Course Descriptions & Student Learning Outcomes (SLOs)

Explanation of course numbering

Courses offered by the College are numbered as follows:
000-049 These courses are noncredit courses. These courses may satisfy prerequisite requirements and/or provide appropriate remediation for courses numbered 050-099 in the same subject areas.

050-099 These courses except for MA096, MA097, MA098, EN096, and EN097 are accepted toward meeting the requirements of the Adult High School and some Certificate/Degree programs.

100-299 These courses are accepted toward meeting requirements of the Associate of Arts and Associate of Science degrees conferred by the College. These courses are also accepted toward meeting the requirements of certificates conferred by the College.

Course numbers indicate the level of the course. Courses numbered 100-199 are intended for freshman or sophomore students; courses numbered 200-299 are intended for sophomore students.

Courses numbered 100-299 may be used to meet Adult High School Diploma requirements. Diploma Students taking courses numbered 100-299 to meet the Adult High School Diploma should select such courses with the advice and approval of their counselor or advisor.

Note: The course descriptions that follow are alphabetized by course alpha and number (i.e., from AC100 to WE220). They are also grouped by fields of study.

Student Learning Outcomes (SLOs) at the course level, follow these course descriptions. SLOs at the course level describe what students should be able to perform, apply, or produce in relation to how and what they have learned. In the course SLOs that follow, clear and intentional expectations are laid out, particularly as they define the goals of student learning experiences. In a nutshell, they specify what students should be able to know, do, or value after participating in planned learning activities.

With this AY2018-2019 catalog, continuous efforts to revisit all curriculum documents so that SLOs become integral components of each and every course at the College have been completed. This effort will continue for all new courses.

Before the course descriptions, there is a notation about the frequency of offerings, i.e., Spring only, fall only, or as needed. Summer courses are also scheduled as needed. The College, however, always reserves the right to cancel courses, due to low student enrollment or other justifiable reasons.

Accounting (AC)

AC100 FUNDAMENTALS OF BOOKKEEPING AND ACCOUNTING

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course covers accounting principles to include interpreting source documents, analyzing business transactions; recording entries in a general journal; posting to the ledger, preparing the worksheet with adjustments; journalizing, adjusting and closing entries; preparing financial statements, and the post-closing trial balance.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Apply accounting procedures to properly record financial information about a business.
2. Apply generally accepted accounting theory and principles to perform all the steps of the accounting cycle for a service and retail type business.
3. Perform internal control procedures to protect and properly manage cash and other business assets.

AC110 PAYROLL ACCOUNTING

Credits: 3 Course Offering: As Needed
Prerequisites: CS151 and Placement into MA110A or equivalent
Corequisites: None
This course covers the most current methods and procedures of calculating payroll and payroll taxes. It includes the latest developments in payroll tax law, covering information on wages, payroll operations, employment practices, and voluntary employee deductions; differences between the USA and the Territory of Guam payroll accounting systems are examined.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain why personnel and payroll records are integral to a company to provide the information required under the numerous laws affecting the operations of payroll system.
2. Calculate wages, explore earnings records, and prepare a payroll register.
3. Perform all aspects of payroll operations including payroll tax returns, while processing a three-month payroