Law

LAW 101 Fundamentals of Law I 3 (3,0,0,0)

Relationship and delineation of the function and responsibility of the legal assistant, the attorney and the client. Prerequisites: ENG 100 or 101 with a grade of "C" or better and IS 101.

LAW 204 Torts 3 (3,0,0,0)

Students will become familiar with the major torts of negligence, trespass to land, defamation, strict liability, wrongful death and conversion. Prerequisite: LAW 101.

LAW 205 Contracts 3 (3,0,0,0)

Discusses the basic elements of contract law including offer, acceptance, consideration, contractual capacity, legality, defenses to enforcement of contracts, remedies and an introduction to the Uniform Commercial Code. Special emphasis placed on the practical analysis of contracts. Prerequisite: Law 101 or instructor approval.

LAW 231 Civil Procedure 3 (3,0,0,0)

This course emphasizes the court system in Nevada focusing on the internet. Topics include preparing pretrial litigation documents, as well as drafting a complaint, answer, and summons. Prerequisites: LAW 101, 259.

LAW 232 Criminal Procedure 3 (3,0,0,0)

Examines the criminal justice system, including procedures from arrest to final disposition, principles of constitutional, federal, state and local laws as they affect the process in criminal court procedures. Prerequisite: LAW 101.

LAW 234 Civil Procedure II 3 (3,0,0,0)

This course explores the court system in Nevada from the point of preparing for trial to post trial and alternative dispute resolutions, by retrieving rules from Nevada websites and Federal Websites. The students will be preparing documents for trial, including summarizing depositions and medical records. Prerequisite: LAW 231.

LAW 250 Administrative Law 3 (3,0,0,0)

Study of the history of administrative agencies, administrative law procedures, use of expert witnesses, law of evidence, constitutional limitations and judicial review. Prerequisite: LAW 101.

LAW 251 Bankruptcy 3 (3,0,0,0)

Study of expanded jurisdiction, its effects on financial rehabilitation of individuals and corporations; involuntary petitions, preparation of voluntary petitions filing; automatic stay provisions, complaint to vacate stay and abandonment of assets. Prerequisite: LAW 101.

LAW 252 Family Law 3 (3,0,0,0)

The law of family relations, including the following: marriage, annulment, dissolution, divorce, separation, guardianship, adoption, custody and legitimacy of children, parental rights and rights and duties of minors. Prerequisite: LAW 101.

LAW 253 Law Office Management 3 (3,0,0,0)

A study of economical and efficient law office practices and procedures including the proper use of law office technology and computerized data processing. Prerequisite: LAW 101.

LAW 255 Probate Procedures 3 (3,0,0,0)

Law related to estate planning issues. Includes procedure to distribute a person's estate upon one's death, creation and administration of a trust and procedure to appoint another to act on one's behalf. Also includes a discussion of health care documents and related elderly care issues. Prerequisite: LAW 101.

LAW 258 Constitutional Law 3 (3,0,0,0)

This course will introduce the student to the fundamental principles and concepts of American Constitutional Law with specific emphasis on civil rights, liberties and responsibilities. Prerequisite: LAW 101.

LAW 259 Legal Writing 3 (3,0,0,0)

An in-depth study and development of legal writing skills. Introduction to the major forms of legal writing, legal terminology, and the principles for organization of legal memorandums or briefs. Prerequisite: LAW 101 or instructor approval.

LAW 261 Legal Research I 4 (4,0,0,0)

Legal research and terminology, including law library familiarization and development of skills. Emphasis on finding, reading and synthesizing cases and in preparing legal memoranda. Prerequisites: LAW 101, 259.

LAW 262 Legal Research II 4 (4,0,0,0)

In-depth study for developing legal research and writing skills. Subjects presented in Legal Research I will be covered in greater detail using federal, state, and administrative law. Emphasis will be placed upon computer assisted legal research tools such as Westlaw, Lexis, and the Internet. Prerequisite: LAW 261.

LAW 263 Ethics 3 (3,0,0,0)

Covers the relationship between the court, attorney, client and legal assistant. Discusses what a legal assistant may and may not do. Also discusses conflicts of interest, dealing with witnesses and adverse parties and confidentiality.

LAW 264 Civil Evidence 3 (3,0,0,0)

To familiarize the student with the rules and forms of evidence that is admissible in court. Prerequisite: LAW 101.

LAW 295 Supervised Field Experience 3 (0,0,0,8)

Offers legal assistant work experience under the supervision of an attorney. The student will work at a local law firm or agency eight hours per week, for a total of 120 hours to gain practical work experience. The student and law firm/agency will report their experience to the program director. Prerequisites: Completion of 21 LAW credits and Legal Programs Director approval.

Library Skills

LIB 101 Research for College Papers 1 (1,0,0,0)

An overview of basic research strategies using Internet and print resources. Focus is on gathering viable information for college assignments.

Mathematics

MATH 050D Mathematics for the Trades 3 (3,0,0,0)

Course emphasizes solving apprenticeship related applied problems and includes a review of basic mathematics operations, exponents, English and Metric measurement, elementary algebra, scientific notation, plane and solid geometric figures, and triangle trigonometry.

MATH 091 Basic Mathematics 3 (3,0,0,0)

A course in arithmetic. Topics include fractions, decimals, measurements, percents, ratios, and proportions. A comprehensive, proctored, departmental final exam will be given.

MATH 093 Pre-Algebra 3 (3,0,0,0)

A course intended to review arithmetic and to preview elementary algebra. A comprehensive, proctored, departmental final exam will be given. Students must pass this final exam with 60% or better in order to earn at least the grade of C in the course. Prerequisite: MATH 091 with a grade of C or better; or a satisfactory ACT/SAT/Placement Test score.

MATH 095 Elementary Algebra 3 (3,0,0,0)

A course in the fundamental operations of real numbers, solving linear equations in one variable, graphing linear equations in two variables, solving linear systems in two variables, and performing basic operations on polynomials. Intended to provide a basic foundation for future mathematics needed in fields of business, economics, engineering and related fields. Strong background in fractions and positive and negative numbers is highly recommended. A comprehensive, proctored, departmental final exam will be given. Prerequisite: MATH 093 or 116 with a grade of C or better; or a satisfactory ACT/SAT/Placement Test score.

MATH 096 Intermediate Algebra 3 (3,0,0,0)

Topics include factoring polynomials, rational expressions and equations, radical expressions and equations, quadratic equations, graphs and applications. A comprehensive, proctored, departmental final exam will be given. Prerequisite: MATH 095 with a grade of C or better; or a satisfactory ACT/SAT/Placement Test score.

MATH 097 Elementary and Intermediate Algebra 5 (5,0,0,0)

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 variable, inequalities, systems of linear equations, radicals and rational exponents, and quadratic equations. A comprehensive, proctored, departmental final exam will be given. Prerequisite: MATH 093 or 116 with a grade of C or better; or a satisfactory ACT/SAT/Placement Test score.

MATH 100B Math for Allied Health Programs 3 (3,0,0,0)

A course designed to provide the mathematics skills used in allied health fields. Topics include operations with fractions and decimals, measurement systems, percents, ratios and proportions, drug calculations, and IV flow rates.

MATH 104B Applied Mathematics 3 (3,0,0,0)

Emphasizing applications, topics include arithmetic, algebra, pre-algebra, graphing, geometry, finance, probability and statistics. Course is only applicable for AAS and AGS degrees and is not transferable for credit.

MATH 111B Mathematics for Electronics Applications 3 (3,0,0,0)

An electronics algebra/trigonometry course which includes signed numbers, laws of exponents, proportions, logarithms, trigonometric functions, polar and rectangular conversions. Prerequisite: MATH 093.

**MATH 115B Mathematics for the Hospitality/
Gaming Industry 3 (3,0,0,0)**

Using data and examples relevant to the hospitality/gaming industry, students will use an applied approach to learn math skills relevant to this industry. Topics covered will include fractions, decimals, geometry, percents, ratio and proportions, probability and statistics. The use of computers and calculators will be integrated into the applications. Students will work in “teams” on some projects and activities.

MATH 116 Technical Mathematics 3 (3,0,0,0)

Concepts that will allow students to become proficient in the mathematics used in technical fields are the focal point of this course. Topics include fundamental operations with signed numbers; measurement systems; exponents; order of operations; scientific notation; algebraic expressions; linear equations and inequalities; an introduction to graphing; simple geometric figures, logarithms; and fundamentals of trigonometry. MATH 091 is strongly recommended prior to enrollment.

**MATH 120 Fundamentals of
College Mathematics 3 (3,0,0,0)**

Topics include probability, statistics, geometry, and consumer mathematics. It may include problem solving, sets, logic, mathematical systems, numeration, and measurement. Course is broad in scope, emphasizing applications. Prerequisite: MATH 095 with a grade of C or better; or a satisfactory ACT/SAT/Placement Test score.

**MATH 122 Number Concepts for
Elementary School
Teachers 3 (3,0,0,0)**

Mathematics needed by those teaching the new-content curriculum at the elementary school level, emphasizing number concepts. This course does not satisfy the general education core requirements. Prerequisite: MATH 096 or MATH 097 both with a grade of C or better; or a satisfactory ACT/SAT/Placement Test score.

**MATH 123 Statistical and Geometrical
Concepts for Elementary
School Teachers 3 (3,0,0,0)**

Mathematics needed by those teaching the new-content curriculum at the elementary school level, emphasizing concepts in statistics, geometry, and probability. Prerequisite: MATH 122 with a grade of C or better.

MATH 124 College Algebra 3 (3,0,0,0)

Practical applications are the focal point of this course. Topics include equations and inequalities; linear, quadratic, polynomial, exponential and logarithmic functions and their graphs; solutions of systems of linear equations; matrices; and sequences and series. Note: This course does NOT serve as a Prerequisite for MATH 127 nor is it sufficiently rigorous for entry into calculus. Prerequisite: MATH 096 or MATH 097 with a grade of C or better, or a satisfactory ACT/SAT/Placement Test score.

MATH 126 Precalculus I 3 (3,0,0,0)

A rigorous discussion of algebra concepts necessary for calculus is the focal point of this course. Topics include an in-depth investigation of algebraic functions and their graphs and solutions of systems of equations. Prerequisite: MATH 096 or MATH 097 both with a grade of C or better; or a satisfactory ACT/SAT/Placement Test Score. Note: This course serves as a prerequisite course for MATH 127 and is essential for students planning to take calculus.

MATH 127 Precalculus II 3 (3,0,0,0)

Topics include an in-depth investigation of trigonometric functions and their graphs, analytic trigonometry, solutions of triangles, vectors, and analytic geometry. Prerequisite: MATH 126 with a grade of C or better; or a satisfactory ACT/SAT/Placement Test score. Note: This course is essential for students planning to take calculus.

**MATH 128 Precalculus and
Trigonometry 5 (5,0,0,0)**

A one semester course equivalent to the combination of MATH 126 and MATH 127. Topics include an in-depth investigation of algebraic and trigonometric functions and their graphs, solutions of systems of equations, analytic trigonometry, solutions of triangles, vectors, and analytic geometry. Prerequisite: MATH 096 or MATH 097 both with a grade of C or better; or a satisfactory ACT/SAT/Placement Test score.

MATH 132 Finite Mathematics 3 (3,0,0,0)

Topics include symbolic logic, set theory, and probability theory applied to the analysis of business and social science problems. Prerequisite: MATH 124 or MATH 126 or MATH 128 all with a grade of C or better; or a satisfactory ACT/SAT/Placement Test score.

MATH 170 Mathematics of Finance 3 (3,0,0,0)

A mathematical study of interest annuities, sinking funds, depreciation, amortization and other topics related to business problems. Prerequisite: MATH 096 or 1-1/2 units of high school algebra.

**MATH 176 Introductory Calculus for
Application in Business
and Social Sciences 4 (4,0,0,0)**

Differentiation and integration of algebraic functions with applications to the analysis of business and social science problems. Prerequisite: Placement Test or MATH 124 or MATH 126 or equivalent.

MATH 181 Calculus I 4 (4,0,0,0)

Differentiation and integration of algebraic and transcendental functions with applications. Prerequisites: MATH 126 and MATH 127, or MATH 128 all with a grade of C or better; or a satisfactory ACT/SAT/Placement Test score.

MATH 182 Calculus II 4 (4,0,0,0)

Topics include further applications and techniques of integration with applications, polynomial approximations, sequences, and series. Prerequisite: MATH 181 with a grade of C or better; or a satisfactory ACT/SAT/Placement Test score.

MATH 211B Advanced Mathematics for Electronics 4 (4,0,0,0)

An advanced course focusing on the mathematics that supports RADAR theory, circuit theory and telecommunications theory. The course will include conic sections, trigonometric functions and vectors, matrices, analytic geometry, and the introduction to differential and integral calculus, applications of first and second order differential equations in electronics, and Laplace transforms. Prerequisites: MATH 111B, ET 132B, or instructor permission.

MATH 251 Discrete Mathematics I 3 (3,0,0,0)

Topics include fundamental principles of logic and proof methods, elements of set theory, equivalence relations and partitions, counting techniques, mathematical induction, cardinality, power set, inclusion-exclusion principle, Cartesian product, pigeonhole principle, binomial theorem, probability and expectation. Prerequisites: MATH 127 or equivalent; and Corequisite: MATH 181 or equivalent.

MATH 253 Matrix Algebra 3 (3,0,0,0)

Introduces linear algebra, including matrices, determinants, vector spaces, linear transformations, eigenvectors and eigenvalues. Prerequisite: MATH 182 with a grade of C or better.

MATH 283 Calculus III 4 (4,0,0,0)

Topics include vectors, differentiation and integration of vector valued functions, multi-variable calculus, partial derivatives, multiple integrals, and applications. Prerequisite: MATH 182 with a grade of C or better; or a satisfactory ACT/SAT/Placement Test score.

MATH 285 Differential Equations 3 (3,0,0,0)

Theory and techniques for constant and variable coefficient ordinary linear differential equations. Also included are a number of non-linear types of ordinary differential equations. Emphasis will be on those differential equations arising from modeling real world phenomena. Prerequisite: MATH 182 with a grade of C or better.

Mechanical Engineering**ME 242 Dynamics 3 (3,0,0,0)**

Engineering analysis of bodies in motion in both two- and three-dimensions; analysis of the kinematic and kinetic principles for both particles and rigid bodies; the development and utilization of the concepts of force and acceleration, work, energy, impulse, momentum and impact. Prerequisites: CEE 241 (formerly CEG 206) and PHYS 180, 180L, and MATH 182.

Management**MGT 100B Practical Human Relations for Business 3 (3,0,0,0)**

Study of human factors involved in business and management with emphasis upon mutual responsibilities and communication problems of employees, managers and customers. Team activities.

MGT 103 Introduction to Small Business Management 3 (3,0,0,0)

Topics covered include start-up, financial and administrative controls, marketing programs, management techniques, legal and governmental relationships. All aspects of operating a business will be thoroughly discussed.

MGT 120B Introduction to Public Sector Administration 3 (3,0,0,0)

Examines the relationship between public sector policies and the world of business. Surveys the public sector regulating advertising, products, production, mergers, competition and marketplace restrictions.

MGT 201 Principles of Management 3 (3,0,0,0)

Topics covered include fundamentals and principles of management, administrative policies, objectives and procedures and problems of organization control and leadership.

MGT 212 Leadership and Human Relations 3 (3,0,0,0)

Focus is on understanding and managing human behavior in organizations. Developing a better understanding of one's self as a leader and exploring some of the more effective ways of leading others.

MGT 235 Organizational Behavior 3 (3,0,0,0)

Topics include concepts, theories and case studies concerning the behavior of people in modern business organizations.

MGT 283 Introduction to Human Resources Management 3 (3,0,0,0)

Designed to develop an understanding of the duties and responsibilities of personnel at the mid-management level. Areas covered include: employee needs, human relations, recruiting techniques, orienting and training employees, benefit programs and economics of supervision.

MGT 284B Introduction to International Management 3 (3,0,0,0)

Examination of the management of resources (people, capital goods, money, inventories and technology) across national boundaries. The student will also learn to adapt management principles and functions to the demands of foreign competition and environment. The class will be supplemented with international speakers. Prerequisite: MGT 201.

MGT 286B Personnel Interviewing 3 (3,0,0,0)

A study of the legal aspects of interviewing in the public and private sector. Students participate in oral board, orientation, counseling, exit and performance appraisal simulations.

MGT 291B Women in Management 3 (3,0,0,0)

Topics include women in management, changing life styles of women and men in U.S. labor force, U.S. legislation affecting women, management styles, power and leadership, effective time management, motivation and supervision, decision making techniques and effective communication.

MGT 294B Seminar in Management 3 (3,0,0,0)

Analysis of the nature and problems in management. Focus is on planning, organizing, decision making and controlling through the study of recent relevant literature and selected cases. May be taken a maximum of three times.

Mental Health Services

MHDD 101 Role of the Technician 1 (1,0,0,0)

Basic skills in behavioral observation, documentation and approaches to intervention as a treatment team member. Other topics include guardianship, rights, confidentiality, abuse and neglect, and program implementation.

MHDD 102 Medical Component 1 (1,0,0,0)

This course covers basic medical information including infection control, safety procedures, confidentiality, awareness of normal bodily functions, personal care and recognition of signs and symptoms that need to be reported to medical staff.

MHDD 103 Psychopathology and Developmental Disabilities 1 (1,0,0,0)

Study of the functional relationship between dual diagnosis of mental disorders and/or developmental disabilities and individual treatment issues raised by dual diagnosis.

MHDD 105 Conflict Prevention and Response Training 2 (2,0,0,0)

This course focuses on the application of prevention and response techniques to support persons in crisis or conflict with others. These applications are for use by service providers as approved by the State of Nevada, Division of Mental Health and Developmental Services.

MHDD 106 Teaching and Active Treatment 1 (1,0,0,0)

Defining “active treatment” and its necessary components. Implementing active treatment in a service context of dignity, respect, privacy, access to choices and participation in the therapeutic process with the use of effective teaching methods.

MHDD 107 Medication Fundamentals 2 (2,0,0,0)

Study of major categories of psychotropic and seizure medications. Rationale for use of medication, typical dosages, main effects, assessment of effectiveness and potential side effects.

MHDD 109 Introduction to Therapeutic Interventions 2 (2,0,0,0)

Basic approaches to behavioral intervention including defining behavior, data collection, principles and application of behavior change techniques, and implementation of behavioral programs.

MHDD 110 Introduction to Disability Services 3 (3,0,0,0)

Study of the history, social attitudes, major diagnostic categories, assessment techniques, major service approaches, legislation and standards of services related to persons with disabilities.

MHDD 126 Understanding Developmental Disabilities 2 (2,0,0,0)

Definition, history, diagnosis and causes of developmental disabilities. Development and delivery of effective direct support services to persons with developmental disabilities.

MHDD 127 Positive Behavior Supports 2 (2,0,0,0)

Addressed are applied approaches to changing behavior emphasizing positive learning principles, including functional observation and assessment of behavior, data collection, computation and graphing of data, positive behavior support planning and implementation, reinforcement, and progress evaluation.

MHDD 130 Teaching Life Skills 3 (3,0,0,0)

Study of teaching functional life skills to persons with disabilities, including persons with physical, social, vocational, communicative, intellectual, cognitive, and other mental disabilities.

MHDD 150 Issues In Substance Abuse 1 (1,0,0,0)

Overview of substance abuse issues and study of basic treatment approaches. Includes biological and lifestyle factors as well as legal issues.

MHDD 152 Allied Therapies 1 (1,0,0,0)

Study of the interdisciplinary roles of psychiatrists, psychologists, nurses, social workers, speech therapists, occupational therapists, recreational therapists and other professions involved in the therapeutic process.

MHDD 153 Life Span Development 1 (1,0,0,0)

Human growth and development through the life span. Includes social, cognitive and biological perspectives related to direct support services to persons with mental illness and/or developmental disabilities.

MHDD 154 Advanced Therapeutic Interventions 2 (2,0,0,0)

A working knowledge of therapeutic interventions, including active listening skills, elements of treatment plans, applications of basic treatment models and issues in therapeutic relationships. Prerequisite: MHDD 109.

MHDD 160 Understanding Mental Illness 2 (2,0,0,0)

Practical strategies for working with people with mental illness. Includes a brief history, social stigma, major diagnostic categories, common treatment issues and development of treatment plans related to mental illness.

MHDD 210 Autism Spectrum Disorders 3 (3,0,0,0)

Overview of autism spectrum disorders, including: assessment, diagnostic criteria, behavioral characteristics, impact on family, current research/intervention approaches, and support services.

MHDD 291B Fieldwork Experience 3 (1,0,0,12)

Experience to apply academic skills to on-site job training in human services agencies under experienced on-site supervision and on-going consulting with faculty mentor. May be repeated to a maximum of nine credits. Prerequisites: Completion of at least ten MHDD credits and approval of Program Director.

MHDD 295 Practicum 3 (1,0,0,8)

Career-related work experience working directly with persons with mental illness or developmental disabilities within a service provider agency. Prerequisites: Completion of at least 10 MHDD credits, evidence of TB test within past year, and approval of Program Director.

MHDD 299 Capstone Project 3 (1,0,0,6)

This course provides a capstone experience to integrate theory and academic coursework into a substantive applied project for students majoring in Mental Health Services. Prerequisite: Approval of Program Director.

Military Science

MIL 100 Leadership Lab 1 (0,2,0,0)

Practicum in those skills taught in the classroom during the other military science classes. Hands-on lab led by mentored cadets focusing on leadership, planning and execution of squad tactics, movement formations, drill and ceremonies, equipment inspections, rappelling, land navigation, orienteering, rifle marksmanship, and air-mobile operations. Leadership Lab is required every semester in conjunction with the appropriate military science class.

MIL 101 Leadership and Personal Development 2 (2,0,0,0)

Mission of the armed services, introduction to the United States Army, its customs and traditions, the role of the Army Officer, the role of the Non-Commissioned Officers Corps, Organizations of the TOTAL Army (Including the National Guard and Army Reserves). Introductory orienteering, marksmanship, physical fitness and briefing skills.

MIL 102 Introduction to Tactical Leadership 2 (2,0,0,0)

Continuation of the mission of the armed services, introduction to the United States Army, its customs and traditions, the role of the Non-Commissioned Officers Corps, Organizations of the TOTAL Army (Including the National Guard and Army Reserves). Introductory orienteering, marksmanship, physical fitness and briefing skills.

MIL 201 Innovative Team Leadership 2 (2,0,0,0)

Introduction to leadership and management, which develops the basic skills that must be learned in order to perform as an effective leader. Introduction to the Army Leadership Development Program (LDP), the decision-making process, the code of conduct, the Army Operations Order format and its use. Advanced land navigation, physical fitness and briefing skills.

MIL 202 Foundations of Tactical Leadership 2 (2,0,0,0)

Leadership and management, which develops the basic skills that must be learned in order to perform as an effective leader. Introduction to the Army Leadership Development Program (LDP), the decision-making process, the code of conduct, the Army Operations Order format and its use. Advanced land navigation, physical fitness, and briefing skills.

Marketing/Merchandising/Retail Management

MKT 111 Introduction to Merchandising 3 (3,0,0,0)

Provides the knowledge necessary to buy merchandise profitably, with mastery of the role of the buyer in relation to other store personnel. Provides skill in planning and figuring markups and expense control as well as determining differences in buying fashion and staple merchandise.

MKT 123 Sales Promotion 3 (3,0,0,0)

Provides the basic knowledge necessary to develop sound sales promotion practices. Builds on a rigorous base of consumer psychology and treats advertising, reseller stimulation, personal selling and other communication tools as part of an overall promotional mix.

MKT 125 Introduction to Fashion Merchandising 3 (3,0,0,0)

Provides a comprehensive view of the fashion industry. Gives an up-to-date guide to the fundamentals of the merchandising of fashion apparel and accessories. Presents the basic principles of fashions, how fashions begin, move, disseminate and can be predicted.

MKT 127 Introduction to Retailing 3 (3,0,0,0)

Directs the student's attention to the dollar and cents implications of managerial decisions and to the various methods used to measure the profitability of those decisions in the field of retailing. Underlines the importance of customer requirements, taste and expectations, emphasizing the retailing implications of market factors.

MKT 132 Sales Management 3 (3,0,0,0)

Provides a comprehensive view of the sales manager as an administrator. Presents a detailed picture of how to operate a sales force including selecting, training, compensating, supervising and motivating sales people.

MKT 210 Marketing Principles 3 (3,0,0,0)

Survey of marketing. Studies problems of the manufacturer, wholesaler and retailer in the marketing of goods and services, channels of distribution, customer relations, pricing policies and communications.

MKT 211 Introduction to Professional Sales 3 (3,0,0,0)

Provides a comprehensive hands-on experience in selling techniques as they relate to modern industrial, wholesale and consumer products.

MKT 250 Introduction to International Marketing 3 (3,0,0,0)

Introduces the student to the various functions of marketing as they are performed in the international environment. Focuses on the problems and decisions facing management in international marketing. Considers the impact of differences in language, aesthetics, religion and business customs on marketing strategies. Prerequisite: MKT 210.

MKT 261 Introduction to Public Relations 3 (3,0,0,0)

Techniques of public relations for those holding supervisory or higher positions in management and marketing. Principles of creating and maintaining good public relations, including employee/employer relations. Customer/employee relations receive emphasis while focusing on the programming of the total public relations effort and selecting of appropriate strategy, media and persuasive devices to accomplish objectives.

MKT 262 Introduction to Advertising 3 (3,0,0,0)

Presents methods and techniques to become a skillful advertiser. Includes copy writing skills, selecting proper media and how the advertisers can approach their problems most effectively.

Medical Office Assisting

MOA 101B Introduction to Medical Assisting 3 (2,3,0,0)

Introduction to the profession of Medical Assisting. Topics include professionalism, communication techniques, community resources, medical ethics and confidentiality. Corequisites: ENG 101 and COT 127B.

MOA 106B The Body in Health and Disease I 3 (3,0,0,0)

Essential anatomy and physiology of 5 body systems emphasizing application to patient interviewing, teaching, and communication with health professionals. Corequisite: MOA 107B.

MOA 107B Medical Assistant Techniques 4 (3,3,0,0)

Emphasis on the clinical aspect of a medical office. Topics include preparation, assisting, vital signs, basic pharmacology, nutrition and diet therapy. Corequisite: MOA 106B.

MOA 108B The Body in Health and Disease II 3 (3,0,0,0)

Continuation of MOA 106B. Includes remaining body systems as well as human development and aging, diagnostic and imaging procedures. Prerequisite: Instructor permission.

MOA 110B Clinical Assistant Techniques 4 (3,3,0,0)

Principles of infection control and IV therapy. Equipment preparation, operation and maintenance. Aseptic techniques, preparation and administration of medications, ECG, assisting with minor office procedures, emergency procedures, CPR and First Aid Certification. Prerequisite: MOA 107B.

MOA 120B Medical Office Management 3 (2,3,0,0)

The theory, practice and techniques of medical office management. This course emphasizes medical administrative responsibilities, records management, business management, managed care, computerized office management, and transcription. Prerequisite: MOA 101B or approval of MOA Program Director.

MOA 130B Clinical Externship 3 (0,0,12,0)

Provides practical medical assisting experience in the physician's office or a medical clinic. Student is an active participant in the administrative and clinical areas. The externship is part of the curriculum and is a learning experience.

Prerequisite: Instructor approval.

MOA 131B Externship Seminar 1 (1,0,0,0)

Discussions of clinical issues and experiences with emphasis on case studies, role playing and problem solving techniques. Prerequisite: Instructor approval.

MOA 195B Selected Topics in Medical Assisting 2 (1,3,0,0)

Covers selected topics of interest to students of Medical Office Assisting including review for the national certification examination and preparation for job search.

Prerequisite: Instructor approval.

Mechanical Technology**MT 101B Introduction to Theater Technology 2 (2,0,0,0)**

Introduction and survey of theater history and technology. Identification of criteria for employment and goal achievement in theater environment. Understanding technical and occupational skills needed for meaningful employment within the theater industry.

MT 102B Fundamentals of Electricity 4 (3,2,0,0)

Fundamentals of constructing electrical circuits, measuring their predictable parameters, using measuring instruments and materials needed to maintain and repair electrical systems.

MT 104B Industrial Electricity 4 (3,2,0,0)

The course concentrates on fabricating, maintaining, troubleshooting, and repairing electrical systems encountered in industry. Emphasis is on the different types of common motor controllers and ladder logic for configuration.

Prerequisite: MT 102B or ET 131B.

MT 106B Mechanical Power Transmission 4 (3,2,0,0)

Overview of hardware components of mechanical power to include preventive maintenance, troubleshooting, overhauling and repairing parts and equipment.

MT 108B Fluid Power (Pneumatics, Hydraulics, Instrumentation) 4 (3,2,0,0)

Presents the theoretical basis for hydraulic and pneumatic circuitry. Attention is given to circuit components and how they work. Assembly, disassembly and troubleshooting is emphasized.

MT 110B Material Science I (Ferrous and Non-Ferrous) 4 (3,2,0,0)

The study of compositions, structures and behaviors of ferrous and nonferrous materials and their effects on physical, mechanical and electrical.

MT 112B Manufacturing Quality Control 3 (2,2,0,0)

The development of a process to determine when a system is in or out of its parameters. Data collection, analysis and problem solving is emphasized.

MT 114B Automated Manufacturing Control 3 (2,2,0,0)

Encompasses the requisition, ordering, expediting and stock control of materials. Principles of computer and sensor operated manufacturing are presented.

MT 115B Programmable Logic Controllers I 3 (2,2,0,0)

Presents the principle of programming logic controller and computerized sensor controls. Emphasis placed on troubleshooting and maintaining computerized sensor control systems.

MT 116B Programmable Logic Controllers II 3 (2,2,0,0)

Advanced programmable control applications and uses dealing with programmable control frequency drives and man machine interfaces packages.

MT 120B Electrical Safety 1 (1,0,0,0)

This course covers the proper safety procedures based on OSHA standards 29CFR 1910 requiring qualification for work on live circuits.

MT 121B Fundamentals of Industrial Measurement 2 (2,0,0,0)

This course covers basic electrical pressure, density, viscosity, temperature measurements and application of Ohm's Law. Safe and correct usage of various meters, gauges and test equipment will be emphasized.

MT 122B Hand Tools and Measuring Instruments 1 (1,0,0,0)

Using computer simulation, the student will articulate proper holding of hand tools for turning and striking. In this same fashion the student will also set up, calibrate and properly use precision measurement tools.

MT 123B Rigging and Lifting 1 (1,0,0,0)

Computer simulation will be used to demonstrate types of lifting equipment, when each type would be used and proper procedures for planning a lift.

MT 124B Industrial Lubrication 1 (1,0,0,0)

This course covers various lubrication systems, their operations, preventative maintenance, repair and failure analysis. Included are ring, bath, splash, constant level and force-fed systems. Proper use of related equipment will be covered.

MT 140B Electrical/Electronic Theory 2.5 (2.5,0,0,0)

This course covers Ohm's Law, the relationship of volts/amps/resistance, basic schematics, symbols and measurement. Analog and digital circuits will be introduced. Prerequisite: MATH 116.

MT 141B Electrical Print Reading 1 (1,0,0,0)

Reading and interpreting the symbols on electrical schematics, determining the function of input, logic and output elements in control circuits are covered. Prerequisite: MATH 116.

MT 142B Conduit Bending and Installation 0.5 (0.5,0,0,0)

Understanding of general conduit bending and installation, in accordance with the National Electrical Code (NEC), conduit systems, general specifications and the use of types and major components of materials are introduced. Prerequisite: MATH 116.

MT 143B Electrical Control Equipment 3 (3,0,0,0)

Understanding of installation, maintenance and use of electrical control equipment, such as fuses, circuit breakers, circuit breaker panels, switches, control circuits and relays are covered. This course also covers basic troubleshooting and repair. Prerequisite: MATH 116.

MT 144B Electrical/Electronic Test Equipment 1 (1,0,0,0)

This course deepens the understanding of electronic test equipment, including digital volt/ohmmeters (DVOM), oscilloscopes and function generators. Prerequisite: MATH 116.

MT 145B Troubleshooting Skills 0.5 (0.5,0,0,0)

Basic procedures for troubleshooting electrical control circuits, using schematic diagrams to locate problems. Performing continuity checks and developing a diagnostic routine are also covered. Prerequisite: MATH 116.

MT 160B Industrial Hydraulic Power 3 (3,0,0,0)

Components of hydraulic systems and how the components function together, as well as interpretation of hydraulic schematics are covered.

MT 161B AC/DC Motors 2 (2,0,0,0)

Identification of the basic types of AC/DC motors including permanent magnet, three-phase and induction motors, major components and how to measure, inspect and diagnose malfunctions are covered.

MT 162B Programmable Logic Controllers 1.5 (1.5,0,0,0)

This course covers interpretation of programmable controller ladder logic, program elements of ladder logic and the function they perform.

MT 180B Co-Op/Internship First Semester 3 (0,0,0,12)

This course provides hands-on opportunities for students to work in actual power utilities environment to gain experience and learn how to apply technical knowledge and skills learned in their course work to actual power utility setting. This Co-Op course is directed by a qualified professional and supervised by the instructor. One credit will be earned for each four hours worked per week during the semester.

MT 181B Co-Op/Internship Second Semester 3 (0,0,0,12)

This course provides hands-on opportunities for students to work in actual power utilities environment to gain experience and learn how to apply technical knowledge and skills learned in their course work to actual power utility setting. This Co-Op course is directed by a qualified professional and supervised by the instructor. One credit will be earned for each four hours worked per week during the semester.

MT 182B Co-Op/Internship Third Semester 2 (0,0,0,9)

This course provides hands-on opportunities to apply material and skills learned in the interactive, multimedia course work previously completed in MT 160B, 161B and 162B. Prerequisite: Department approval.

MT 183B Co-Op/Internship Third Semester 3 (0,0,0,12)

This course provides the student with the opportunity to apply the technical knowledge and skills acquired in their course work to actual theater environment. This Co-Op course is directed by a qualified professional and supervised by the instructor. One credit will be earned for each four hours worked per week during the semester.

MT 184B Co-Op/Internship Fourth Semester 3 (0,0,0,12)

This course provides hands-on opportunities for students to work in actual theater environment to gain experience and learn how to apply technical knowledge and skills learned in their course work to actual theater settings. This Co-Op course is directed by a qualified professional and supervised by the instructor. One credit will be earned for each four hours worked per week during the semester.

Music

MUS 100 Concert Attendance 0 (0,0,0,1)

Attendance at ten on-campus concerts and/or recitals as a member of the audience. Required of every music major for four semesters. Note: Students taking this course must check in with the Music Office during the first week of the semester.

MUS 101 Music Fundamentals 3 (3,0,0,0)

A course in learning to read music, including notation, terminology, scales, and chords. Designed to furnish a foundation for musicianship.

MUS 102 Beginning Music Theory 3 (3,0,0,0)

Review course designed for music majors whose background in music theory is not sufficient for admittance into MUS 201. Not applicable to degree with a major in music. Notation, note reading, scales, intervals, chords, part writing. Sight-singing and Ear Training.

MUS 103 Voice Class I 3 (3,0,0,0)

Teaches fundamentals of tone production, breath control, and practical techniques involved in reading and interpreting songs.

MUS 107 Guitar Class I 3 (3,0,0,0)

A class in basic guitar technique. Recommended for non-Music majors and elementary school teachers. No previous musical training required.

MUS 108 Guitar Class II 3 (3,0,0,0)

Classroom instruction in guitar at the intermediate level. Prerequisite: MUS 107.

MUS 111 Piano Class I 3 (3,0,0,0)

Class instruction in piano playing. This course is for people who have never played the piano.

MUS 112 Piano Class II 3 (3,0,0,0)

A class in basic piano technique, designed as a continuation of MUS 111. Prerequisite: MUS 111.

MUS 121 Music Appreciation 3 (3,0,0,0)

The course is for students with little or no musical training and focuses on the historical background of classical music and composers and listening to representative works. Emphasis is on increasing enjoyment and understanding of a variety of classical musical styles.

MUS 125 History of Rock Music 3 (3,0,0,0)

The esthetics and sociology of rock from its origins in rhythm and blues to the rise of Elvis Presley and Rock-a-Billy, Chuck Berry and teenage-rock, Bob Dylan and protest rock, the Beatles and the Rolling Stones, Psychedelic Rock, and Soul.

MUS 131 Introduction to Music Literature 3 (3,0,0,0)

Development of a listening repertoire that will serve as a basis for music history.

MUS 133 History of The Beatles 3 (3,0,0,0)

Students will study the history of The Beatles from their beginnings in Liverpool, England, to their unequalled world popularity. The course will feature a mixture of videos, music, and discussion that will cover every important phase of the world's most successful and beloved rock band.

MUS 134 Jazz Appreciation 3 (3,0,0,0)

Study of jazz literature for the layperson from the early 1900s to the present with emphasis on differentiating the various styles of jazz.

MUS 181 Business of Music 3 (3,0,0,0)

A general survey course to provide the knowledge of music merchandising, management, publishing, contracts, copyrights, record production, concert promotion and manager selection.

MUS 201E Basic Musicianship I E 3 (3,0,0,0)

Elementary Harmony. A basic study of harmonic practices, including four-part writing and rudimentary forms. Prerequisite: Theory Placement Exam.

MUS 201F Basic Musicianship I F 1 (1,0,0,1)

Ear-Training and Sight-Singing Lab. These elements are practiced as related to materials presented in MUS 201E. Prerequisite: Theory Placement Exam.

MUS 202E Basic Musicianship II E 3 (3,0,0,0)

Elementary Harmony. A basic study of harmonic practices, including diatonic seventh chords, part-writing, secondary functions, modulations and rudimentary forms. Prerequisite: MUS 201E.

MUS 202F Basic Musicianship II F 1 (1,0,0,1)

Ear-Training and Sight-Singing Lab. These elements are practiced as related to materials presented in MUS 202E. Prerequisite: MUS 201F.

MUS 207E Advanced Musicianship I E 3 (3,0,0,0)

The study of harmonic practices including part-writing, altered chords, modulations and late nineteenth century techniques. Prerequisite: MUS 202E.

MUS 207F Advanced Musicianship I F 1 (1,0,0,0)

Ear-Training and Sight-Singing lab. These elements are practiced as related to materials presented in MUS 207E. Prerequisite: MUS 202F.

MUS 208E Advanced Musicianship II E 3 (3,0,0,0)

The advanced study of harmonic practices including twentieth century techniques and rudimentary counterpoint exercises. Prerequisite: MUS 207E.

MUS 208F Advanced Musicianship II F 1 (1,0,0,0)

Ear-Training and Sight-Singing lab. These elements are practiced as related to materials presented in MUS 208E. Prerequisite: MUS 207F.

MUS 229 Survey of Latin American Music 3 (3,0,0,0)

A survey of musical traditions and stylistic trends of Latin America from their roots to the present. This course will explore selected Latin American music works and styles from countries such as: Mexico, Cuba, Brazil, Colombia, Argentina and others, studying their influence in other continents and the United States.

MUS 231 Recording Techniques I 3 (3,0,0,0)

An introduction to audio recording including theoretical concepts, terminology, microphones, consoles, and use of analog and digital equipment. Includes hands-on training.

MUS 232 Recording Techniques II 3 (3,0,0,0)

An intermediate course in multi-track recording techniques including discussions on session procedures, production techniques, tracking and overdubbing methods, and general equipment operation. Prerequisite: MUS 231.

MUS 249 Harp 1 (0,0,0,0.5)

Private instruction in harp. May be repeated up to a maximum of four credits. Prerequisite: Four semesters of MUS 149.

MUS 251 Jazz Fundamentals I 3 (3,0,0,0)

Study of chord/scale relationships in improvising jazz/rock music. Includes voicings for keyboard and instrumental performance. Prerequisite: MUS 206, or appropriate musical background.

MUS 255 Jazz Keyboard Techniques I 3 (3,0,0,0)

Continuation of skills from MUS 111 with an emphasis on pop, jazz, and contemporary piano styles. Prerequisite: MUS 111.

MUS 256 Jazz Keyboard Techniques II 3 (3,0,0,0)

Continuation of MUS 255. Emphasis on improvisation, composition, and performance with rhythm section. Prerequisite: MUS 255.

MUS 281B Business of Music II 3 (3,0,0,0)

A continuation of MUS 181. Topics include starting a record label, recording budgets, record royalties, audits, legal agreements, and the future of the recording and music industry. Prerequisite: MUS 181.

MUS 285B Advanced Recording Techniques 3 (3,0,0,0)

A continuation of MUS 232. Emphasis on hands-on recording projects, digital multitrack recording, hard-disk editing, and mixdown techniques.

MUSA 101 Bass - Lower Division 1 (0,0,0,0.5)

Private instruction in Bass for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 102 Bass II 1 (0,0,0,0.5)

Private instruction in Bass for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 101.

MUSA 103 Bassoon - Lower Division 1 (0,0,0,0.5)

Private instruction in Bassoon for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 104 Bassoon II 1 (0,0,0,0.5)

Private instruction in Bassoon for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 103.

MUSA 105 Cello - Lower Division 1 (0,0,0,0.5)

Private instruction in Cello for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 106 Cello II 1 (0,0,0,0.5)

Private instruction in Cello for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 105.

MUSA 107 Clarinet - Lower Division 1 (0,0,0,0.5)

Private instruction in Clarinet for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 108 Clarinet II 1 (0,0,0,0.5)

Private instruction in Clarinet for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 107.

MUSA 109 Drum Set - Lower Division 1 (0,0,0,0.5)

Private instruction in Drum Set for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 110 Drum Set II 1 (0,0,0,0.5)

Private instruction in Drum Set for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 109.

MUSA 111 Euphonium - Lower Division 1 (0,0,0,0.5)

Private instruction in Euphonium for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 112 Euphonium II 1 (0,0,0,0.5)

Private instruction in Euphonium for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 111.

MUSA 113 Flute - Lower Division 1 (0,0,0,0.5)

Private instruction in Flute for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 114 Flute II 1 (0,0,0,0.5)

Private instruction in Flute for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 113.

MUSA 115 Guitar - Lower Division 1 (0,0,0,0.5)

Private instruction in Guitar for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 116 Guitar II 1 (0,0,0,0.5)

Private instruction in Guitar for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 115.

MUSA 117 Harp - Lower Division 1 (0,0,0,0.5)

Private instruction in Harp for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 118 Harp II 1 (0,0,0,0.5)

Private instruction in Harp for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 117.

MUSA 121 Horn - Lower Division 1 (0,0,0,0.5)

Private instruction in Horn for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 122 Horn II 1 (0,0,0,0.5)

Private instruction in Horn for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 121.

MUSA 123 Oboe - Lower Division 1 (0,0,0,0.5)

Private instruction in Oboe for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 124 Oboe II 1 (0,0,0,0.5)

Private instruction in Oboe for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 123.

MUSA 127 Percussion - Lower Division 1 (0,0,0,0.5)

Private instruction in Percussion for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 128 Percussion II 1 (0,0,0,0.5)

Private instruction in Percussion for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 127.

MUSA 129 Piano - Lower Division 1 (0,0,0,0.5)

Private instruction in Piano for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 130 Piano II 1 (0,0,0,0.5)

Private instruction in Piano for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 129.

MUSA 131 Saxophone - Lower Division 1 (0,0,0,0.5)

Private instruction in Saxophone for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 132 Saxophone II 1 (0,0,0,0.5)

Private instruction in Saxophone for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 131.

MUSA 133 Synthesizer/MIDI - Lower Division 1 (0,0,0,0.5)

Private instruction in Synthesizer/MIDI for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 134 Synthesizer/MIDI II 1 (0,0,0,0.5)

Private instruction in Synthesizer/MIDI for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 133.

MUSA 135 Trombone - Lower Division 1 (0,0,0,0.5)

Private instruction in Trombone for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 136 Trombone II 1 (0,0,0,0.5)

Private instruction in Trombone for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 135.

MUSA 137 Trumpet - Lower Division 1 (0,0,0,0.5)

Private instruction in Trumpet for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 138 Trumpet II 1 (0,0,0,0.5)

Private instruction in Trumpet for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 137.

MUSA 139 Tuba - Lower Division 1 (0,0,0,0.5)

Private instruction in Tuba for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 140 Tuba II 1 (0,0,0,0.5)

Private instruction in Tuba for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 139.

MUSA 141 Viola - Lower Division 1 (0,0,0,0.5)

Private instruction in Viola for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 142 Viola II 1 (0,0,0,0.5)

Private instruction in Viola for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 141.

MUSA 143 Violin - Lower Division 1 (0,0,0,0.5)

Private instruction in Violin for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 144 Violin II 1 (0,0,0,0.5)

Private instruction in Violin for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 143.

MUSA 145 Voice - Lower Division 1 (0,0,0,0.5)

Private instruction in Voice for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for first semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester.

MUSA 146 Voice II 1 (0,0,0,0.5)

Private instruction in Voice for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for second semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 145.

MUSA 151 Bass for Non Majors 1 (0,0,0,0.5)

Private instruction in Bass for non-majors. May be repeated for credit.

MUSA 152 Bassoon for Non Majors 1 (0,0,0,0.5)

Private instruction in Bassoon for non-majors. May be repeated for credit.

MUSA 153 Cello for Non Majors 1 (0,0,0,0.5)

Private instruction in Cello for non-majors. May be repeated for credit.

MUSA 154 Clarinet for Non Majors 1 (0,0,0,0.5)

Private instruction in Clarinet for non-majors. May be repeated for credit.

MUSA 155 Drum Set for Non Majors 1 (0,0,0,0.5)

Private instruction in Drum Set for non-majors. May be repeated for credit.

MUSA 156 Euphonium for Non Majors 1 (0,0,0,0.5)

Private instruction in Euphonium for non-majors. May be repeated for credit.

MUSA 157 Flute for Non Majors 1 (0,0,0,0.5)

Private instruction in Flute for non-majors. May be repeated for credit.

MUSA 158 Guitar for Non Majors 1 (0,0,0,0.5)

Private instruction in Guitar for non-majors. May be repeated for credit.

MUSA 159 Harp for Non Majors 1 (0,0,0,0.5)

Private instruction in Harp for non-majors. May be repeated for credit.

MUSA 161 Horn for Non Majors 1 (0,0,0,0.5)

Private instruction in Horn for non-majors. May be repeated for credit.

MUSA 162 Oboe for Non Majors 1 (0,0,0,0.5)

Private instruction in Oboe for non-majors. May be repeated for credit.

MUSA 164 Percussion for Non Majors 1 (0,0,0,0.5)

Private instruction in Percussion for non-majors. May be repeated for credit.

MUSA 165 Piano for Non Majors 1 (0,0,0,0.5)

Private instruction in Piano for non-majors. May be repeated for credit.

MUSA 166 Saxophone for Non Majors 1 (0,0,0,0.5)

Private instruction in Saxophone for non-majors. May be repeated for credit.

MUSA 167 Synthesizer/MIDI for Non Majors 1 (0,0,0,0.5)

Private instruction in Synthesizer/MIDI for non-majors. May be repeated for credit.

MUSA 168 Trombone for Non Majors 1 (0,0,0,0.5)

Private instruction in Trombone for non-majors. May be repeated for credit.

MUSA 169 Trumpet for Non Majors 1 (0,0,0,0.5)

Private instruction in Trumpet for non-majors. May be repeated for credit.

MUSA 170 Tuba for Non Majors 1 (0,0,0,0.5)

Private instruction in Tuba for non-majors. May be repeated for credit.

MUSA 171 Viola for Non Majors 1 (0,0,0,0.5)

Private instruction in Viola for non-majors. May be repeated for credit.

MUSA 172 Violin for Non Majors 1 (0,0,0,0.5)

Private instruction in Violin for non-majors. May be repeated for credit.

MUSA 173 Voice for Non Majors 1 (0,0,0,0.5)

Private instruction in Voice for non-majors. May be repeated for credit. Prerequisite: Audition required.

MUSA 201 Bass III 1 (0,0,0,0.5)

Private instruction in Bass for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 102.

MUSA 202 Bass IV 1 (0,0,0,0.5)

Private instruction in Bass for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 201.

MUSA 203 Bassoon III 1 (0,0,0,0.5)

Private instruction in Bassoon for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 104.

MUSA 204 Bassoon IV 1 (0,0,0,0.5)

Private instruction in Bassoon for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 203.

MUSA 205 Cello III 1 (0,0,0,0.5)

Private instruction in Cello for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 106.

MUSA 206 Cello IV 1 (0,0,0,0.5)

Private instruction in Cello for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 205.

MUSA 207 Clarinet III 1 (0,0,0,0.5)

Private instruction in Clarinet for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 108.

MUSA 208 Clarinet IV 1 (0,0,0,0.5)

Private instruction in Clarinet for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 207.

MUSA 209 Drum Set III 1 (0,0,0,0.5)

Private instruction in Drum Set for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 110.

MUSA 210 Drum Set IV 1 (0,0,0,0.5)

Private instruction in Drum Set for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 209.

MUSA 211 Euphonium III 1 (0,0,0,0.5)

Private instruction in Euphonium for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 112.

MUSA 212 Euphonium IV 1 (0,0,0,0.5)

Private instruction in Euphonium for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUS 211.

MUSA 213 Flute III 1 (0,0,0,0.5)

Private instruction in Flute for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 114.

MUSA 214 Flute IV 1 (0,0,0,0.5)

Private instruction in Flute for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 213.

MUSA 215 Guitar III 1 (0,0,0,0.5)

Private instruction in Guitar for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 116.

MUSA 216 Guitar IV 1 (0,0,0,0.5)

Private instruction in Guitar for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 215.

MUSA 217 Harp III 1 (0,0,0,0.5)

Private instruction in Harp for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 118.

MUSA 218 Harp IV 1 (0,0,0,0.5)

Private instruction in Harp for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 217.

MUSA 221 Horn III 1 (0,0,0,0.5)

Private instruction in Horn for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 122.

MUSA 222 Horn IV 1 (0,0,0,0.5)

Private instruction in Horn for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 221.

MUSA 223 Oboe III 1 (0,0,0,0.5)

Private instruction in Oboe for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 124.

MUSA 224 Oboe IV 1 (0,0,0,0.5)

Private instruction in Oboe for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 223.

MUSA 227 Percussion III 1 (0,0,0,0.5)

Private instruction in Percussion for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 128.

MUSA 228 Percussion IV 1 (0,0,0,0.5)

Private instruction in Percussion for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 227.

MUSA 229 Piano III 1 (0,0,0,0.5)

Private instruction in Piano for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 130.

MUSA 230 Piano IV 1 (0,0,0,0.5)

Private instruction in Piano for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 229.

MUSA 231 Saxophone III 1 (0,0,0,0.5)

Private instruction in Saxophone for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 132.

MUSA 232 Saxophone IV 1 (0,0,0,0.5)

Private instruction in Saxophone for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 231.

MUSA 233 Synthesizer/MIDI III 1 (0,0,0,0.5)

Private instruction in Synthesizer/MIDI for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 134.

MUSA 234 Synthesizer/MIDI IV 1 (0,0,0,0.5)

Private instruction in Synthesizer/MIDI for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 233.

MUSA 235 Trombone III 1 (0,0,0,0.5)

Private instruction in Trombone for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 136.

MUSA 236 Trombone IV 1 (0,0,0,0.5)

Private instruction in Trombone for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 235.

MUSA 237 Trumpet III 1 (0,0,0,0.5)

Private instruction in Trumpet for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 138.

MUSA 238 Trumpet IV 1 (0,0,0,0.5)

Private instruction in Trumpet for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 237.

MUSA 239 Tuba III 1 (0,0,0,0.5)

Private instruction in Tuba for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 140.

MUSA 240 Tuba IV 1 (0,0,0,0.5)

Private instruction in Tuba for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 239.

MUSA 241 Viola III 1 (0,0,0,0.5)

Private instruction in Viola for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 142.

MUSA 242 Viola IV 1 (0,0,0,0.5)

Private instruction in Viola for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 241.

MUSA 243 Violin III 1 (0,0,0,0.5)

Private instruction in Violin for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 144.

MUSA 244 Violin IV 1 (0,0,0,0.5)

Private instruction in Violin for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 243.

MUSA 245 Voice III 1 (0,0,0,0.5)

Private instruction in Voice for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for third semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 146.

MUSA 246 Voice IV 1 (0,0,0,0.5)

Private instruction in Voice for music majors. Students will study repertoire, scales, and technical etudes commensurate with standards established for fourth semester music majors. Required: performance on MUS 100 Recital Attendance and jury at the end of the semester. Prerequisite: MUSA 245.

MUSE 101 Concert Choir 1 (1,2.5,0,0)

Study and performance of representative choral music, sacred and secular, from the major musical types and historical movements. May be repeated for credit.

MUSE 103 Chamber Chorale 1 (1,2.5,0,0)

This vocal ensemble will study and perform literature from the Renaissance time period as well as other chamber music compositions.

MUSE 111 Concert Band 1 (1,2.5,0,0)

Open to all college students with previous band experience. May be repeated up to six times for credit.

MUSE 121 Symphony Orchestra 1 (1,2.5,0,0)

Rehearsal and performance of orchestral music of all periods. Required participation of scheduled performances. Audition required. May be repeated for credit.

MUSE 131 Jazz Ensemble 1 (1,2.5,0,0)

Performance ensemble will perform standard and new big band Jazz literature. Emphasis on sight reading, improvisation, and ensemble playing. Consistent attendance and participation in public performances mandatory. May be repeated for credit. Prerequisite: Admission by audition only. Limited to instrumentalists.

MUSE 133 Jazz Combo 1 (1,2.5,0,0)

Exploration and performance of small group jazz literature with improvisation. May be repeated for credit.

MUSE 135 Jazz Vocal Ensemble 1 (1,2.5,0,0)

Explores a variety of musical styles, including pop, rock, and jazz by a lively performing group.

MUSE 141 Woodwind Ensemble 1 (1,2.5,0,0)

Emphasis on woodwind literature from all periods. Open to college woodwind players, including saxophones, through audition or permission of the instructor. May be repeated six times for credit.

MUSE 146 Brass Ensemble 1 (1,2.5,0,0)

Emphasis on brass literature from all periods. Open to college brass players through audition or permission of the instructor. May be repeated six times for credit.

MUSE 161 Percussion Ensemble 1 (1,2.5,0,0)

A percussion ensemble performing musical repertoire varying from classical to jazz and pop selections. Audition required. May be repeated for credit.

MUSE 165 Steel Drum Band 1 (1,2.5,0,0)

A performance based class intended to provide the student with a general knowledge in the art of playing steel drums and percussion instruments related to the steel drum band.

Nursing

**NURS 040 In-Facilities
Nursing Assistant 3 (2,0,3,0)**

Integration of knowledge and skills which focuses on the role of the nursing assistant in caring for non-critical patients. Successful completion fulfills requirements for eligibility to write the Certified Nursing Assistant examination. This course is taught only in health care facilities. Registration must be through facility where course is taught.

**NURS 090 Tools for
Nursing Success 1 (1,0,0,0)**

Course is a brief introduction to nursing math through all four semesters, and to nursing process and writing care plans. Course open to all that have had acceptance into the Nursing Program.

**NURS 101 Introduction to Professional
Nursing Practice 6 (3,3,6,0)**

Introduction to the practice of professional nursing focusing on nursing concepts and skills while providing nursing care to promote adaptation of middle and elderly clients in a variety of settings. Prerequisite: Admission to ADN program.

NURS 115 Medical-Surgical Nursing I 6.5 (3.5,1.5,7.5,0)

Focuses on the role of the professional nurse in supporting and promoting optimal adaptation of the adult medical-surgical client in acute care settings. Prerequisites: NURS 101, 125B, BIOL 224.

NURS 125B Pharmacology for Nursing Practice 2 (2,0,0,0)

Integrates basic pharmacology with nursing practice. Covers drug actions, side effects, interactions, pharmacokinetics, and dosage and calculations. Prerequisite: Admission into the ADN program.

NURS 130 Nursing Assistant 6 (3,3,6,0)

Integration of knowledge and skills focusing on the role of the nursing assistant in caring for non-critical patients in skilled nursing facilities.

NURS 135B Nursing Assistant Instructor Development 1 (1,0,0,0)

Required by Nevada State Board of Nursing, this course reviews State and Federal regulations, model curriculum, course content, and laboratory and clinical skills.

NURS 205 Introduction to Associate Degree Nursing 4.5 (3,1.5,4,0)

Facilitates transition from LPN to professional nursing role in promoting optimal adaptation of the adult client within the community and acute care settings. Prerequisites: Admission to ADN program, LPN licensed in Nevada.

NURS 208 Professional Topics: Management Concepts and Transition into Professional Practice 2 (2,0,0,0)

Introduces the nursing student to basic management/leadership concepts as well as preparing the nursing student to assume and assimilate the role and the responsibilities of the professional nurse. Prerequisites: NURS 247, 248.

NURS 211 Medical-Surgical Nursing II 4.5 (2.25,0.75,6,0)

Focuses on the role of the professional nurse in supporting and promoting optimal adaptation of adult medical-surgical clients experiencing complex, multi-system dysfunction in acute critical and special care units and community settings. Prerequisites: NURS 247, 248.

NURS 240B RN Refresher Course (Theory/Lab) 2.5 (2,0.5,0,0)

Assists inactive professional nurses to update their knowledge and skills in order to renew their licensure. This is the first course of a two-course series.

NURS 242B RN Refresher Course (Clinical) 2.5 (0,0,0,7.5)

This is the second course of a two-course series designed to assist inactive professional nurses to update their knowledge and skills in order to renew their licensure. The student will be assigned to clinical practice under the supervision of an RN preceptor. This course will be graded on a pass/fail basis. Prerequisite: NURS 240B.

NURS 243 Mental Health Nursing 4.5 (2.25,0.75,6,0)

Focuses on the role of the professional nurse in supporting and promoting adaptive coping responses for clients and their families in mental health and other clinical settings. APs take NURS 125, 205 concurrently. Prerequisites: NURS 125B, 101, BIOL 224.

NURS 247 Maternal-Newborn Nursing 4.5 (2.25,0.75,6,0)

Focuses on the role of the professional nurse in supporting and promoting adaptation of the child-bearing family during antepartum, intrapartum and postpartum periods. Prerequisites: NURS 115 or 205, 243, and BIOL 251.

NURS 248 Pediatric Nursing 4.5 (2.25,0.75,6,0)

Focuses on the role of the professional nurse in supporting and promoting adaptive coping responses for pediatric clients and their families in a variety of settings. Prerequisites: NURS 115 or 205, 243, and BIOL 251.

NURS 285 Selected Topics in Nursing 0.5-6 (0.5-6,0,0,0)

Selected nursing topics offered for specific needs of nursing students or community nurses. Prerequisite: Consent of Nursing Program Director.

NURS 296 Nursing Management and Preceptorship 2.5 (0,0,7.5,0)

With guidance of a nursing preceptorship, this clinical practicum focuses on role transition from student to professional graduate nurse in the nursing management of client care. This course is graded on a pass/fail basis. Corequisites: NURS 208, 211.

Ornamental Horticulture

OH 100B Horticulture Fundamentals 1 (1,0,0,0)

Exploration of the varied fields and career opportunities within the Ornamental Horticulture industry. Students will also receive counseling to prepare and to guide their progression through the program leading to graduation. Should be taken in the first semester of study.

OH 101 Introduction to Plant Propagation 3 (3,1,0,0)

Introduction to asexual and sexual plant propagation practices emphasizing why these practices are used and how they are applied in hobby and commercial horticulture. Prerequisite: OH 100B or consent of instructor.

OH 104 Floriculture 3 (3,1,0,0)

Designed to provide the student with theory and lab experience on the identification, production, grading and standards for cut flowers and potted plants. Emphasis on processing, industry sales practices, merchandising and packaging of cut flowers and potted plants. Prerequisite: OH 100B or consent of instructor.

OH 105 Soils and Plant Nutrition 3 (3,1,0,0)

Designed to provide the student with instruction and laboratory experience on soil derivation, classification and general characteristics, properties of soil and soil evaluation, use of soils and their management, including soil moisture, structure, cultivation, organic materials and microbiology, alkali and saline soils and reclamation. Prerequisite: OH 100B or consent of instructor.

OH 107B Landscape Materials 3 (2,2,0,0)

The study of the various materials used in Landscape Construction including the interpretation of landscape construction documents for calculation of quantities.

OH 110B Plant Science 3 (3,0,0,0)

Study of the role of the environment upon plant growth and development with emphasis upon interaction between plants and environmental factors. Explores the scientific principles that can be applied to modify the environment and enhance plant performance and production.

OH 111 Turfgrass Fundamentals 3 (3,0,0,0)

Explores the biology and ecology of grasses suitable for use as turf with emphasis upon selecting species and cultivars suitable for the site environment. Introduces students to techniques of and equipment used in establishing and maintaining turfgrass in a variety of uses. Prerequisite: OH 100B or consent of instructor.

OH 120B Nursery Operations and Management 3 (3,1,0,0)

Course will cover those items needed to start and/or manage a retail nursery/garden center including site selection, layout, development, production, maintenance, operation management, merchandising, niche marketing, employer/employee relations and stock selection.

OH 130B Pesticide Regulations and Safety 1 (1,0,0,0)

Students will review the history and content of current Federal and State pesticide regulations. The content of pesticide labels and material safety data sheets will be examined to evaluate product suitability to the application, methods for storing, mixing, applying and disposing of the product and the personal protective equipment required to minimize risk. Instruction will fulfill the minimum standards for issuance of a Worker Protection Standard Training Handler Verification Card.

OH 131B Pesticide Management and Records 1 (1,0,0,0)

Students will be introduced to the decision making process followed in implementing a pest control program that includes the use of chemical pesticides and the role of an adequate record keeping system to comply with Federal and State regulations and provide useful information for future decision making. Emphasis will be placed upon strategies designed to minimize risk and the development of pest resistance.

OH 132B Pesticide Application and Equipment 1 (1,0,0,0)

Students will review different types of pesticide application equipment and the suitability of each to specific situations. Pre-use inspection techniques and routine maintenance practices will be presented. Instruction in the operation of individual types of equipment and application techniques to effectively and uniformly dispense pesticides with minimum exposure risk will be presented.

OH 133B Pesticide Application Rates and Calibration 1 (1,0,0,0)

Students will receive instruction and practice on how to determine the allowable rate of application for a pesticide, calibrate the application equipment, determine the amount of concentrated and prepared pesticide needed to treat a site.

OH 140B Annual Color Concepts 2 (2,0,0,0)

An introduction to the design and culture of annual color beds in the landscape including plant identification and selection, design principles, cost and budget considerations, and cultural practices.

OH 150B Landscape Equipment Survey 2 (1,3,0,0)

Students will be introduced to daily inspection, maintenance requirements and safe operation of powered equipment commonly used in landscape maintenance and construction.

OH 203 Introduction to Plant Pathology and Landscape Pests 3 (3,1,0,0)

This course is an introduction to plant pathology including the definition of disease, recognition of signs and symptoms, life cycle of disease causing organisms, and host response to disease causing organisms. Landscape pests and weeds found in the Southern Nevada area will be identified, their life cycle described, and host plants identified. Prerequisite: OH 100B or consent of instructor.

OH 207 Landscape Construction 4 (2,6,0,0)

Application of theories in analysis of landscape designs/plans to estimate quantities and costs of materials, labor and other associated inputs required to complete construction. Students will participate in the installation of a landscape project. Prerequisites: OH 107B, 109B or consent of instructor.

OH 209 Arboriculture 4 (3,3,0,0)

Designed to provide students with classroom and applied instruction on the care and management of large ornamental trees, shrubs and vines. Applied laboratory exercises will provide experience in tree climbing techniques, planting, staking, pruning, and other necessary skills. Prerequisite: OH 100B or consent of instructor.

OH 210B Arboriculture II 3 (3,1,0,0)

Handling of ropes and other safety equipment used in tree climbing, cavity work, bracing, cabling and pruning. Prerequisite: OH 209B.

OH 211B Irrigation Management 2 (1,2,0,0)

Provides students with a review of smart irrigation products and technology available for commercial and residential sites. Presents theory and application of water auditing techniques to evaluate system performance and establish baseline irrigation schedules based upon prevailing environmental factors and system performance. Prepares students for Irrigation Association certification examination. Prerequisite: IS 101 or consent of instructor.

OH 212B Landscape Estimating 3 (3,1,0,0)

Examination and application of cost estimating techniques in the preparation of budgets and/or bids that anticipate labor, equipment, material, subcontracting and overhead costs using current computer programs. There will be a review of contract law, types of contracts, job administration and cost accounting. Prerequisites: OH 100B and IS 101 or consent of instructor.

OH 214B Interior Plant Design and Maintenance 3 (3,1,0,0)

Identification, selection, cultural practices, design concepts, practices, and management of interior foliage plants.

OH 215B Advanced Irrigation Design 3 (3,1,0,0)

Advanced irrigation design applications. Prerequisite: OH 201.

OH 221B CAD for Landscape Design II 3 (3,1,0,0)

A continuation of CAD for Landscape Design I. Introduces the student to the advanced features of a CAD workstation, as it relates to landscape design, using AutoCAD software. Prerequisite: OH 219B.

OH 230B Basic Tree Work 1 (0.5,1.5,0,0)

This class is designed to provide instruction and application of safe work practices, identification and use of common hand tools, operation and maintenance of powered equipment used in tree care, and basic job skills for entry level as a ground worker for a tree care provider.

OH 231B Pruning I 1 (0.5,1.5,0,0)

This class is designed to provide instruction and application of industry accepted techniques and strategies for tree pruning including crown cleaning, crown thinning, crown reduction, and crown restoration. Topics presented will include natural target pruning concepts, CODIT model of tree wound response, safe operation and maintenance of commonly used hand tools and power equipment, and safe work practices in compliance with ANSI Z133.1 Safety Requirements.

OH 232B Climbing I 1 (0.5,1.5,0,0)

This class is designed to provide instruction and application of industry accepted climbing and work positioning techniques used in tree care. Topics presented will include safe work practices established by ANSI Z-133.1. Safety Requirements, climbing gear and accessories, climbing ropes, knots and knot tying, placing the climbing rope in the tree, tree entry techniques, limb walking, and controlled descent.

OH 233B Aerial Rescue 1 (0.5,1.5,0,0)

This class is designed to provide instruction and application of industry accepted aerial rescue techniques used to assist or remove an injured tree worker from the canopy of a tree. Topics presented will include aerial rescue practices established by ANSI Z-133.1. Safety Requirements, inspection and evaluation of the work area, techniques for descending while supporting and controlling the descent of an injured worker, basic first aid, and CPR. Prerequisite: OH 232B or consent of instructor.

OH 240 Turfgrass for Golf Professionals 3 (3,0,0,0)

A survey of the science and art of establishing and maintaining high quality turfgrass on golf courses. Students will be introduced to best management practices based upon environmental factors and the biological needs of turfgrass species and cultivars. Site visits will be made to local facilities to observe application of these principles. Emphasis will be placed upon budget and cost considerations.

OH 250B Advanced Topics 1-6 (0-4,0-6,0,0)

Introduction and exploration of advanced topics, current innovations and developing technologies in the industry using a combination of lectures, discussion forums, and/or practical applications. May be repeated up to a maximum of 6 credits. Prerequisite: OH 100B.

OH 295B Horticultural Careers Internship 1-4 (0,0,0,5-20)

Cooperative education course designed to provide the student with on-the-job supervised and educationally directed work experience in the green industry. One credit may be earned for each 75 hours worked per semester. Variable to 4 credits per semester. May be repeated to fulfill program internship requirements. Prerequisites: OH 100B and instructor approval.

Ophthalmic Technology**OPHT 102B Introduction to Contact Lenses 3 (3,0,0,0)**

Overview of instruments pertaining to the fitting of contact lenses; keratometer, biomicroscope, radioscope, diameter gauge, thickness gauge as well as others. Studies will emphasize the care and handling of rigid and soft contact lenses as well as their history.

OPHT 105B Introduction to Contact Lens Lab 1 (0,3,0,0)

Practical application of contact lens fitting procedures as presented in OPHT 102B. Topics include, but are not limited to: keratometry, slit-lamp evaluations, over-refractions, depth perception, color perception, strabismus assessment, and insertion and removal training. Corequisite: OPHT 102B.

OPHT 112B Anatomy and Physiology of the Eye and Related Structures 3 (3,0,0,0)

Designed to give the student an insight into the anatomical structure of the eye and its adnexa. The student will learn the function of the parts of the eye as they relate to vision and the fitting of contact lenses. The student will be presented with common pathologies of the eye and ocular pharmacology.

OPHT 115B Introduction to Ophthalmic Tech 3 (3,0,0,0)

Introduction to the profession of ophthalmic technology, the roles and responsibilities of the ophthalmic technician and organizations involved in the profession with emphasis on medical/legal issues, ethics and medical economics.

OPHT 121B Ophthalmic Optics I 5 (3,6,0,0)

History and development and manufacture of ophthalmic materials, including current industry standards. Single vision and multifocal lenses including spherical, spherocylinder and prism lenses, as well as formulae used in lens design, construction and function. Current lens catalogs are used for information and data.

OPHT 123B Ophthalmic Optics II 5 (3,6,0,0)

Studies of multifocal lens design and construction, including bifocals, trifocals, double segment lenses, progressive and blended lenses. Lens tints, coatings, colors, filters, occupational and sport lenses will be discussed. Formulae pertinent to lens functions will be covered as well.

OPHT 125B Ophthalmic Optics III 3 (3,0,0,0)

Principles of basic ophthalmic optics including optical principles of light, lenses and the human eye.

OPHT 130B Ophthalmic Procedures I 3 (2,3,0,0)

Principles and techniques of ophthalmic procedures including visual acuity measurement, lensometry, tonometry, depth perception, fusion, pupillary evaluation, history taking and color vision. Care, maintenance, calibration of instrumentation and inventory control are included.

OPHT 155B Geometric Optics 3 (3,0,0,0)

Principles of basic and advanced optics including optical principles of light lenses, prisms and mirrors. This is a course in optical physics.

OPHT 160B Clinical Applications I 3 (0,0,12,0)

Introductory clinical experience designed to apply skills acquired in previous course work. Experience designed to give the student an introduction to, and observation of, the ophthalmic office/hospital setting.

OPHT 161B Ophthalmic Seminar 1 (1,0,0,0)

Lecture/discussion of clinical issues and experiences with emphasis on case studies, role playing and problem solving techniques.

OPHT 201B Ophthalmic Dispensing I 5 (3,8,0,0)

Introduction to ophthalmic dispensing skills. Patient/client measurements, frame and lens material selection, prescription analysis and adjustment techniques will be covered. The student will develop basic lensometry skills using a manual lensometer. Students will learn and apply current ophthalmic A.N.S.I. standards. The student will learn the formulas and terminology pertinent to ophthalmic dispensing.

OPHT 202B Contact Lenses I 3 (3,0,0,0)

Continuation of OPHT 102B. Specialty lenses will be covered, including bifocals, torque, keratoconus as well as therapeutic lenses. Overview of all contact lens-related equipment. Students will also cover various over-refraction techniques.

OPHT 203B Contact Lenses II 1 (0,3,0,0)

Practical application of contact lens fitting procedures. Topics include modifications of contact lenses, over-refraction of contact lenses, corneal photography and problem solving techniques. Students will use case studies as well as each other to gain fitting experience.

OPHT 220B Theory of Refractometry 3 (3,0,0,0)

The course will cover pre-testing procedures. Identify various ophthalmic equipment and identify the procedures of the objective and subjective refraction.

OPHT 223B Ophthalmic Dispensing II 5 (3,0,8,0)

Continuation of clinical dispensing procedures, with emphasis on unusual and complex problems, including aphakia and various eye disorders.

OPHT 228B Ocular Pharmacology and Diseases of the Eye 4 (4,0,0,0)

Principles and concepts of pharmacology with emphasis on ocular pharmacology. Terminology, abbreviations, identification, delivery systems, actions and effects of commonly used drugs, as well as related legal issues of pharmacology are included. Pathological conditions of the eye are discussed including basic characteristics of common external, internal, and systemic diseases of the eye, ocular emergencies and management.

OPHT 232B Opticianry Management Sales 3 (3,0,0,0)

Presentation of basic principles of present day ophthalmic dispensing practices. Emphasis will be on patient communication, costs, both inventory and laboratory and computer skills, as well as general bookkeeping skills and associated dispensing practice procedures. Salesmanship and business ethics will be covered.

OPHT 235B Ophthalmic Surgical Assistant 2 (2,0,0,0)

Fundamentals and practice of microbial control, control of infection, prevention of contamination in the medical facility, safe handling of equipment and supplies, hand-washing technique, maintaining aseptic fields and assisting the physician in common office surgical procedures.

OPHT 237B Ophthalmic Clinical Management 3 (3,0,0,0)

Current diagnosis and treatment of ocular diseases and the technician's role in caring for pre- and post-operative patients. Basic and practical microbiology as it relates to the diagnosis, treatment and management of ocular diseases.

OPHT 238B Ophthalmic Applied Diagnostic Studies 3 (3,0,0,0)

Advanced diagnostic testing including ocular motility testing, potential acuity meter, ultrasonography, endothelial cell analysis, corneal topography, ophthalmic photography and electrophysiology.

OPHT 250B Clinical Applications II 3 (0,0,12,0)

Advanced clinical experience designed to apply skills acquired in previous course work. Emphasis is placed on contact lenses and surgical assisting,

OPHT 251B Clinical Applications Seminar 1 (1,0,0,0)

Discussion of clinical issues and experiences with emphasis on case studies, role playing and problem solving techniques.

OPHT 260B Introduction to Low Vision 1 (1,0,0,0)

Introduction to low vision dispensing skills for the optician. Topics include, but are not limited to: patient/client needs assessment, low vision aid/device selection, patient usage training, patient follow up visitations and resource services.

OPHT 291B Clinical Applications III 3 (0,0,12,0)

Clinical experience designed to apply skills acquired in previous course work. Experience designed to give the student an introduction to and observation of the ophthalmic dispensing office.

OPHT 299B Certificate Review 2 (2,0,0,0)

Review course for national and state competency examinations. This course may be taken up to three times: American Board of Opticianry Certification exam review, National Contact Lens Examiners certification review, and Nevada State Board of Dispensing Opticians exam review.

Physical Education

PEX 184 Conditioning, Intercollegiate Athletics 1 (0,0,0,6)

Beginning conditioning course designed to prepare students to participate in intercollegiate athletics.

PEX 186 Intercollegiate Baseball 1 (0,0,0,6)

Beginning course participation on the intercollegiate baseball team.

PEX 194 Intercollegiate Softball 1 (0,0,0,6)

Beginning course participation on the intercollegiate softball team.

PEX 284 Intermediate Conditioning, Intercollegiate Athletics 1 (0,0,0,6)

Intermediate conditioning course designed to prepare students to participate in intercollegiate athletics.

PEX 286 Intermediate Intercollegiate Baseball 1 (0,0,0,6)

Intermediate course participation on the intercollegiate baseball team.

PEX 294 Intermediate Intercollegiate Softball 1 (0,0,0,6)

Intermediate course participation on the intercollegiate softball team.

Pharmacy Technician

PHAR 100B Introduction to Pharmacy Practice 3 (3,0,0,0)

To provide an overview of the pharmacy profession and the roles of the pharmacist and the pharmacy technician. Topics include profession evolution, pharmacy law and ethics, professional standards, pharmacy operations, professionalism, and employment. Prerequisite: Admission to the Pharmacy Technician Program.

PHAR 101B Pharmacy Techniques 3 (2,3,0,0)

To provide an overview of pharmaceutical preparation and compounding techniques. Topics including dosage forms, facilities and equipment, aseptic technique, quality control, and record keeping. Prerequisite: Admission to the Pharmacy Technician Program.

PHAR 105B Pharmaceutical Math for Technicians 3 (3,0,0,0)

A practical approach to pharmaceutical math calculations designed to provide students with the skills, training, and techniques necessary for successful comprehension and mastery of relevant pharmaceutical computations. Prerequisite: Admission to the Pharmacy Technician Program.

PHAR 110B Pharmacology I 2 (2,0,0,0)

An overview of the pharmacokinetics between the body systems and particular classes of drugs. Introduces a framework of knowledge and principles about the classifications, purposes, side effects, cautions and interactions of medications. Prerequisite: Admission to the Pharmacy Technician Program.

PHAR 115B Pharmacology II 2 (2,0,0,0)

This course is designed to provide an advanced study of the pharmacological framework. Topics include therapeutic utility, drug classifications, drug actions, side effects, contraindications, and interactions. Prerequisite: PHAR 110B.

PHAR 120B Pharmacy Microcomputers 2 (1,2,0,0)

A computer-based laboratory course designed to introduce students to the fundamentals of computer and database applications unique to pharmacy practice settings. Prerequisite: PHAR 101B.

PHAR 126B Pharmacy Technician Practicum 7 (0,0,21,0)

Supervised application in a practice setting of the skills learned in the program, i.e., profiling, recognition and filling of medication orders. Intravenous preparation, aseptic techniques. Prerequisite: PHAR 110B.

Philosophy

PHIL 101 Introduction to Philosophy 3 (3,0,0,0)

A study of philosophy as an interpretation of human experience and an examination of concepts and assumptions fundamental in human thought.

PHIL 101H Introduction to Philosophy - Honors 3 (3,0,0,0)

An honors level study of philosophy as an interpretation of human experience and an examination of concepts and assumptions fundamental in human thought. Honors emphasizes both interactive and independent learning entailing an in-depth examination of one's thinking on philosophical questions through use of the Socratic Method. Courses with "H" suffixes are designated Honors level courses and can be used to fulfill equivalent general education requirements. Prerequisite: Admission to the Honors program.

PHIL 102 Critical Thinking and Reasoning 3 (3,0,0,0)

Introduction to the analysis and evaluation of actual arguments, to the practice of constructing logically sound arguments, and to logic as the theory of argument. Emphasizes arguments of current or general interest.

PHIL 114 Introduction to Symbolic Logic 3 (3,0,0,0)

Introduces principles of correct reasoning, using modern symbolic techniques of the propositional calculus and simple quantification theory.

PHIL 115 Philosophy of Death and Dying 3 (3,0,0,0)

A philosophical study of concepts and theories surrounding death and dying. This course will examine different philosophical and/or cultural attitudes and beliefs concerning issues such as, but not limited to, preparation for death, fear of death, immortality, grief and commemoration of the dead.

PHIL 119 Introduction to the Old Testament 3 (3,0,0,0)

General survey of the books of the Old Testament from a nondenominational perspective. Covers the history, ideas and theological beliefs of Biblical Israel and deals with those themes in the light of archeological research and literary criticism.

PHIL 124 Philosophical Traditions of Asia 3 (3,0,0,0)

Study of the nature of self, mind, knowledge, truth, logic, and related themes characteristic of India, China, Japan, or any other Asian country.

PHIL 129 Introduction to the New Testament 3 (3,0,0,0)

This course surveys New Testament books from a non-denominational perspective. Literary criticism and historical background are considered.

PHIL 131 Introduction to Metaphysics 3 (3,0,0,0)

Selected problems concerning human nature and reality, e.g., mind and body, freedom and determinism, space and time, God, causality.

PHIL 135 Introduction to Ethics 3 (3,0,0,0)

A course designed to introduce students to the theory and practice of ethics. In the context of classical theories and modern moral problems, students will be encouraged to clarify their own ethical positions.

PHIL 201 Philosophy Goes to the Movies 3 (3,0,0,0)

Introduction to philosophical problems in ethics, politics, law, aesthetics, metaphysics, or knowledge through film and literary materials in addition to standard philosophical texts.

PHIL 202 Introduction to Philosophy of the Arts 3 (3,0,0,0)

Varieties of artistic representation and expression, the relationship of artworks to their embodiments, and the nature of interpretation and aesthetic response.

PHIL 203 Survey of Existentialism 3 (3,0,0,0)

A survey of the various influences and responses which led to existential thought. Readings from Kierkegaard, Sartre, Nietzsche and Buber will be emphasized.

PHIL 205 Science and Religion 3 (3,0,0,0)

Selected problems and episodes in the interaction between science and religion, such as the 17th century condemnation of Galileo, the 18th century controversy about natural religion, and the recent creation/evolution debate in the United States.

PHIL 207 Social and Political Philosophy 3 (3,0,0,0)

Major political philosophers, e.g., Plato, Aristotle, Machiavelli, Hobbes, Rousseau, Mill, and Marx, on topics such as justice, freedom, equality, tyranny, war, racism, sexism, power, consent, and economics.

PHIL 210 World Religions 3 (3,0,0,0)

A critical introduction to the nature of religion. The major moral and religious views of Hinduism, Buddhism, Taoism, Confucianism, Judaism, Christianity and Islam will be studied.

PHIL 215 Introduction to Philosophy of Religion 3 (3,0,0,0)

An introductory philosophical examination of some claims and problems within the Western tradition including, but not limited to, the nature of God, arguments for the existence of God, the problem of evil, divine foreknowledge and human freedom, arguments for/against personal immortality, and faith/reason as alternative avenues to belief.

PHIL 216 Philosophy of Human Nature 3 (3,0,0,0)

This course explores a variety of traditions on what human nature is. We will study both western and eastern religious concepts, classical and modern philosophical theories, and scientific theories and models of human nature.

PHIL 217 Introduction to the Study of Marxism 3 (3,0,0,0)

Exploration of the fundamental concepts of the views of Karl Marx as well as other historical and contemporary Marxist thinkers.

PHIL 244 Bioethics 3 (3,0,0,0)

Treatments of such issues as abortion and euthanasia, cloning, genetic screening, just health care, patients' rights, the use of human and animal subjects in research.

PHIL 245 Contemporary Moral Issues 3 (3,0,0,0)

Introduction to ethics by way of such current issues as war and atrocity, the purpose of the university, racism, women's liberation, violence and aggression, the notions of happiness and success, or ethics of ecology.

PHIL 246 Philosophy of Law 3 (3,0,0,0)

Study of the meaning of law, particularly legal reasoning, positive and normative functions of law, and the nature of justice. Such legal theorists as Plato, Aquinas, Hobbes, Kant, Hegel, Hart, and Dworkin will be studied.

PHIL 247 Philosophy and Women 3 (3,0,0,0)

Variety of philosophical writings by or about women, from Plato to the present, focusing on such key concepts as nature, equality, dignity, freedom, love, and self-realization: may include feminist critiques of the western philosophical tradition. (Same as WMST 247.)

PHIL 249 Environmental Ethics 3 (3,0,0,0)

Explores fundamental concepts of human moral obligations towards other living things and natural systems. Topics include the rights of animals and new candidates for an adequate environmental ethic.

PHIL 295 Topical Issues in Philosophy 1-3 (1-3,0,0,0)

The topic will vary; however, the intent is to develop awareness of, and appreciation for, certain philosophers and/or issues. May be repeated to six credits.

PHIL 302 Intermediate Reasoning and Critical Thinking 3 (3,0,0,0)

Designed to extend the theory and practice of reasoned argument by the analysis, evaluation, reconstruction, and construction of extended examples drawn from such fields as philosophy, literature, religion, natural and social sciences, the arts, or contemporary affairs. Prerequisites: Admission to Dental Hygiene Bachelor of Science Degree Program, Medical Laboratory Scientist Bachelor of Applied Science Degree Program, Cardiorespiratory Sciences Bachelor of Applied Science Degree Program or consent of the instructor.

PHIL 311 Professional Ethics 3 (3,0,0,0)

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. Prerequisites: Admission to Dental Hygiene Bachelor of Science Degree Program, Medical Laboratory Scientist Bachelor of Applied Science Degree Program, Cardiorespiratory Sciences Bachelor of Applied Science Degree Program or consent of the instructor.

Photography**PHO 150B Movies and Media 3 (3,0,0,0)**

Analysis of movie and media, the meaning of images and stories, film deconstruction, genre and auteur appreciation, history of film and historical film construction models.

PHO 151B Film Directing Styles 3 (3,0,0,0)

This course is an analysis of the film director's relationship with key creative collaborators of the production team. An analysis of directing techniques, styles and survey of cinematic movements.

PHO 152B World Cinema 3 (3,0,0,0)

Survey of major movements in world cinemas that shows the evolution and development of film grammar through an examination of the historical, technological, and economic perspectives.

PHO 153B Independent Filmmaking 3 (3,0,0,0)

This course will study the evolution of independent filmmaking, through a close examination of cinematic and narrative styles, emerging technologies, independent financing, production budgets, and exhibition and distribution.

PHO 157B Cinematography I 3 (2,2,0,0)

Introduction to the study and operations of HDV and HD digital video cameras, lenses, apertures, shutter speeds, grip equipment, and to the principles and applications of composition, color and light for video. Prerequisite: PHO 214.

PHO 170 Beginning Photography 3 (2,2,0,0)

Fundamental techniques and use of photographic equipment using digital capture. Includes history of photography, its language and major styles, as well as camera handling, exposure, basic image adjustments using digital software including print processing and image presentation.

PHO 171B Digital Photography for the Novice I 3 (2,2,0,0)

This course is an introduction to the mechanics and use of traditional photographic language applied to the digital format. It will cover digital image capture, image downloading to computer, downsizing images and emailing them, and image posting to WebCT. This class is a very BASIC class meant for people new to digital technology.

PHO 172B Digital Photography for the Creative Mind I 3 (2,2,0,0)

This course is an introduction to the mechanics and use of digital technology to create and/or manipulate images into more artistic pieces. This class is very basic and meant for students new to digital technology. This course provides a fun learning experience that allows the student to experiment and use their imagination.

PHO 174B Night Photography 3 (2,2,0,0)

This course will explore the art of creating dramatic night time images. Prerequisite: PHO 170.

PHO 175 Intermediate Photography 3 (2,2,0,0)

Investigation and practice in intermediate photographic principles, creative photography and darkroom techniques and introduction to studio lighting methods. Visual emphasis and critical approach to photographic imagery. Prerequisite: PHO 170.

PHO 176B Photographic Composition and Design 2 (1,2,0,0)

Compositional and design elements specific to photographic processes. Academic principles related to technical, commercial, and creative composition with practical application.

PHO 177B Photographic Bookmaking Process 3 (2,2,0,0)

For many artists, the handmade book occupies a spot near the top of the food chain of creative self-expression. In this course, photographers will learn how to create a photographic book that best reflects your imagery for both self-promotion and commercial applications. Prerequisite: PHO 175.

PHO 178B Wedding Photography 3 (2,2,0,0)

Basic photographic techniques, use of cameras, and portable lighting equipment specific to wedding photography. Creative and compositional considerations. Commercial photography/wedding business applications. Prerequisite: PHO 175.

PHO 179B Wedding Photography II 3 (2,2,0,0)

This course will cover advanced lighting techniques in the studio and on location. Photoshop techniques for the wedding photographer will be taught. Efficient work flow will be discussed. Prerequisite: PHO 178B.

PHO 180 Creative Photography 3 (2,2,0,0)

A practical, analytical, and critical approach to creative color and black-and-white photography. Emphasis on creative film exposure and creative darkroom processes. Prerequisite: PHO 175.

PHO 181B Creative Photography II 3 (2,2,0,0)

This course deals with creating unusual and non-traditional photographic images through the use of toy cameras, darkroom manipulation, and theme interpretation. Prerequisite: PHO 180.

PHO 182B Alternative Photographic Processes 3 (2,2,0,0)

Introduction into non-traditional and historical photographic processes. Emphasis is placed primarily on non-silver techniques, processes, and large format Polaroid image and emulsion transfers. Prerequisite: PHO 195.

PHO 183B Sports and Entertainment Photography 3 (2,2,0,0)

Learn the basics of this exciting specialty area including boxing matches, concerts, shows, clubs, and celebrities. This course will feature several location shoots at major venues in Las Vegas. Prerequisite: PHO 175.

PHO 184B Introduction to American Cinema 3 (2,2,0,0)

Introduction to American cinema as art and communication. Analyze the creative process and film content by viewing films, reading textbooks and online screenplays and discussing dialogue.

PHO 185 Introduction to Photojournalism 3 (2,2,0,0)

The practical application of academic principles and technical skills of photojournalism. Emphasis on ethical considerations and journalistic real-world experiences and assignments. Prerequisite: PHO 175.

PHO 186B Photographing the Heritage of the West 3 (2,2,0,0)

A field course with classroom critiques focusing on locating, interpreting and effectively photographing natural and cultural resources found in the southwestern United States. Film, digital, or hybrid approaches can be used to shoot various stock and magazine type assignments. Prerequisite: PHO 170.

PHO 187B Digital Portrait Enhancement 2 (1,2,0,0)

This course will cover cosmetic retouching, glamour enhancement, retouching with large group photographs, digital body reshaping, and digital lighting enhancement. Prerequisite: PHO 175.

PHO 191B Digital Photography for the Novice II 3 (2,2,0,0)

This course is an intermediate course designed to manipulate and fine tune pictures through Photoshop. Prerequisite: PHO 171B.

PHO 192B Advanced Digital Photography for the Creative Mind 4 (2,4,0,0)

This course is an advanced exploration into the mechanics and use of digital technology to create Fine Art pieces. In this class, the student will enjoy creative license and full use of her/his imagination. This class is an advanced class for those students already familiar with traditional and digital photography, as well as digital technology, i.e., hardware and software.

PHO 194B Night Photography II 3 (2,2,0,0)

This course is an exploration of advanced photographic techniques used in low-light conditions with emphasis on film characteristics, digital techniques, and equipment operation. Creative, commercial, scenic and astrophotography applications will be covered. Prerequisite: PHO 174B.

PHO 195 Photographic Lighting 4 (2,4,0,0)

Introduction to control and modification of natural light and studio applications of quartz and electronic flash lighting equipment. Commercial/illustration, portrait, and photojournalistic applications stressed. Prerequisite: PHO 175.

PHO 200 Color Photography I 3 (2,2,0,0)

This course covers color in the digital world, from capture to print; from psychology to calibration. Students will learn to use color and produce accurate exhibition quality prints. Prerequisite: PHO 175.

PHO 202B Introduction to Forensic Photography 4 (2,4,0,0)

Introduction into practical control of crime scenes and their documentation photographically as evidence. Emphasis on the admissibility of photography into the chain of evidence. Prerequisite: PHO 170.

PHO 206 Nature Photography 4 (2,4,0,0)

The study of nature photography with an emphasis on biological and geological studies and specimens. All film formats are applied to field photography studies. Field trips are scheduled with participation required. Prerequisite: PHO 170.

PHO 207B Landscape Photography 3 (2,2,0,0)

Learn to work in the style of the master landscape photographers. Heavy emphasis on Zone system work. There will be several weekend field trips into the southwest region where students will have the opportunity to create fine art quality prints for exhibition. Prerequisite: PHO 170.

PHO 208B Introduction to Large Format Photography 3 (2,2,0,0)

Introduction to the large format camera and how it is used in a commercial environment with an emphasis on in-camera focus and perspective corrections. Students will be provided with large format view cameras to use in the studio and on location. Prerequisite: PHO 195.

PHO 209B Large Format Photography II 3 (2,2,0,0)

Advanced techniques in the use of view cameras. Includes both field and studio applications and extends the introductory course to new creative directions. Prerequisites: PHO 195, 208B.

PHO 210B Architectural Photography 3 (2,2,0,0)

Learn the art of creating exciting images of both exteriors and interiors. Prerequisite: PHO 195.

PHO 211B Editorial Photography 3 (2,2,0,0)

Students will be introduced to editorial photography with an emphasis on illustrating story ideas. Interpretation of assignments and location portrait lighting will be covered. Students will be given a variety of assignments taken from actual editorial photographers. Prerequisite: PHO 175.

PHO 212B Food Photography and Styling I 4 (2,4,0,0)

This course is designed to introduce students to the fundamentals of prepping and photographing food for various layouts. Prerequisite: PHO 195.

PHO 214 Videography and Film I 3 (2,2,0,0)

Basic filmmaking techniques using portable video or 16mm film equipment. Stresses effective video/film camera usage, production planning, storyboarding, lighting, directing and editing with commercial photography applications.

PHO 215 Rock Video Production 3 (2,2,0,0)

“Guerilla” rock video production for the low budget videographer. Planning stories and concepts, shooting band coverage and the story video will be covered. Prerequisite: PHO 214.

PHO 216 Videography and Film II 3 (2,2,0,0)

Intermediate filmmaking techniques using portable video camera and editing equipment. Stresses intermediate storyboarding, production planning, lighting, directing, editing, scriptwriting, camera moves and sequence shooting techniques. Prerequisite: PHO 214.

PHO 217B Wedding Videography 2 (1,2,0,0)

Basic video techniques, use of portable equipment, and in-camera editing techniques for wedding videography. Stresses camera usage, production planning, storyboarding, lighting, directing and editing with commercial photography/wedding applications. Prerequisite: PHO 214.

PHO 218B Film Screenwriting I 3 (3,0,0,0)

Process of organizing film/video screenplay materials and to create story concepts, screenplay outlines, storyboards and final shooting scripts.

PHO 219B Film Screenwriting II 3 (2,2,0,0)

Advanced techniques for finishing the professional screenplay with emphasis on revising plot structure, character development, rewriting scenes, sharpening and polishing dialogue. Prerequisite: PHO 218B or instructor permission.

PHO 220B Video Digital Editing 3 (2,2,0,0)

Digital editing and manipulation of video/film media for output to film, video, multimedia and digital media. Prerequisite: PHO 214.

PHO 221B Advanced Digital Editing 3 (2,2,0,0)

Advanced non-linear editing featuring Final Cut Pro software. Emphasizes intermediate technical aspects of Final Cut Pro such as basic editing, titling, compositing, applying digital effects and mixing with pro-level equipment. Previous digital editing experience recommended. Prerequisites: PHO 214 plus either PHO 216, 223B, or 220B or instructor permission required. Knowledge of Final Cut Pro necessary.

PHO 222B Photographic Presentations 3 (2,2,0,0)

Introduction to commercial presentation of photographic art. Emphasis is placed on current trends and classical framing, matting and placement of photographic art for salability.

PHO 223B Documentary Film Production I 3 (2,2,0,0)

Principles of documentary filmmaking. The study of classic documentary films and the production of a short documentary film/video focusing on local themes. Prerequisite: PHO 214.

PHO 224B Final Cut Pro Bootcamp 1 (2,2,0,0)

For the raw beginner in Final Cut Pro. This Tutorial boot-camp covers the rudimentary essentials of accessing and utilizing this non-linear editing program. This course is highly recommended for students taking PHO 216 or Beginning Editing. Students should have some familiarity with making films.

PHO 225 Photographic Commercial/Illustration I 4 (2,4,0,0)

Students will assume the role of a commercial photographer and complete weekly assignments from wide variety of subjects. Topics covered will include subject setup and lighting for food, automotive and architectural interior photography among others. Prerequisite: PHO 195.

PHO 226B Documentary Film Production II 3 (2,2,0,0)

Intermediate principles of documentary film making with emphasis on producing and shooting in the Electronic News Gathering (ENG) style. Prerequisite: PHO 220B or instructor permission.

PHO 227B DVD Studio Bootcamp 1 (1,2,0,0)

This is a hands-on post production course that teaches the technical and aesthetic skills required to design and author DVDs. Students will edit digital video; encode audio and video; propose and script a DVD project; create graphics, menus and buttons; design and test navigation and author/produce DVDs. Prerequisites: PHO 220B, 224B.

PHO 228B Motion Bootcamp 1 (2,2,0,0)

This 5 session bootcamp covers the introductory essentials of accessing and utilizing Motion (part of Apple's Final Cut Studio package of programs). Not for the beginner, student must be skilled in Final Cut Pro. Prerequisite: PHO 220B.

PHO 229B Hollywood Glamour 3 (2,2,0,0)

Learn to photograph models in the Hollywood Glamour style of George Hurrell. Students will use "hot lights" followed by retouching in Photoshop to achieve the desired results. Prerequisite: PHO 195.

PHO 234B High Fashion Photography 3 (2,2,0,0)

This course is designed as an introductory course of the fundamentals of fashion photography for editorial and advertising purposes. It will encompass black and white and color negative, and transparency films. Studio and location lighting emphasized. Prerequisite: PHO 195.

PHO 235 Photographic Portraiture I 4 (2,4,0,0)

Theory, skills, and practice of posing, lighting, exposing film, and printing in the photography of people. Formal, informal and environmental portraits are stressed. Prerequisite: PHO 195.

PHO 237B Fashionable Portraiture 3 (2,2,0,0)

This course expands on the knowledge of portraiture by creating new ways of seeing and photographing people. Current trends and styles of portrait photography will be covered. Prerequisites: PHO 234B, 235.

PHO 240B Digital Photographic Imaging 3 (2,2,0,0)

This course will introduce students to the basic Adobe Photoshop techniques such as layers, layer masks, color correction and retouching directed specifically to how it applies to photography will be explored. We will scan film and prints as well as using digital camera images. This course can be taken in the same semester as PHO 170. The student must be familiar with computer navigation, saving files and burning to a CD or disk.

PHO 244B Lighting for Video and Film 3 (2,2,0,0)

Introduction to control and modification of natural light and studio applications of tungsten and quartz lighting equipment, as it applies to film and video. Lighting terminology, tools of the trade and lighting techniques for specific needs, like people, rooms, action and products will be taught. Prerequisite: PHO 214.

PHO 245B Video Lighting and Grip 3 (2,2,0,0)

An introduction to basic lighting and grip language and technical skills for the videographer. Prerequisite: PHO 214.

PHO 250B Digital Photographic Imaging II 3 (2,2,0,0)

In this course, students will get to know their camera by extensive testing of its capabilities. Current trends in Digital Photography will be explored as well as techniques, workflows and equipment. Mastering output to labs as well as printing to specialty papers on the inkjet printers in the classroom. Prerequisite: PHO 240B or GRC 183B or instructor permission.

PHO 251B Digital Photographic Imaging III 3 (2,2,0,0)

In this course students will explore the newest trends and techniques in the fields of commercial and fine art photography, including advanced selection techniques and master printing philosophies. You will be exploring content, sequencing and presentation of your digital work. Prerequisite: PHO 250B or instructor permission.

PHO 254B Big Digital 3 (2,2,0,0)

This course will use medium format digital backs, Pro DSLR's and professional scanners to produce large digital files. Using these files, we will print to professional wide format printers. Prerequisite: PHO 250B or instructor permission.

PHO 257B Cinematography II 3 (2,2,0,0)

In this course, students take an advanced investigation into the visual language and technical aspects of motion picture film and digital filmmaking. This course places additional emphasis on lighting, including greenscreen and translites. Also, techniques for assuring the highest possible quality image and sound. Prerequisite: PHO 157B.

PHO 260B Photographic Business Practices 3 (3,0,0,0)

Fundamental photographic business organization, funding and management, to include equipment, personnel, and advertising needs.

PHO 262B Photographic Makeup 3 (2,2,0,0)

This course provides instruction in basic elements of makeup for portraiture, glamour, fashion, wedding, and commercial photography using time tested methods and techniques in a creative hands-on environment. Prerequisite: PHO 170.

PHO 265B Photographic Equipment and Set Construction 3 (2,2,0,0)

Construction of basic photographic studio backgrounds, diffusion systems, props and equipment support systems. Simplified photographic set construction.

PHO 272B History of Photography 3 (3,0,0,0)

Development of photography as an aesthetic medium from its invention to the present time in America and Europe.

PHO 278 Art and Photography in 20th Century Mexico 3 (3,0,0,0)

This course examines the contributions made by Mexican artists and photographers to 20th century visual culture. The focus is on the "Mexican Renaissance" of the 1920s and 1930s: in particular, the revival of the fresco tradition and the effect it had on artistic production. Other topics include: the print tradition, easel painting, and the development of Mexican photography. (Same as ART 278.)

PHO 285 Photographic Internship 3 (0,0,0,30)

Student placement at a commercial photography job location. On-the-job experience performing work projects reflecting industry employee assignments. Academic credit earned, with or without wages. Enrollment by instructor permission only.

PHO 288 Portfolio 3 (2,2,0,0)

The production of a professional portfolio. The selection and execution of various photographic and/or art pieces stressed. Portfolio presentation materials, methods, résumés, and application formats studied.

PHO 290B Video Portfolio 3 (0,0,0,3)

Development and manufacture of a useful video portfolio. Admission by permission of instructor. For Videography and Film majors only. Enrollment by instructor permission only.

Physics**PHYS 110 Conceptual Physics 4 (4,0,0,0)**

Introduction to fundamental concepts and principles of physics. Intended primarily for non-science majors. Integration of lecture and lab designed to satisfy the lab science general education requirement.

PHYS 151 General Physics I 4 (3,3,0,0)

General physics primarily for students in Arts and Science, medicine and agriculture. Includes study of mechanics, sound, and heat. A knowledge of right angle trigonometry is desired. Prerequisite: MATH 128 (or equivalent combination of MATH 126 and 127).

PHYS 152 General Physics II 4 (3,3,0,0)

Continuation of Physics 151. Covers optics, electromagnetism and some aspects of modern physics. Prerequisite: PHYS 151.

PHYS 180 Physics for Scientists and Engineers I 3 (3,0,0,0)

Lecture in Newtonian mechanics. Covers rectilinear motion, particle dynamics, work and energy, momentum and collision, rotational mechanics, oscillations, wave motion, and gravitation. Note: Students should have successfully completed MATH 181 before taking this course. Corequisite: PHYS 180L.

PHYS 180L Physics for Scientists and Engineers Lab I 1 (0,3,0,0)

Laboratory exercises in Newtonian mechanics. Covers rectilinear motion, particle dynamics, work and energy, momentum and collision, rotational mechanics, oscillations, wave motion, and gravitation. Note: Students should also be enrolled in PHYS 180 while taking this lab course. Prerequisite: MATH 181.

PHYS 181 Physics for Scientists and Engineers II 3 (3,0,0,0)

Lecture in electromagnetism, Coulomb's law, electric and magnetic fields, Gauss' law, potential, capacitance, current and resistance, electromotive force, inductance, motion of charged particles, introduction to Maxwell's equations and electromagnetic waves. Corequisite: PHYS 181L.

PHYS 181L Physics for Scientists and Engineers Lab II 1 (0,3,0,0)

Laboratory exercises in electromagnetism. Covers Coulomb's law, electric and magnetic fields, Gauss' law, potential, capacitance, current and resistance, electromotive force, inductance, motion of charged particles, introduction to Maxwell's equations and electromagnetic waves. Prerequisites: PHYS 180, MATH 182.

PHYS 182 Physics for Scientists and Engineers III 3 (3,0,0,0)

Lecture in fluid mechanics, thermodynamics and optics. Covers sound, temperature and thermometry, heat, gases, intermolecular forces, kinetic theory, entropy, nature of light, geometrical optics, physical optics including diffraction and interference, introduction of modern developments. Corequisite: PHYS 182L.

PHYS 182L Physics for Scientists and Engineers Lab III 1 (0,3,0,0)

Laboratory exercises in fluid mechanics, thermodynamics and optics. Covers sound, temperature and thermometry, heat, gases, intermolecular forces, kinetic theory, entropy, nature of light, geometrical optics, physical optics including diffraction and interference, introduction of modern developments. Prerequisites: PHYS 180, MATH 182.

Practical Nursing

PN 100L Practical Nursing Learning Lab 1 (0,3,0,0)

A lab to promote student nurse success by applying study skills, time management, critical thinking, and organizational skills to current course load in a collaborative and caring environment. Prerequisite: Admission to the PN program.

PN 101B Introduction to Practical Nursing 2 (2,0,0,0)

Explore health care delivery systems, nursing history, current trends in nursing, role of the Licensed Practical Nurse, the nursing process, legal and ethical responsibilities and communication. Prerequisite: Admission to PN program.

PN 103B Gerontological Health Care 2 (2,0,0,0)

Designed to discuss the holistic aspects of aging and the increasing health needs of the older adult.

PN 104B Practical Nursing Fundamentals 5 (2.5,3,4.5,0)

Applies basic nursing skills, nursing process, basic communication, mental health concepts, medication administration skills, calculation skills and legal and ethical responsibilities of the practical nurse in the care of the client with stable health care needs. Develops intravenous therapy skills. Clinical experience in long-term or sub-acute care setting. Prerequisite: PN 101B.

PN 105B Practical Nursing I 5 (2.5,3,4.5,0)

Continued application of nursing process, mental health concepts, medication administration skills, calculation skills, intravenous therapy skills and legal-ethical issues. Study of health disorders presented by body system sequence. Clinical practice in long-term or sub-acute care setting. Prerequisite: PN 104B.

PN 106B Family Nursing 3 (2.5,0,1.5,0)

Emphasizes normal growth and development and prevention, promotion, and maintenance of health while providing family health care. Focus on child bearing, the neonate, infant and children through the growth years. Prerequisite: PN 105B.

PN 108B Practical Nursing II 4 (2,0,6,0)

A continuation of PN 105B, this course applies the nursing process when providing nursing care to adult clients with stable health care needs in the acute care setting.

PN 110B Practical Nursing Seminar/Management Concepts 4 (2,0,6,0)

The seminar emphasizes career opportunities and responsibilities as well as NCLEX-PN preparation. The clinical component includes a preceptorship.

PN 125B Pharmacology for Practical Nursing Practice 3 (3,0,0,0)

Integrates basic pharmacology with nursing practice. Covers drug actions, side effects, interactions, pharmacokinetics, and dosage calculations. Prerequisite: Completion of PN 101B.

PN 240B LPN Refresher 5 (2,1.5,7.5,0)

Assists inactive practical nurses to update their knowledge and skills in order to renew their license. Includes precepted clinical practice in either an acute care, sub-acute care or long term care setting.

Portuguese

PORT 101B Basics of Portuguese I 3 (3,0,0,0)

A course emphasizing spoken communication. Speaking, oral listening, reading and writing skills explored. A vocabulary of Portuguese-English words developed.

PORT 111 First Year Portuguese I 4 (4,0,0,0)

The development of language skills in listening, speaking, reading and writing. Emphasis is placed on communication in all four language skills.

PORT 112 First Year Portuguese II 4 (4,0,0,0)

A course emphasizing the further development of Portuguese language skills in listening, speaking, reading and writing. Emphasis is placed on more sophisticated communication in all four language acquisition skills. Portuguese speaking culture(s) are also emphasized. Prerequisite: PORT 111.

PORT 211 Second Year Portuguese I 3 (3,0,0,0)

A continuation of Portuguese 111 and 112. This course emphasizes the development of Portuguese language skills in listening, speaking, reading, writing and Portuguese-speaking cultures. Prerequisite: PORT 112.

PORT 212 Second Year Portuguese II 3 (3,0,0,0)

A continuation of Portuguese 111, 112, and 211. This course emphasizes the continuing development of Portuguese language skills in listening, speaking, reading, writing and Portuguese-speaking cultures. Prerequisite: PORT 211.

Political Science

PSC 101 Introduction to American Politics 4 (4,0,0,0)

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.) Prerequisite: ENG 101.

PSC 200 Survey of Political Theory 3 (3,0,0,0)

Survey of political theory from Plato to the present. Among the thinkers whose works will be explored are Aristotle, St. Thomas Aquinas, Machiavelli, Hobbes, Locke, Rousseau and Marx.

PSC 201 Politics of Minority Groups 3 (3,0,0,0)

An analysis of the effects of religious, cultural, racial and sexual identification on the American process.

PSC 205 Latino Politics and Society 3 (3,0,0,0)

This course will focus on the social, economic, and political evolution of the Latino community in the United States.

PSC 208 Survey of State and Local Government 3 (3,0,0,0)

Organization, working principles, functional processes of state and local governments in the United States. (Satisfies the legislative requirement of the Nevada Constitution.)

PSC 210 American Public Policy 3 (3,0,0,0)

Analysis of the interplay of forces involved in policy-making at all levels of American government. Assessment of the impact of policy on individuals and institutions. Prerequisite: PSC 101.

PSC 211 Introduction to Comparative Politics 3 (3,0,0,0)

Analysis of similarities and differences in the governing processes of developed and developing societies. Prerequisite: PSC 101.

PSC 222 Terrorism and Political Violence 4 (4,0,0,0)

This interdisciplinary course focuses on the motivation for terrorism and political violence. It addresses the question, "What makes an otherwise ordinary person deliberately attack unarmed civilians who have personally done the perpetrator no wrong and is in no position to redress the perpetrator's grievances?" The course approaches the issue from four different academic perspectives: history, psychology, sociology, and political science. (Same as HIST 222, PSY 222, or SOC 222.)

PSC 231 Introduction to International Relations 3 (3,0,0,0)

An introduction to and explanation of modern and contemporary international relations, foreign policies and economic and social conditions in an interrelated world.

PSC 246 Politics of Developing Nations 3 (3,0,0,0)

A survey of the politics, ideologies, political structures, processes, and important issues and problems in developing nations, with specific examples drawn from selected countries and regions. Students will consider the arguable meanings of "development" and "globalization".

PSC 247 Organized Crime and Political Corruption 3 (3,0,0,0)

Students will review relationships among organized crime groupings and local, state, and national governments with particular attention to 21st century America and other selected nations.

PSC 251 Introduction to Campaign Management 3 (3,0,0,0)

Students will be exposed to a broad spectrum of subjects related to the management of political campaigns, with the intent of understanding various factors that must be considered and integrated into almost every political campaign.

PSC 253 Online Campaign Strategies 3 (3,0,0,0)

Introduction to internet-based campaign strategies with a focus on developing and managing a web based campaign for election or other advocacy oriented activities.

PSC 257 Political Parties and Interest Groups 3 (3,0,0,0)

This course examines the history, purpose, organization, and strategies of the major and minor American political parties, and also examines the purpose of interest groups and their impact on the policy-making process.

PSC 259 Lobbying and Issue Advocacy 3 (3,0,0,0)

An examination of the profession and tactics of lobbying and issue advocacy including the processes, laws, and traditions surrounding the industry.

PSC 261 Introduction to Survey Research and Demographics 3 (3,0,0,0)

An introduction to development, deployment, and interpretation of survey research and other statistical and analytical tools and methodologies in the current political environment.

PSC 295 Topical Issues in Political Science 1-3 (1-3,0,0,0)

Exploration of an issue of current interest. Topics may include: the formulation and implementation of National Security Policy, international organization and law, structure and function of U.S. intelligence agencies, or revolution and reaction in Latin America. May be repeated with the permission of the Department chair up to a total of six credits.

PSC 297 Capstone in Political Science 2 (2,0,0,0)

This course provides a capstone experience in the field of political science, and provides preparation for both academic and non-academic careers in political science. Prerequisite: Department approval.

PSC 299 Government Internship 3 (0,0,0,9)

Students receive practical experience in both the public and private sector through political internship opportunities, including campaigns and/or governmental agencies.

Psychology

PSY 101 General Psychology 3 (3,0,0,0)

A study of the principles of human behavior, including discussions of motivation, perception, learning and personality development.

PSY 101H General Psychology - Honors 3 (3,0,0,0)

An in-depth study of the principles of human behavior including discussions of motivation, perception, learning and personality development. Emphasis on interactive learning entailing an examination of the self and one's environment through the use of reflective reasoning and dialogue. Courses with "H" suffixes are designated Honors level courses and can be used to fulfill equivalent general education requirements. Prerequisite: Admission to the Honors program.

PSY 102 Psychology of Personal and Social Adjustment 3 (3,0,0,0)

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 200 Introduction to the Psychology Major 1 (1,0,0,0)

An introduction to psychology as a college major, including an overview of topics in psychology, careers in psychology, and preparation for additional study in psychology or closely-related disciplines.

PSY 203 Advanced General Psychology I 3 (3,0,0,0)

Intensive survey of major areas of psychology. Prerequisite: PSY 101.

PSY 206 Business/Industrial Psychology 3 (3,0,0,0)

Introduces material on organizational behavior and personnel psychology including the areas of hiring, evaluation/appraisal of employees and termination.

PSY 207 Psychology and the Family 3 (3,0,0,0)

An investigation of psychological principles as these relate to the solution of family problems, survey of community resources available to the family in need.

PSY 208 Psychology of Human Relations 3 (3,0,0,0)

Explores the relationships between human beings and assists in the development of interpersonal communication skills which can be used personally and professionally.

PSY 210 Introduction to Statistical Methods 4 (4,0,0,0)

Practice with statistical methods especially useful in the presentation and interpretation of psychological, sociological and educational data, including elementary computer applications. Prerequisites: PSY 101 or SOC 101, a grade of "C" or better in MATH 096.

PSY 222 Terrorism and Political Violence 4 (4,0,0,0)

This interdisciplinary course focuses on the motivation for terrorism and political violence. It addresses the question, "What makes an otherwise ordinary person deliberately attack unarmed civilians who have personally done the perpetrator no wrong and is in no position to redress the perpetrator's grievances?" The course approaches the issue from four different academic perspectives: history, psychology, sociology, and political science. (Same as PSC 222, HIST 222, or SOC 222.)

PSY 224 Introduction to Latino Psychology 3 (3,0,0,0)

Multicultural view of the various psycho-social challenges facing the immigrant and native-born Latino population in adjusting to life in the United States.

PSY 228 Psychology of Dreams 3 (3,0,0,0)

An introduction to the study of dreams through psychological theory, etiology and interpretation

PSY 233 Child Psychology 3 (3,0,0,0)

A study of the growth and development of the child with special consideration given to theories of learning and personality formation. Prerequisite: PSY 101.

PSY 234 Psychology of Adolescence 3 (3,0,0,0)

A study of the psychological development during adolescence with emphasis on the special problems encountered in our society.

PSY 240 Social Science Research Methods 3 (3,0,0,0)

Critical examination of research methods in social science, including experimental and quasi-experimental designs, correlational methods, clinical research techniques, natural observation, survey methods, and the phenomenological approach. Prerequisite: PSY 101 or SOC 101. (Same as SOC 240.)

PSY 241 Introduction to Abnormal Psychology 3 (3,0,0,0)

An overview of abnormal psychology with emphasis on symptomology, etiology, diagnosis, treatment and prevention.

PSY 261 Introduction to Social Psychology 3 (3,0,0,0)

Discussion of socialization process and change in attitudes and behavior.

PSY 270 Understanding Psychology Through Film 3 (3,0,0,0)

Analysis of different psychological concepts and how they are expressed in popular film media. Specifically, the course will cover families, psychological disorders, counseling approaches, parenting, human development across the life span and alcohol/drug abuse, in the format of film appreciation.

PSY 276 Aging in Modern American Society 3 (3,0,0,0)

Focus on the psychological and sociological development and the changes attendant to the process of aging in society, including theory and research in the field, implications for social policy, and perspectives on death and dying. (Same as SOC 276.)

PSY 298 Capstone Course 1 (0,0,0,3)

This course is designed to integrate theoretical and practical coursework covered in the AA Degree in Psychology. It would also provide preparation for continued academic work in psychology. This is to be the final course in fulfilling the requirements for the degree in psychology. Prerequisite: Department approval.

Physical Therapy**PT 100 Introduction to Physical Therapy 3 (3,0,0,0)**

Introduction to the practice and profession of physical therapy including history, philosophy, role and scope, licensure and ethics. Other topics include documentation, medical terminology and information about other allied health careers.

PT 101B Pilates for Fitness - Level I 2 (1,3,0,0)

Course covers the foundation principles, theory of and instruction in Pilates method exercises using Pilates equipment. This class is designed for all fitness levels. Open enrollment.

PT 102B Pilates for Fitness - Level II 2 (1,3,0,0)

Course provides more in-depth instruction in theory and practice of Pilates method exercises. Emphasis will be on advanced exercises and a full body workout using Pilates equipment. Prerequisite: PT 101B or instructor permission.

PT 104B Dissection Techniques 1-3 (0,2-6,0,0)

Students are introduced to the techniques used in the dissection of tissues for use as prosection materials in physical therapist assistant courses. Enrollment by instructor permission.

PT 105 Musculoskeletal Anatomy Review 1 (0,3,0,0)

Students review selected topics in human anatomy including the musculoskeletal, neurological, cardiovascular and respiratory systems. Restricted to admitted PTA program students.

PT 110 Principles of Kinesiology 2 (2,0,0,0)

Students are introduced to basic kinesiological principles of normal movement and their importance in understanding and implementing treatment programs. Restricted to admitted PTA program students.

PT 111 Problems in Kinesiology 2 (0,6,0,0)

Students develop competencies in identifying anatomical landmarks and symmetry, muscle length relationships and contraction types, joint mechanics and function, neurological control and effects and gait cycle. Restricted to admitted PTA program students.

PT 117 Fundamental Principles for the Physical Therapist Assistant 2 (2,0,0,0)

This course reviews the fundamental principles required for appropriate patient treatment and care. Topics include gait training, mobility and transfer training, wheelchair adjustment, architectural barriers, documentation and patient education. Restricted to admitted PTA program students.

PT 118 Fundamental Procedures for the Physical Therapist Assistant 2 (0,6,0,0)

Students develop competence in fundamental skills including ADL's, transfers, mobility, gait training, architectural barriers, documentation and patient education. Patient age is considered. Restricted to admitted PTA program students.

PT 120 Observation and Measurement Principles for the Physical Therapist Assistant 2 (2,0,0,0)

Introduction to the principles for monitoring patient progress and safety and making recommendations for treatment modifications. Prerequisites: PT 105, 110, 111, 117, 118.

PT 121 Observation and Measurement Procedures 2 (0,6,0,0)

Students develop competencies in observation and measurement techniques including goniometry, manual muscle testing, volumetric measurements, righting and equilibrium reactions and posture, gait and sensory assessments. Prerequisites: PT 105, 110, 111, 117, 118.

PT 122 Psychological-Social Considerations in Patient Care 3 (3,0,0,0)

Introduction to considerations which affect patient rehabilitation. Cultural diversity, work relationships, human relations, geriatric considerations, responses to illness, grieving, death and dying are discussed. Prerequisites: PT 105, 110, 111, 117, 118.

PT 125 Principles of Physical Agents 2 (2,0,0,0)

Introduction to the theory underlying the effects of appropriate application of therapeutic physical agents. Prerequisites: PT 105, 110, 111, 117, 118.

PT 126 Physical Agent Procedures and Practices 2 (0,6,0,0)

Students develop competence in the correct application of therapeutic heat and cold, electrotherapy, intermittent compression, massage, short wave diathermy, traction and ultrasound. Prerequisites: PT 105, 110, 111, 117, 118.

PT 130 Administration in Physical Therapy 2 (2,0,0,0)

Introduction of students to administrative topics important for successful management including levels of authority, management techniques, personality profiles, performance evaluations, fiscal considerations and quality assurance. Prerequisites: PT 105, 110, 111, 117, 118.

PT 134 Clinical Affiliation I 2 (0,0,16,0)

A six-week, full-time clinical affiliation which provides students with an opportunity to practice skills and competencies acquired during their first two semesters of course work. The emphasis of this affiliation is providing direct, hands-on patient care, under the supervision of a physical therapist, using learned fundamental skills. Grades assigned on Pass/Fail basis. Prerequisites: PT 105, 110, 111, 117, 118.

PT 225 Therapeutic Principles for Musculoskeletal Pathologies 3 (3,0,0,0)

Introduction to basic therapeutic principles underlying the treatment of patients with musculoskeletal pathologies. General exercise programs along with specific treatment protocols, and their indications and contraindications will be presented. Prerequisites: PT 120, 121, 122, 125, 126, 130, 134.

PT 226 Therapeutic Procedures for Musculoskeletal Pathologies 2 (0,6,0,0)

Students are introduced to and develop competence in the application of therapeutic exercise and other procedures used when treating musculoskeletal pathologies. Prerequisites: PT 120, 121, 122, 125, 126, 130, 134.

PT 238 Pathophysiology I 3 (3,0,0,0)

Review of the inflammatory and healing processes of tissue trauma or disease and the disease process associated with specific musculoskeletal pathologies. Prerequisites: PT 120, 121, 122, 125, 126, 130, 134.

PT 240 Orthotic and Prosthetic Considerations in Patient Care 1 (1,0,0,0)

Students are introduced to the various types of orthotic and prosthetic devices and their use in patient care. Prerequisites: PT 120, 121, 122, 125, 126, 130, 134.

PT 244 Clinical Affiliation II 2 (0,0,16,0)

This six-week, full-time (40 hours/week) clinical affiliation is designed to expand the student's knowledge and competencies in treating musculoskeletal pathologies. The emphasis of this affiliation is providing direct, hands-on patient care, under the supervision of a physical therapist, mastering orthopedic skills and competencies learned in the last semester as well as further development of fundamental competencies acquired in previous semesters. Grades assigned on a Pass/Fail basis. Prerequisites: PT 120, 121, 122, 125, 126, 130, 134.

PT 248 Pathophysiology II 3 (3,0,0,0)

Introduction of students to specific neuromuscular pathologies most commonly treated in the physical therapy clinic. Prerequisites: PT 225, 226, 238, 240, 244, 250, 251.

PT 250 Therapeutic Principles for Cardiopulmonary Pathologies 2 (2,0,0,0)

Introduction to the therapeutic principles underlying the treatment of patients with cardiopulmonary pathologies. Prerequisites: PT 120, 121, 122, 125, 126, 130, 134.

PT 251 Therapeutic Procedures for Cardiopulmonary Pathologies 1 (0,2,0,0)

Students develop competencies in the application of specific treatment protocols used with cardiopulmonary pathologies. Prerequisites: PT 120, 121, 122, 125, 126, 130, 134.

PT 254 Therapeutic Principles for Neuromuscular Pathologies 3 (3,0,0,0)

Introduction to the therapeutic principles used in the treatment of patients with neuromuscular pathologies. Prerequisites: PT 225, 226, 238, 240, 244, 250, 251.

PT 255 Therapeutic Procedures for Neuromuscular Pathologies 2 (0,6,0,0)

Students are introduced to and develop competencies in the application of specific treatment procedures used with neurologically involved children and adults. Prerequisites: PT 225, 226, 238, 240, 244, 250, 251.

PT 256 Clinical Affiliation III 2 (0,0,16,0)

This six-week, full-time (40 hours/week) clinical affiliation is designed to expand the student's knowledge and competencies in treating neuromuscular pathologies. The emphasis of this affiliation is providing direct, hands-on patient care, under the supervision of a physical therapist, mastering neuromuscular skills and competencies learned in the last semester as well as further development of orthopedic and fundamental competencies acquired in previous semesters. Grades assigned on Pass/Fail basis. Prerequisites: PT 225, 226, 238, 240, 244, 250, 251.

PT 298B Special Topics in Physical Therapy 1 (1,0,0,0)

Students will be introduced to selected topics in rehabilitation medicine that are not covered in the core physical therapist assistant program curriculum.

Radiation Therapy Technology

RDTP 101B Introduction to Radiation Therapy 2 (1,3,0,0)

This course deals with the principles and application of C.T., MRI, ultrasound, PET, bone mineral densitometry, and interventional techniques. Clinical applications and protocols are discussed for each technology. Students will visit oncology wards, nutrition centers and Hospice during this rotation.

RDTP 102B Methodologies I 2 (2,0,0,0)

This course presents a broad theoretical framework for understanding the principles of radiation therapy equipment and lays the groundwork necessary for the practical aspects concerning the use of this equipment. An introduction to the principles and application of multi-leaf collimation and Intensity Modulated Radiation Therapy.

RDTP 103B Introduction to Oncology 1 (1,0,0,0)

An introduction to the clinical institution and the Radiation Therapy Department. Stresses the ethics of the patient/oncologist/therapist relationship, nursing procedures, safety precautions necessary for therapy patients, and the keeping of medical records.

RDTP 105B Principles and Practice of Radiation Therapy 2 (2,0,0,0)

This course addresses the concepts of cancer treatment, focusing primarily on radiation therapy. Methods of improving therapeutic advantages are investigated. Students learn safe and effective use of equipment and accessories along with the rationale for their clinical application. Technical information related to machine development, construction and use are discussed. Students learn about the historical development of radiation generators.

RDTP 115B Caring for the Patient at the End of Life 1 (1,0,0,0)

This course outlines the wide range of clinical experiences used to care for patients at the end of life. The course discusses practical guidance for clinicians, patients, and families about critical communication issues such as delivering bad news, discussing palliative care, making decisions for incapacitated patients, and exploring the wish to die.

RDTP 125B Radiographic Process 2 (2,0,0,0)

This course will provide the student with instruction on the principles of radiation exposure, the processing of films, and the positioning of patients for simulation.

RDTP 150B Introduction to Radiation Physics 2 (2,0,0,0)

Introduction to the fundamentals of physics involved in the operation of radiographic equipment to include units of measurement, matter, energy, mechanics, magnetism, electrostatics, and electrodynamics.

RDTP 180B Radiobiology 3 (3,0,0,0)

A study of the sequence of events following the absorption of energy from ionizing radiation. Factors influencing radiation effects, tissue sensitivity, tolerance, and clinical applications are presented.

RDTP 202B Radiotherapy Physics 3 (3,0,0,0)

This course provides a fundamental understanding of radiation physics relevant to radiation therapy. Topics to be included are particle and photon interactions with matter, units and systems of radiation measurements, radioactivity and radiation production.

RDTP 210B Treatment Planning I 3 (3,0,0,0)

This course introduces the student to the application of the radiation beam to the patient in the therapy environment. Topics include absorption characteristics of the radiation beam in air and in a phantom, beam data and characteristics and an introduction to treatment planning.

RDTP 211B Radiographic Analysis 2 (2,0,0,0)

This course is a presentation of radiographic anatomy as it pertains to the radiation therapist in general. Specific skeletal anatomy will be reviewed with emphasis placed on bony landmarks, terminology, organ reference, surface anatomy and reading and interpreting X-ray port and simulation films.

RDTP 212B Cross Sectional, Topographic and Radiological Anatomy 2 (2,0,0,0)

This course discusses anatomy specifically from an imaging perspective. Students will learn to identify structures and pathology on X-rays, CT and MRI scans and locate landmarks on diagnostic and simulator films.

RDTP 213B Radiation Oncology 3 (3,0,0,0)

This course provides the student with an understanding of the clinical signs, symptoms, epidemiology, routes of spread, pathology, staging system, and management approaches of the major tumor sites in the body. Topics covered include diagnostic and staging work-up, prognostic factors, decision-making skills for treatment options and treatment results.

RDTP 214B Methodologies II 2 (1,3,0,0)

This course deals with relational and cross-sectional anatomy of the head, thorax, abdomen, pelvis, and representative sections of the extremities. In the laboratory component, students will simulate radiation treatment fields of cross-sectional anatomy using C.T., MRI, SPECT, ultrasound, and PET images. This course is designed to move students from a two- to a three-dimensional view of internal and relational anatomy.

RDTP 215B Treatment Planning II 3 (3,0,0,0)

This course is a continuation of Treatment Planning I. Students will be responsible for accurate three-dimensional treatment plans for lung, brain, abdomen, pelvis and extremity cancers. Planning will include wedges, blocks, beam weighting, off axis, boost fields and special techniques.

RDTP 216B Methodologies III 2 (1,3,0,0)

An in-depth study of the rationale, principles, and the methods of quality assurance as they relate to radiation therapy.

RDTP 219B Advanced Radiation Therapy Techniques 2 (2,0,0,0)

Continuation of RDTP 214B to provide the student with the advanced concepts of dosimetry, treatment planning, and patient simulation. Various external beam techniques and applications, depth dose data, and summation of isodose curves will be applied to simulation procedures. Modalities of treatment, immobilization, patient set-up, dose measurement and verification are discussed and practiced.

RDTP 220B Treatment Planning Lab 1 (0,3,0,0)

Students will be responsible for accurate three-dimensional treatment plans for lung, brain, abdomen, pelvis, and extremity cancers. Planning will include wedges, blocks, beam weighting, off axis, boost fields and special techniques.

RDTP 221B Ethics/Law/Professionalism 2 (2,0,0,0)

Establish a basic foundation of professional practice for the radiation therapist as a part of the radiation therapy team. Ethical behavior for caregivers will be discussed. Legal ramifications, case studies, malpractice and ARRT ethics will also be discussed.

RDTP 229B Radiation Therapy Board Review 1 (1,0,0,0)

This course will prepare the student to take the National Registry Exam for Radiation Therapy. The course will go into detail on exam questions. Students will learn how to read and evaluate questions for best results. Students will take mock board exams.

RDTP 230B Clinical Applications I 1 (0,3,0,0)

Patient treatment competencies are discussed and practiced on a simulation machine. Students are introduced to isocenter, depth of treatment, patient localization marks, immobilization devices, patient alignment using lasers.

RDTP 231B Clinical Applications II 1 (0,3,0,0)

Continuation of Clinical Applications I. Students will be assigned four (4) intermediate treatment competencies to be completed under the direct supervision of CSN faculty.

RDTP 232B Clinical Practicum III 3 (0,0,21,0)

Continuation of Clinical Applications II where the student will take the competencies learned in the lab and apply them to actual patients in the clinic. The student responsibilities increase as more complicated competencies are introduced in patient treatments set-ups.

RDTP 233B Clinical Practicum IV 1 (0,3,0,0)

Advanced Clinical Practicum stressing practical application of dosimetry competencies under the direct supervision of a medical physicist or dosimetrist. Continuation of advanced patient treatment competencies under the supervision of a Registered Radiation Therapist.

RDTP 234B Clinical Practicum V 4 (0,0,17,0)

The most advanced clinical practicum as evidenced by the level of competency of the student upon completion of RDTP 233B. Successful completion of this course will ensure that the student is competent upon graduation to assume all of the responsibilities required of a Registered Radiation Therapy Technologist.

Real Estate

RE 101 Real Estate Principles 3 (3,0,0,0)

A course that covers most subjects required for successful passing of the state real estate exam. Satisfies requirements of the Nevada State Real Estate Commission Salesman’s exam.

RE 102B Real Estate Math 3 (3,0,0,0)

A general mathematics course designed to assist the student who wishes to pass the state exam as well as the student who wants to be more proficient and knowledgeable in the real estate profession.

RE 103 Real Estate Law and Practice 3 (3,0,0,0)

A law course specifically designed for the field of real estate including agency, contracts, deeds, instruments, easements, estates in land, zoning, restrictions, tenancy, liens, foreclosures, transfers of title, leases and court decisions. One of two courses required by the Nevada Real Estate Commission to take the Salesperson’s License exam.

RE 199 Real Estate Investments 3 (3,0,0,0)

Introduction to the mechanics of the real estate business, state, and federal regulations, management, financial statements, formulas, techniques, protection and investment guidelines for the consumer as they relate to the real estate business.

RE 201B Real Estate Brokerage 3 (3,0,0,0)

Study of the factors necessary for the establishment and efficient operation of brokerage offices. Ethics, listing, office location, physical layout, budgeting, records and procedures. One of several courses required by the Nevada Real Estate Commission to take the Broker’s exam.

RE 202 Real Estate Financing and Insurance 3 (3,0,0,0)

A study of the procedures and techniques requisite to the analysis of financial real property. The types of financing include conventional, Federal Housing Administration, Veterans’ Administration, credit evaluations, interest rates, loan costs and the availability of mortgage money and its competition in the money market. Types of insurance specifically applicable to the real estate industry covered.

RE 203B Tax Aspects of Real Property Transactions 3 (3,0,0,0)

Course covers basic tax law principles governing forms and methods of acquisition of real property. Emphasis is on planning techniques to structure real property transactions to minimize tax liability.

RE 205B Real Property Management 3 (3,0,0,0)

Designed to cover the fundamental principles involved in the management of real property. Topics to be covered include the role of an effective managing agent, accounting systems and financial controls, human relations in property management, leases, developing management checklist and developing effective service techniques.

RE 206 Real Estate Appraising 3 (3,0,0,0)

Course covers basic principles and economic trends, nature of appraisal process, neighborhood and site analysis, site evaluation, residential style and functional utility. Use of cost, income capitalization and market approaches to value and the correlation of the data to arrive at a value estimate. Recommended for those holding a real estate license.

RE 295B, 296B, 297B, 298B Work Experience I, II, III, IV 1-4 (0,0,0,1-4)

Cooperative Education courses designed to provide the student with on-the-job supervised and educationally directed work experience with the Real Estate Program. Each course except 295B will have a prerequisite of successful completion of preceding Work Experience course.

Reading Skills

READ 095 Reading and Improvement 3 (3,0,0,0)

This class will improve fundamental reading skills, including word-attack skills, vocabulary development, reading comprehension, fluency, and interpretation. Extensive opportunities for applying reading strategies for before, during, and after reading will be provided. Critical analysis skills in relationship to various texts will be introduced to guide students toward college level reading. Prerequisite: Placement Test.

READ 135 College Reading Strategies 3 (3,0,0,0)

Improvement of reading comprehension, critical thinking skills, vocabulary, reading rate, and study-reading techniques through reading and analyzing a variety of texts, including book-length works and textbook selections from various areas. Note: May be taken in lieu of the reading portion of the PPST exam by a license holder who has failed the PPST reading portion at least once, when a grade of “B” is obtained at the conclusion of the course. This option is not available to students in teacher education courses

Registered Nurse First Assisting

RNFA 280B Registered Nurse First Assistant 2 (2,0,0,0)

Enhance perioperative nurse's training and skills to pursue the position as a Registered Nurse First Assistant (RNFA). Advanced study covering multi-speciality first assisting. Safety issues, procedures, and RNFA scope of practice issues are covered. Restricted to National Institute of First Assisting students only.

RNFA 281B RNFA SutureStar™ Workshop and Clinical Internship 1 (0,0,8,0)

Intraoperative surgical skills workshop. Mastery of 148 surgical skills sets. Requires a 120-hour supervised clinical internship. Restricted to National Institute of First Assisting students only. Prerequisite: RNFA 280B.

RNFA 295B First Assisting Intraoperative Skills Workshop 3 (1,3,0,2)

Designed to enhance the perioperative nurse's training and skill to pursue the position as a Registered Nurse First Assistant (RNFA). Students will have six days of intensive hands-on training in the surgical skills needed to first assist in the operating room. The registered nurse learns the advanced techniques to assist during a surgical procedure in a controlled setting on a simulated patient, creating a life-like surgical experience.

RNFA 296B First Assisting Clinical Internship I 3 (0,0,4.5,6)

Specific surgical cases include transverse colon resection, total hip arthroplasty, inguinal hernia repair and tubal ligation. Diagnostic studies, intravenous equipment, and drip rates, central and peripheral catheters, central venous pressure, arterial lines, fluid replacement, anesthesia, tissue planes and wound healing will be reviewed. The clinical internship will be enhanced with guided home study, case study representations, record maintenance and journaling.

RNFA 297B First Assisting Clinical Internship II 3 (0,0,4.5,6)

A continuation of RNFA 296B is designed to assist in the enhancement of the perioperative nurse's training and skill to pursue the position as a Registered Nurse First Assistant (RNFA). Internship is enhanced with guided home study, presentation of case studies, maintenance of records and a journal. Prerequisites: RNFA 295B, 296B.

Religious Studies

RST 101 Introduction to Religious Studies 3 (3,0,0,0)

Varieties of religious expression: belief, ritual scripture, art. Religious issues: deity, the sacred, death, evil, salvation. Methods of studying religion.

RST 136 Introduction to Women and Religion 3 (3,0,0,0)

This course studies women as subjects of religion and provides an opportunity for students to examine religion in the context of the gender-specific experiences of women. The course includes the roles of women in a variety of religious groups as well as a study of the myths and symbols relating to women's roles in these religious groups.

RST 150 Abrahamic Religions: Judaism, Christianity, Islam 3 (3,0,0,0)

This course focuses on the major historical developments, structural cosmology, symbolic interpretation, and values of the Abrahamic religions: Judaism, Christianity, Islam.

RST 170 Introduction to Modern Western Paganism 3 (3,0,0,0)

This course introduces Modern Western Paganism. Included are history, sources, traditions, cosmology, practices, rituals, ritual calendars, and rites of passage.

RST 260 Meso American Religions: Jaguars, Serpents, Trees 3 (3,0,0,0)

Introduction to the religions of Meso America using cultural methods such as art and architecture coupled with written sources to explore their unique cosmology.

RST 270 Modern Western Pagan Thought 3 (3,0,0,0)

Exploration of beliefs, values, and ethics of the modern western Pagan community. Includes concepts of deity, nature, magic, ethics, existence, suffering, evil, death, and ecstasy.

RST 295 Topical Issues in Religious Studies 1-3 (1-3,0,0,0)

The topic will vary; however the intent is to develop awareness of and appreciation for certain religious or spiritual paths and/or issues. May be repeated up to six credits.

Russian

RUS 111 First Year Russian I 4 (4,0,0,0)

The development of language skills in listening, speaking, reading and writing; structural analysis. Emphasis is placed on speaking.

RUS 112 First Year Russian II 4 (4,0,0,0)

The development of language skills in listening, speaking, reading and writing; structural analysis. Emphasis is placed on speaking. Prerequisite: RUS 111 or equivalent.

RUS 211 Second Year Russian I 3 (3,0,0,0)

Further development of Russian speaking, listening, reading, writing skills and Russian cultural awareness. Prerequisite: RUS 112 or department approval.

RUS 212 Second Year Russian II 3 (3,0,0,0)

Further advancement of Russian speaking, listening, reading, writing skills and Russian cultural awareness.

Prerequisite: RUS 211 or department approval.

Sustainable Construction**SCT 101B Fundamentals of Sustainability 3 (3,0,0,0)**

A course designed to expose students to fundamental earth cycles, nutrient cycles, and environmental concepts of sustainability. Students will explore energy sources and conventional and alternative resources and how these concepts connect to construction and the built environment.

SCT 105B Sustainable Construction Materials 3 (3,0,0,0)

This course will cover building materials used for the interior and exterior environment of sustainable and non-sustainable construction, to include: mechanical, plumbing, electrical, framing (wood and metal) and insulation systems, insulated concrete forms (ICF), cast-in-place and tilt-up concrete, landscaping (irrigation and planting). Proper methods of installation will be discussed.

SCT 113B Renewable Energy Efficiency 3 (3,0,0,0)

This course will help students learn how the climate affects green building strategies and the differences altitude, longitude and latitude can make in design. Students will also learn when and where to use the correct type of energy generation (solar, wind, geothermal, etc.).

SCT 201B Sustainable Construction of New Buildings 3 (3,0,0,0)

This course will compare the differences between sustainable construction and the traditional method of construction, to include: strategies and economic, environmental and social demands during construction and after construction is completed. Prerequisites: SCT 101B and 105B.

SCT 202B Sustainable Construction of Existing Buildings 3 (3,0,0,0)

This course will cover retrofitting for energy efficiency and sustainable operations of existing buildings, to include both commercial and residential construction remodeling.

Prerequisite: SCT 201B.

SCT 210B Sustainable Technology 3 (2,3,0,0)

This course will assist students to comprehend the utilization of RESNET approved computer rating software program, which includes determining the energy performance of buildings. This course is oriented towards RESNET certification. Prerequisite: BTW 103B.

SCT 290B Legal Development of Sustainable Construction 3 (3,0,0,0)

This is a capstone course which will cover the legal aspects of sustainable construction, to include: the International Code Council (ICC), U S Green Building Council (USGBC), Green Building Rating Systems and more. Students will prepare for the Leadership in Energy and Environmental Design (LEED) exam. Prerequisite: Instructor permission.

Sociology**SOC 101 Principles of Sociology 3 (3,0,0,0)**

Sociological principles underlying the development, structure and function of culture, society, human groups, personality formation and social change.

SOC 101H Principles of Sociology - Honors 3 (3,0,0,0)

An honors-level study of sociological principles underlying the development, structure and function of culture, society, human groups, personality information and social change. Honors emphasizes interactive learning, entailing an examination of the self and one's social and cultural world through the use of reflective reasoning and dialogue. Courses with "H" suffixes are designated honors-level courses and can be used to fulfill equivalent general education requirements. Prerequisite: Admission to the Honors program.

SOC 102 Contemporary Social Issues 3 (3,0,0,0)

An examination of selected social issues and problems, their causes and proposed solutions.

SOC 205 Ethnic Groups in Contemporary Societies 3 (3,0,0,0)

A survey of ethnic relations in the United States and other societies where cultural and racial pluralism illustrates problems and processes of social interaction. Prerequisite: ANTH 101 or SOC 101. (Same as ANTH 205.)

SOC 207 Introduction to Sociological Theory 3 (3,0,0,0)

Examination of the works of classical and contemporary social theorists of the 19th and 20th centuries.

SOC 210 Introduction to Statistical Methods 4 (4,0,0,0)

Practice with statistical methods especially useful in the presentation and interpretation of psychological, sociological and educational data, including elementary computer applications. Prerequisites: PSY 101 or SOC 101, and a grade of "C" or better in MATH 096.

SOC 222 Terrorism and Political Violence 4 (4,0,0,0)

This interdisciplinary course focuses on the motivation for terrorism and political violence. It addresses the question, “What makes an otherwise ordinary person deliberately attack unarmed civilians who have personally done the perpetrator no wrong and is in no position to redress the perpetrator’s grievances?” The course approaches the issue from four different academic perspectives: history, psychology, sociology, and political science. (Same as PSC 222, HIST 222, or PSY 222.)

SOC 225 Media and Society 3 (3,0,0,0)

An investigation of the role of the Mass Media and its effects on contemporary society.

SOC 240 Social Science Research Methods 3 (3,0,0,0)

Critical examination of research methods in social science, including experimental and quasi-experimental designs, correlational methods, clinical research techniques, natural observation, survey methods, and the phenomenological approach. Prerequisite: PSY 101 or SOC 101. (Same as PSY 240.)

SOC 241 Introduction to Research Methods 3 (3,0,0,0)

This course provides a broad survey of research methods and the tools needed to critically assess sociological research.

SOC 261 Introduction to Social Psychology 3 (3,0,0,0)

Discussion of socialization process and change in attitudes and behaviors.

SOC 270 Introduction to Deviant Behavior 3 (3,0,0,0)

A survey of the contrasting sociological viewpoints in the field of deviant behavior as applied to a variety of socially stigmatized behaviors.

SOC 275 Introduction to Marriage and the Family 3 (3,0,0,0)

An analysis of the internal and external forces influencing today’s American family. Major topics include love, sex, marriage adjustment, divorce and problems of child rearing. (Same as WMST 275.)

SOC 276 Aging in Modern American Society 3 (3,0,0,0)

The psychological and sociological development and the changes attendant to the process of aging in society; theory and research in the field, implications for social policy and perspectives on death and dying. (Same as PSY 276.)

SOC 281 Computer Applications for the Social Sciences 4 (2,4,0,0)

This course equips students with computer skills needed to compete effectively for new employment opportunities in service organizations and evaluation research (i.e., applications, analysis, data management). Prerequisite: IS 101.

SOC 289 Applied Skills in Sociology 3 (2.5,0,0,4)

Students will develop discipline-specific employability skills including applied research methods, internship procurement and self-presentation. Theory and practice are blended by training in areas of professional interest.

SOC 291 Field Experience in Sociology 1 (0.5,0,0,4)

Program includes formal classroom instruction (substantive and applied components), computer-related tasks, and on-site job training, blending theory with practice. Communication and social interactive skills are developed and practiced. Course may be repeated one time for a total of two credits.

SOC 295 Sociology of the Future 3 (3,0,0,0)

A course designed to provide the student with a sociological perspective on the world in which we live and the emerging trends and issues. There will be an introduction to various models for forecasting future trends with an emphasis on the issues most important to the average person.

SOC 298 Selected Topics in Sociology 3 (3,0,0,0)

Variable content required to respond to specific topic areas in sociology, relationships between sociology and the community, special student interests and needs and faculty expertise.

SOC 299 Capstone Course in Sociology 1 (0,0,0,1)

This course provides a capstone experience in the field of sociology. It integrates coursework covered in the sociology AA degree program and provides preparation for both academic and non-academic careers in sociology. Prerequisite: Instructor permission.

Sonography

SON 101B Basic Sonography 3 (3,0,0,0)

Presents an introduction to sonography, with an emphasis on the role of the sonographer, basic anatomy, physiology, physics, and imaging parameters.

SON 101L Basic Sonography Laboratory 1 (0,3,0,0)

Focuses on the development of skills needed to begin clinical courses.

**SON 102B Basic Cardiac
Sonography 3 (3,0,0,0)**

Presents an introduction to cardiac sonography, with an emphasis on the role of the sonographer, basic anatomy, physiology, physics and imaging parameters. Corequisite: SON 102L.

**SON 102L Basic Cardiac
Sonography Laboratory 1 (0,3,0,0)**

Focuses on the development of skills needed to begin clinical courses.

SON 116B Echocardiography I 3 (3,0,0,0)

Focuses on valvular heart disease, ischemic cardiac disease, cardiomyopathy, pericardial disease, congenital heart disease, and cardiac neoplasms and masses.

**SON 125B Sonographic Physics
and Instrumentation I 3 (3,0,0,0)**

Focuses on basic sonographic principles, with an emphasis on instrumentation.

**SON 135B Cardiovascular
Ultrasound Physics 2 (2,0,0,0)**

This course presents students with advanced cardiovascular principles with an emphasis on cardiac anatomy, physiology, evaluation methods and hemodynamics. The information presented will serve as a resource for the ARDMS exam on cardiovascular principles and instrumentation.

**SON 150B Patient Care for
Imaging Professions 3 (2,3,0,0)**

Focuses on patient care procedures, patient transport and handling, infection control, surgical asepsis, interview and examination techniques, vital signs and emergency procedures and chart and referral evaluations.

**SON 160B Sonographic Scanning
Lab I 2 (0,8,0,0)**

Ultrasound procedures performed in supervised lab on campus.

**SON 190B Sonographic Physics
and Instrumentation II 3 (3,0,0,0)**

Continuation of Sonographic Physics I with emphasis on Doppler physics, including color Doppler, hemodynamics, bio effects, quality assurance/control and sonographic artifacts. Prerequisite: SON 125B.

**SON 195B Sonographic Scanning
Lab II 2 (0,8,0,0)**

Ultrasound procedures performed in a supervised lab on campus.

**SON 210B Abdominal
Sonography I 3 (3,0,0,0)**

Focuses on the anatomy, physiology and pathology of the abdominal organs that can be visualized with ultrasound.

SON 216B Echocardiography II 3 (3,0,0,0)

Continuation of SON 116B with emphasis on cardiac trauma, pulmonary vascular disease, diseases of the aorta and great vessels, transesophageal echocardiography, contrast echocardiography and intraoperative echocardiography.

**SON 220B Abdominal
Sonography II 3 (3,0,0,0)**

Focuses on the anatomy, physiology, and pathology of the urinary system, thyroid, breast, scrotum, prostate and neonatal neurosonography. Prerequisite: SON 210B.

**SON 225B Stress
Echocardiography 3 (3,0,0,0)**

Focuses on the indications, utility, limitations and technical procedures related to stress echocardiology including cardiovascular pharmacology, theory and use of provocative stress agents and non-pharmacologic stress.

**SON 235B Gynecologic
Sonography 3 (3,0,0,0)**

Focuses on the anatomy, physiology and pathology of the female pelvis and reproductive system and sonographic appearance.

**SON 245B Obstetrical
Sonography I 3 (3,0,0,0)**

Focuses on the anatomy, physiology and pathology of pregnancy with emphasis on first trimester pregnancy and complications of first trimester obstetrics. Normal sonographic obstetrical measurements and sonographic appearance of first, second and third trimester pregnancy will also be covered.

**SON 250B Seminar and
Case Review I 2 (2,0,0,0)**

Through the presentation of select cases by students, faculty and radiologists, the multi-facets of diagnostic medical sonography are reviewed and future trends discussed.

**SON 255B Seminar and
Case Review II 2 (2,0,0,0)**

Through the presentation of select cases by students, faculty, and radiologists, the multi-facets of diagnostic medical sonography are reviewed and future trends discussed.

**SON 260B Obstetrical
Sonography II 3 (3,0,0,0)**

Continuation of Obstetrical Sonography I with emphasis on abnormal second and third trimester pregnancy, fetal anomalies, multiple gestation, maternal disease, amniotic fluid, placenta and invasive procedures during pregnancy.

SON 261B Pediatric Echocardiography I 3 (3,0,0,0)

Focuses on fetal, neonatal and pediatric echocardiography including embryology and normal fetal and neonatal cardiac anatomy. Pediatric cardiac pathology, pathophysiology and hemodynamics in various disease processes will be discussed.

SON 262B Pediatric Echocardiography II 2 (2,0,0,0)

Continuation of Pediatric Echocardiography I with special emphasis on contrast agents, specialized pediatric patient care, pediatric transesophageal echocardiography and surgical procedures utilized for pediatric cardiac anomalies.

SON 270B Small Parts/Pediatric Sonography 2 (2,0,0,0)

Focuses on the anatomy, physiology and pathology of the thyroid, breast, scrotum, prostate, and neonatal brain. Pediatric spine, abdomen, kidneys, hips, and gastrointestinal system as imaged on ultrasound will be discussed.

SON 275B Vascular Sonography I 3 (3,0,0,0)

Focuses on duplex and color Doppler imaging of the extracranial cerebral and peripheral vessels of the vascular system as well as the physiology and sonographic appearance of normal anatomy and pathology. Corequisite: SON 275L.

SON 275L Vascular Sonography Laboratory I 1 (0,4,0,0)

Focuses on the use of “Direct Testing” methods in the performance of vascular ultrasound procedures in a supervised lab on campus.

SON 276B Vascular Sonography II 3 (3,0,0,0)

Continuation of SON 275B (Vascular Sonography I), with an emphasis on the use of “Indirect Testing” ultrasound evaluation of the vascular system in the upper and lower extremities; and transcranial Doppler. Plethysmography of extremity vessels will also be discussed. Corequisite: SON 276L.

SON 276L Vascular Sonography Laboratory II 1 (0,4,0,0)

Focuses on the use of “Indirect Testing” methods in the performance of vascular ultrasound procedures in a supervised lab on campus.

SON 280B Sonographic Clinical Practicum I 2 (0,0,16,0)

Provides 16 hours per week of supervised ultrasound clinical experience.

SON 281B Sonographic Clinical Practicum II 2 (0,0,16,0)

Provides 16 hours per week of supervised ultrasound clinical experience. Prerequisite: SON 280B.

SON 282B Sonographic Clinical Practicum III 3 (0,0,24,0)

Provides 24 hours per week of supervised ultrasound clinical experience. Prerequisite: SON 281B.

SON 283B Sonographic Clinical Practicum IV 3 (0,0,24,0)

Provides 24 hours per week of supervised ultrasound clinical experience. Prerequisite: SON 282B.

SON 284B Sonographic Clinical Practicum V 3 (0,0,24,0)

Provides 24 hours per week of supervised ultrasound clinical experience. Prerequisite: SON 283B.

SON 290B Sonography Registry Review 2 (2,0,0,0)

A review of material covered in all previous sonography courses. Designed to prepare students to take the Abdominal, Obstetrics and Gynecology, and Ultrasound Physics and Instrumentation registries.

SON 291B Cardiac Registry Review 2 (2,0,0,0)

Review of all course content for Cardiac/Vascular program with emphasis on registry question.

Spanish

SPAN 101B Basics of Spanish I 3 (3,0,0,0)

An introductory Spanish course emphasizing spoken communication and development of elementary structures in Spanish. It may not transfer to other institutions.

SPAN 102B Basics of Spanish II 3 (3,0,0,0)

A continuation of the basic language skills learned in SPAN 101B, emphasizing spoken communication and development of elementary structures in Spanish. Course may not transfer to other institutions. Prerequisite: SPAN 101B.

SPAN 105B Spanish for Health Professions I 3 (3,0,0,0)

An introductory course emphasizing spoken communication. Students study basic grammatical concepts in a variety of practical settings and specialized vocabulary needed by personnel in the health professions.

SPAN 106B Spanish for Health Professions II 3 (3,0,0,0)

A continuation of Spanish 105B; students continue studying specialized vocabulary and basic grammatical concepts needed by health professions personnel and apply it in practical settings.

SPAN 109B Spanish for Law Enforcement I 3 (3,0,0,0)

Emphasizes spoken communication, including the specialized vocabulary and basic grammatical concepts needed by Law Enforcement personnel. Will provide applications of Spanish in situations ranging from domestic violence to reading the Miranda warning.

SPAN 111 First Year Spanish I 4 (4,0,0,0)

A beginning level Spanish course emphasizing the development of language skills (listening, speaking, reading, and writing) and cultural understanding. Emphasis on basic communication.

SPAN 112 First Year Spanish II 4 (4,0,0,0)

This is the second semester of first-year Spanish concentrating on the development of language skills in the present and simple past tenses (listening, speaking, reading and writing) and cultural understanding. Emphasis on basic communication. Prerequisite: SPAN 111.

SPAN 126 Introduction to Spanish for Heritage Speakers 3 (3,0,0,0)

This course focuses on expanding intermediate-level vocabulary, developing oral skills, and exploring basic grammatical concepts to prepare students for second year courses. The course was designed for students who grew up, or spent significant amounts of time, in a Spanish-speaking environment.

SPAN 211 Second Year Spanish I 3 (3,0,0,0)

The development of intermediate language skills using a variety of tenses (listening, speaking, reading, and writing) and cultural understanding. Emphasis on incorporation of intermediate communication. Prerequisite: SPAN 112.

SPAN 212 Second Year Spanish II 3 (3,0,0,0)

The development of intermediate language skills using a comprehensive variety of tenses (listening, speaking, reading, and writing) and cultural understanding. Emphasis on mastery of intermediate communication. Prerequisite: SPAN 211.

SPAN 215 Intermediate Spanish Conversation I 3 (3,0,0,0)

Designed to continue and improve the oral communication and listening skills of the student who has completed Spanish 212 or has the equivalent knowledge.

SPAN 216 Intermediate Spanish Conversation II 3 (3,0,0,0)

Designed to continue and improve the oral communication and listening skills of the student who has completed Spanish 212 or 215 or has the equivalent knowledge.

SPAN 223 Spanish Caribbean Culture 3 (3,0,0,0)

This course examines historical, cultural, and social developments of the Spanish Caribbean from pre-Hispanic times to the present. Topics include history, traditions, ethnicity, literature, arts, religion, politics, music, and food. (Same as LAS 223.)

SPAN 224 Mexican Culture 3 (3,0,0,0)

This course focuses on elements that contribute to the formation of the culture and identity of the Mexican nation: history, religion, music, art, food, movies and TV, traditions, celebrations and folklore, social realities, and the relationship with the U.S. Taught in English. (Same as LAS 224.)

SPAN 226 Spanish for Heritage Speakers I 3 (3,0,0,0)

Designed for students who have an informal training in Spanish, but little or no formal instruction. Emphasis on grammar, transfer of literacy skills, vocabulary enrichment and cultural awareness.

SPAN 227 Spanish for Heritage Speakers II 3 (3,0,0,0)

Designed for students who have an informal training in Spanish, but little or no formal instruction. This course continues to examine the topics and skills from SPAN 226: Emphasis on grammar, transfer of literacy skills, vocabulary enrichment and cultural awareness.

Spelling Skills

SPEL 095 Spelling Skills I 3 (3,0,0,0)

Develops essential spelling skills. Emphasis is on learning, practice and retention of basic spelling rules.

SPEL 097 Spelling Skills II 2 (2,0,0,0)

This class offers a variety of approaches to help students master the spelling of troublesome words. Some of the approaches include: learning principles, pairing, mnemonic devices, rhyme, definition, repetition, pronunciation. Prerequisite: SPEL 095.

Surgical Technology

SRGT 101B Introduction to Surgical Technology 1 (1,0,0,0)

Roles and responsibilities of the Surgical Technologist are discussed, defined, and explored. Includes hands on demonstrations pertaining to the field of Surgical Technology. Discussion of the educational requirements, certifications, job description, and job outlook of the profession.

SRGT 103B Pharmacology for the Surgical Technologist 2 (2,0,0,0)

Scientific principles of biological science, pharmacology, and anesthetic agents. Defines the rationale for the use of specific drugs, their therapeutic effects and major side effects on the surgical patient, and how they may alter or influence surgical intervention. Prerequisite: Acceptance into the program.

SRGT 105B Surgical Interventions I 5 (4,3,0,0)

Introduces knowledge of specific basic surgical procedures routinely performed in the operating room. Practical experience in basic core surgical procedures will be performed, practiced, and evaluated in preparation for entry into the clinical practicum in surgical procedures.

SRGT 106B Surgical Fundamentals I 3 (3,0,0,0)

Surgical indications, principles of asepsis, ethical, legal, and moral responsibilities, as well as safe patient care, principles of operating room techniques (including hazards in the surgical suite), and biotechnological sciences are defined.

SRGT 108B Central Services Practicum 0.5 (0,0,4,0)

The student will be directly involved in the cleansing, sorting, wrapping, packaging and sterilization of surgical instrumentation and supplies. The student will gain an understanding of the functions of central supply and surgical support staff in relation to the preparation and coordination of sterile supplies. Prerequisites: SRGT 103B, 105B, 105L, 106B, 114B, 114L

SRGT 114B Principles and Practices of Surgical Technology I 3 (2,3,0,0)

Basic concepts necessary to establish, maintain, and coordinate methods required for good patient care preoperatively, intraoperatively, and postoperatively. Principles of operating room techniques and surgical indications are included.

SRGT 204B Principles and Practices of Surgical Technology II 3 (2,3,0,0)

Defines proper protocol for performance in other roles in the surgical suite. Further understanding of patient care to include laboratory results, specimen care, vital signs, diagnosis, preps and shaving, catheterization, and wound care and classifications. Understand and define proper protocols for emergency situations in the surgical suite. Prerequisite: SRGT 114B.

SRGT 205B Surgical Interventions II 5 (4,3,0,0)

Expanding skills to include specialty surgical procedures routinely performed in the operating room. Practical experience in specialty surgical procedures will be performed, practiced, and evaluated. Prerequisite: SRGT 105B.

SRGT 206B Surgical Fundamentals II 3 (3,0,0,0)

Focus on the professional aspects of the field. With emphasis on psychosocial behaviors necessary to function as an entry level Surgical Technologist. Prerequisite: SRGT 106B.

SRGT 207B Clinical Practicum I 3 (0,0,24,0)

The student will be assigned to specific preceptors to perform in the function of a surgical technologist. The student will actively assist in selection of equipment and supplies, perform surgical scrub, and become a functioning member of the sterile team. The student will progress through specific basic core surgical specialties developing and enhancing skills needed to function as a practicing surgical technologist. Prerequisite: SRGT 108B.

SRGT 210B Clinical Practicum II 2 (0,0,16,0)

Student will progress through progressively complex procedures gaining experience and competency in the position of the Surgical Technologist. Prerequisite: SRGT 207B.

Statistics

STAT 152 Introduction to Statistics 3 (3,0,0,0)

Basic probability and statistical methods with applications (possibly with computers and the internet); correlation, descriptive statistics, experiments, graphical presentation of data, hypothesis and significance testing, linear regression, point and interval estimation, sampling, and/or other related and special topics. Prerequisites: MATH 124 or MATH 126 or MATH 128 all with a grade of C or better; or a satisfactory ACT/SAT/Placement Test score.

Surgical Technology Surgical Assisting

STFA 295B Intraoperative First Assistant Skills Workshop 3 (1,3,0,2)

This course is designed to provide the First Assistant candidate with the intellectual concepts and the manual techniques necessary to assume the role of first assisting. The expanded functions unique to the surgical technologist first assistant are emphasized and include providing exposure to tissue handling, suturing, providing hemostasis and using surgical instruments. Manual dexterity and intellectual knowledge are combined to prepare the qualified surgical technologist with essential skills necessary to function in this expanded role. Selected home study topics related to first assisting are included.

**STFA 296B First Assisting
Clinical Internship I 3 (0,0,4.5,6)**

This course guides the experienced surgical technologist through the required number of surgical cases. The clinical internship is enhanced with guided home study, presentation of case studies, maintenance of records and a journal. Specific surgical cases to be studied include but are not limited to transverse colon resection, total hip arthroplasty, inguinal hernia repair and tubal ligation. Diagnostic studies, intravenous equipment and drip rates, central and peripheral catheters, central venous pressure, arterial lines, fluid replacement therapy, local and general anesthesia, tissue planes and wound healing are reviewed. Selected home study topics related to first assisting are included.

**STFA 297B First Assisting
Clinical Internship II 3 (0,0,4.5,6)**

This course guides the experienced surgical technologist through the required number of surgical cases. The clinical internship is enhanced with guided home study, presentation of case studies, maintenance of records and a journal. Specific surgical cases to be studied include, but are not limited to, thioracotomy/Rt. Upper lobectomy, simple nephrectomy, bilateral reduction mammoplasty and lumbar laminectomy. Hemostasis, surgical complications and shock are reviewed. Selected home study topics related to surgical first assisting are included. Prerequisites: STFA 295B, 296B.

Tourism and Convention Administration**TCA 100B Concierge Management -
Business Operations and
Customer Service 3 (3,0,0,0)**

This course is an overview of professional duties of corporate, business and hospitality concierges. Focus will be on interpersonal relationships, guest transactions, customer and concierge services.

**TCA 101B Concierge Software
Applications
and Operations 3 (3,0,0,0)**

This course is designed to familiarize students with the fundamentals of a comprehensive software program. The student will learn how to access information, manage events, use the logbook and message center, as well as establish patron profiles and administrative functions.

**TCA 110 Introduction to the
Convention Industry 3 (3,0,0,0)**

Overview of the convention industry, including meetings, trade shows, conferences and incentive travel. Role of the suppliers to the industry also covered. Course provides practical insights into the role of association and corporate meeting planners.

TCA 141 Travel and Tourism I 3 (3,0,0,0)

Survey of travel and tourism; focus on concepts, terminology, demographics, financial significance and trends.

**TCA 180 Hotel, Restaurant
and Casino Marketing 3 (3,0,0,0)**

An introduction to the marketing of hotels, restaurants and casinos. Special attention is given to sales, public relations, advertising, promotions, merchandising and entertainment.

**TCA 183 Conference and
Convention Planning 3 (3,0,0,0)**

Practical insight into the different types of conferences and conventions, the types of organizations that stage such events and how to reach and sell to these different groups. Students will learn how to analyze a hotel and convention property along with other venues, and how to successfully service the various segments of the meeting planning industry.

TCA 188 Special Events Planning 3 (3,0,0,0)

Overview of special event planning for events such as festivals, fairs, fund raisers, family occasions, civic celebrations, athletic competitions, parades, and theme parties. Students will learn organizational skills, and creativity in the design, planning, marketing, and staging of an event.

**TCA 190 Introduction to
Destination Marketing 3 (3,0,0,0)**

Study of Convention and Visitors Bureaus on a domestic level and National Tourism Organizations on an international level to examine economic impact of visitor markets and advertising, promotion, sales and public relations.

TCA 200 Airlines Reservations 3 (3,0,0,0)

An introduction to Computer Reservation Systems (CRS) used in the airline/travel agent industries. Emphasis will be on specialized airline computer terminology.

**TCA 201 Hospitality
Career Development 3 (3,0,0,0)**

Prepares students for fulfilling balanced careers as hospitality professionals. Takes a strategic orientation to career planning (3 to 5 years) by facilitating students developing a personal mission statement and relevant strategies for designing and living a satisfying whole life. Prerequisites: HMD 101 and ENG 100, 101, or 113.

TCA 221 Hospitality Accounting I 3 (3,0,0,0)

Hospitality accounting principles and practices pursuant to the industry's uniform system of accounts. Prerequisite: ACC 201.

TCA 222 Wedding Planning 3 (3,0,0,0)

Students will learn the business of wedding planning to include creating a guest list, hiring vendors, and creating a beautiful wedding event. Students will gain practical knowledge of traditional, non-traditional, and destination wedding planning.

TCA 225 Introduction to International Tourism 3 (3,0,0,0)

Study of international travel and tourism. Focuses on the economic, social, political and environmental considerations of international tourism management and development. International tourist destinations are explored.

TCA 241 Travel and Tourism II 3 (3,0,0,0)

Evaluates the economic, social and political impact of tourism and travel, including markets, transportation, media, destination development and the interrelationship of cooperating agencies.

TCA 242 Travel Industry Operations 3 (3,0,0,0)

Examination of services and functions of retail and wholesale travel agencies. Agency administration, ticketing, accounting, promotion, travel counseling, selling, and procedures will be covered. Field trips will supplement classroom discussions.

TCA 251 Tourism and Convention Externship 3 (1,0,0,8)

On-site career orientation and training program in the following areas: convention/meeting/trade shows, transportation fields, destination management/marketing, hospitality/casinos, accounting/finance, club, hotel catering, entertainment, theme parks or tourism.

TCA 276 Introduction to Trade Show Operations 3 (3,0,0,0)

Overview of the trade show industry. Students will learn how to develop, plan, create and evaluate domestic and international trade shows. Students will also learn how to promote and sell to attendees and exhibitors.

TCA 289 Introduction to Corporate Meetings and Events 3 (3,0,0,0)

Students will learn how to become successful corporate meeting planners. Students will be able to produce and market a variety of industry functions such as company events, new product/service launches, customer relations functions, and tools to evaluate an event performance.

TCA 295 Work Experience in Tourism and Convention Industry 1 (0,0,0,1)

In addition to the academic requirements, the Department of Hospitality Management requires 200 hours of acceptable employment in the hospitality industry. This work experience will be measured qualitatively as well as quantitatively. The work experience requirement should be met during the school year or in summers. Students who plan to transfer to UNLV will be able to transfer a maximum of 500 hours of employment toward UNLV's 1000 hour employment requirement. International students must go to the office of International Student Services to verify employment eligibility and obtain authorization. This course can be repeated up to up to a maximum of four credits. Grade will be given upon verification of employment.

Thai

THAI 101 Basics of Thai I 3 (3,0,0,0)

Introduction to Thai language and culture. A course focusing on spoken communication and the development of language skills in listening, speaking, and structural analysis. Emphasis on the student's acquisition and control of the basic sound structures and simple sentences. A vocabulary of Thai-English words developed. Oral emphasis.

THAI 111 First Year Thai I 4 (4,0,0,0)

The development of language skills in listening, speaking, reading and writing; structural analysis. Oral Emphasis.

Theatre

THTR 100 Introduction to Theatre 3 (3,0,0,0)

Survey of dramatic literature and history emphasizing the development of drama from Greek to the contemporary. Critical analysis of all phases of theatre production including acting, directing and playwrighting.

THTR 102 Introduction to Stage Voice 3 (3,0,0,0)

Voice work for presentation and the stage, in theory and practical application. Focus, breath, awareness, phonation, resonance and articulation.

THTR 105 Introduction to Acting I 3 (3,0,0,0)

Interpretation of the drama through the art of the actor. Development of individual insights, skill, and disciplines in the presentation of dramatic materials to the audience and the learning of the basic exercise for the actor.

THTR 199 Play Structure and Analysis 3 (3,0,0,0)

THTR 199 provides students with a close, careful analysis of the great plays of the Western world. Focus will be on the major components of dramatic structure and style. Students will analyze a broad range of drama, which will deepen their understanding of the major historical, philosophical, and cultural trends in drama from the Classical to Contemporary period.

THTR 204 Theatre Technology I 3 (3,0,0,0)

Fundamentals of technical theatre production. Emphasis on theatre shapes, personal organization, techniques of scenic and prop construction and graphics.

THTR 205 Introduction to Acting II 3 (3,0,0,0)

Continuation of THTR 105 including the performance of selected scenes. Prerequisite: THTR 105.

THTR 209 Theatre Practicum 1-6 (0,0,0,1-6)

Rehearsal/Performance. Evaluation credit for being cast, rehearsing and performing in departmental theatre production. Prerequisite: Instructor permission.

THTR 214 Theatre Technology II 3 (3,0,0,0)

Continuation of Stagecraft I including scene painting, lighting and sound. Prerequisite: THTR 204.

Veterinary Technology**VETT 101B Introduction to Animal Health Technology 1 (1,0,0,0)**

Orientation to career field covering ethical and legal aspects, maintenance and treatment of animals, species and breed identification, professional organization/publications, and introduction to veterinary terminology. Prerequisite: Admission to Veterinary Technology Program.

VETT 105B Veterinary Medical Terminology 1 (1,0,0,0)

An introduction to word derivation and formation of medical terminology with emphasis on applications in veterinary medicine. Prerequisite: Admission to Veterinary Technology Program.

VETT 110B Clinical Anatomy and Physiology I 4 (2,6,0,0)

Clinical anatomy and physiology of common species of animals. Prerequisite: Admission to Veterinary Technology Program.

VETT 112B Clinical Anatomy and Physiology II 4 (2,6,0,0)

Continued study of clinical anatomy and physiology of common species of animals. Prerequisite: VETT 110B.

VETT 125B Veterinary Office Clinic Procedures 2 (2,0,0,0)

Basic bookkeeping and business procedures; inventory control; personnel management; history taking; veterinary medical records. Prerequisite: Admission to Veterinary Technology Program.

VETT 127B Basic Animal Nursing 4 (3,3,0,0)

Introductory nursing techniques; physical exam; administration of medications; sanitation and hygiene, psychological needs of animals; animal husbandry, biological sampling. Prerequisite: Admission to Veterinary Technology Program.

VETT 203B Veterinary Clinical/General Pathology 4 (3,3,0,0)

Basic urinalysis, hematological evaluations, identification of common blood, internal and external parasites, basic serological testing, essentials of veterinary microbiology, necropsy techniques, and other related laboratory evaluations. Corequisite: VETT 209B. Prerequisite: Admission to Veterinary Technology Program.

VETT 205B Diagnostic Imaging 2 (1,3,0,0)

Principles of radiology in diagnosis and treatment. Operation of equipment for diagnostic procedures; principles of Nevada and Federal safety regulations; proper utilization of safety equipment around an x-ray source; operation of an automatic film developer, critique and analysis of radiographic films; basic introduction to ultrasound and other advanced imaging techniques. Prerequisite: Admission to the Veterinary Technology Program.

VETT 208B Lab Animal Science and Exotics 2 (1,3,0,0)

Experimental methods and techniques, special care procedures for non-domestic companion animals and breeding principles unique to research are covered. Federal policies and procedures with respect to laboratory animals and the Federal Animal Welfare Act are also covered. Prerequisite: Admission to Veterinary Technology Program.

VETT 209B Parasitology 1 (1,0,0,0)

Life cycles and identification of internal and external parasites. Corequisite: VETT 203B.

VETT 211B Animal Nutrition 2 (2,0,0,0)

Normal and therapeutic nutritional needs of various species of animals and ration formulation are covered. Prerequisite: Admission to Veterinary Technology Program.

VETT 225B Pharmacology and Toxicology 2 (2,0,0,0)

Basics of veterinary pharmacology and toxicology; handling, storing and documenting controlled substances; vaccination; routes and methods of drug administration based on a systems-oriented approach. Prerequisite: Admission to Veterinary Technology Program.

VETT 227B Advanced Animal Nursing 4 (3,3,0,0)

Physiologic principles of intensive care nursing; bandaging; casting, hemodynamic monitoring; care of critical and intensive care patients. Prerequisite: Admission to Veterinary Technology Program.

VETT 230B Principles of Asepsis 1 (1,0,0,0)

Aseptic surgical preparations; utilization of sterile techniques; anesthetic equipment and pharmaceuticals; cleaning and preparation of surgical supplies and facilities. Prerequisite: Admission to Veterinary Technology Program.

VETT 235B Surgical, Anesthesia and Dental Procedures 4 (3,3,0,0)

Pre and post operative care; surgical procedures and assisting; basic anesthetic techniques including induction and monitoring; basic dental care and prophylaxis. Prerequisite: Admission to Veterinary Technology Program.

VETT 240B Large Animal Procedures 2 (2,0,0,0)

Veterinary procedures for large animals, restraint safety, nursing consideration, surgical preparation and assisting. Prerequisite: Admission to Veterinary Technology Program.

VETT 250B Critical Care/ER 3 (2,3,0,0)

Advanced knowledge of emergency conditions, response, and treatment. Prerequisite: Admission to Veterinary Technology Program.

VETT 260B Directed Clinical Practice I 2 (0,0,8,0)

Basic animal health theory and skills applied in a clinical setting. Grades assigned on Pass/Fail basis. Prerequisite: Admission to Veterinary Technology Program.

VETT 265B Directed Clinical Practice II 2 (0,0,8,0)

Advanced animal health theory and skills applied in a clinical setting. Grades assigned on Pass/Fail basis. Prerequisite: Admission to Veterinary Technology Program.

VETT 266B Directed Clinical Practice for Certificate of Achievement Students 2 (0,0,8,0)

Animal health theory and skills applied in a clinical setting. Grades assigned on Pass/Fail basis. Prerequisite: Admission to Veterinary Technology Alternate Program.

VETT 299B Independent Study 1-4 (1-4,0,0,0)

Covers selected topics of interest to veterinary technician students. Prerequisite: Consent of the instructor.

Vocabulary Skills

VOC 095 Vocabulary Skills I 3 (3,0,0,0)

Designed to broaden the student's range of English vocabulary. Emphasis is placed on word recognition, misused words, basic Latin and Greek roots.

VOC 097 Vocabulary Skills II 3 (3,0,0,0)

Strategies for the mastery of vocabulary words useful for the academic and employment world. Prerequisite: VOC 095.

Welding

WELD 115B Welding Inspection and Testing Principles 3 (2,2,0,0)

Provides classroom and laboratory instruction in common destructive and non-destructive testing methods used to determine the quality and soundness of welds.

WELD 116B Ultrasonic Nondestructive Testing - Level I 3 (2,2,0,0)

Covers ultrasonic testing of material, including theory, terminology, principles, and applications. Course meets 40-hour requirement for ASNT Level I inspector. Prerequisite: WELD 115B.

WELD 130B Welding Support Equipment Operations 3 (2,2,0,0)

Covers service, set up, operation and troubleshooting of welding support equipment including: ironworkers, drill presses, mag drills, grinders, bandsaws, cranes and rigging.

WELD 131B Blueprint Reading, Layout and Sketching 3 (3,0,0,0)

Provides instruction in the interpretation, reading and understanding of blueprints, drawings, weld symbols, fabrication layout and free hand sketching commonly used in the welding trade.

WELD 132B Oxy/Fuel, Plasma and Carbon Arc-Air Cutting Operations 2 (1,3,0,0)

Provides classroom and laboratory instruction in oxy/fuel, plasma and CAC-A cutting applications. Topics include lay-out, base metal preparation, and machine and hand cutting operations.

WELD 133B SMAW (Stick) 4 (1,6,0,0)

Provides classroom and laboratory instruction in skill development and proficiency of Shielded Metal Arc Welding of mild steel plate in all positions.

WELD 134B GTAW (Tig) 4 (1,6,0,0)

Provides classroom and laboratory instruction in the proper techniques, skill development and proficiency of GTA Welding of mild steel, aluminum and stainless steel gage material in various positions.

WELD 135B GMAW (Mig) 2 (1,3,0,0)

Provides classroom and laboratory instruction in the proper techniques, skill development and proficiency of GMAW of mild steel and aluminum in various positions.

WELD 137B FCAW (Flux Core) 2 (1,3,0,0)

Provides classroom and laboratory instruction in the proper techniques, skill development and proficiency of FCAW-S and FCAW-G of mild steel in various positions.

WELD 154B D1.1 Structural Welding Code 3 (3,0,0,0)

Provides extensive classroom instruction on the AWS D1.1 Structural Welding Code, covering topics such as Procedure Qualification Records, Weld Procedure Specifications, welded connections, fabrication and inspection.

WELD 214B Fabrication Layout 3 (1,4,0,0)

Provides instruction on basic fabrication principles, safety, measurement, layout techniques using blueprints and weld symbols and the use of common fabrication tools and associated equipment. Prerequisites: WELD 131B, 132B, 133B or instructor approval.

WELD 218B Pipe Welding Procedures 4 (1,6,0,0)

Provides instruction on the proper techniques, skill development and proficiency of pipe welding using SMAW fillet and pipe groove welds on plate/pipe in all positions. Prerequisite: WELD 133B or instructor approval.

WELD 219B Ornamental Iron 3 (1,6,0,0)

This class is designed for the do-it-yourself individual who wishes to use his or her knowledge of welding as an addition to his/her own field in the art of ornamental iron fabrication.

WELD 223B Special Topics in Welding Technology 2-6 (1-5,3-6,0,0)

Custom designed course content in welding technology with variable credit for managers, technicians, engineers, labor groups and others. Variable start times and dates.

WELD 240B Advanced GTAW 4 (1,6,0,0)

Provides instruction on the proper techniques and skill development of advanced GTAW with emphasis on pipe fillet and groove welds on plate/pipe in various positions.

WELD 270B Welding Certification Preparation 1 (0,2,0,0)

This course prepares experienced welders for qualification (certification) to welding codes AWS, ASME IX, and API 1104. May be taken up to a maximum of four credits. Prerequisite: Instructor approval.

Women's Studies**WMST 101 Introduction to Women's Studies 3 (3,0,0,0)**

Introduces the methods and concerns of women's studies drawing from history, psychology, sociology, law and language concerns.

WMST 113 Gender, Race, and Class 3 (3,0,0,0)

Interdisciplinary, cross-cultural survey of the ways in which gender interacts with race, age, class, and sexuality to shape human consciousness and determine the social organization of human society.

WMST 113H Gender, Race, and Class - Honors 3 (3,0,0,0)

Interdisciplinary, cross-cultural survey of the ways in which gender interacts with race, age, class, and sexuality to shape human consciousness and determine the social organization of human society. Emphasis on interactive learning entailing an examination of the self and one's environment through the use of reflective writing and dialogue. Prerequisite: Admission to the Honors program.

WMST 180 The Economics of Discrimination 3 (3,0,0,0)

The Discrimination of Economics investigates the economic causes, effects, and remedies of discrimination based on categories such as age, ethnicity, gender, religion, national origin, or sexuality. (Same as ECON 180.)

WMST 247 Philosophy and Women 3 (3,0,0,0)

Variety of philosophical writings by or about women, from Plato to the present, focusing on such key concepts as nature, equality, dignity, freedom, love and self-realization. May include feminist critique of the western philosophical tradition. (Same as PHIL 247.)

WMST 250 Introduction to Feminist Theory 3 (3,0,0,0)

American feminist thought in its diversity, examining the differences among liberal, radical, Marxist, socialist, psychoanalytic, and postmodern feminism and the challenges to each posed by women of color.

WMST 255 The American Women's Movement 3 (3,0,0,0)

Introduction to American women's history and politics focusing on race, gender, and class relations, and the legal and economic status of women.

WMST 275 Introduction to Marriage and Family 3 (3,0,0,0)

An analysis of the internal and external forces influencing today's American family. Major topics include love, sex, marriage adjustment, divorce, and problems of child rearing. (Same as SOC 275.)

WMST 285 History of Witchcraft 3 (3,0,0,0)

The study of the figure of the witch from ancient times to the present, and the historical, religious, and social context from which it emerged. The course includes Paleolithic and Neolithic religion, witches in ancient cultures, formulation of the Christian witch concept, the witch hunt in Early Modern Europe and in the British North American colonies, and modern neo pagan witchcraft. (Same as HIST 285.)

WMST 286 Goddess Traditions 3 (3,0,0,0)

A study of goddess images in a variety of cultures from prehistory to the modern age including the history, values, beliefs, practices, and ethics systems associated with goddess imagery. (Same as HIST 286.)

WMST 295 Special Topics 1-3 (1-3,0,0,0)

Intensive study of a major topic in women's studies. May be repeated to a maximum of 6 credits.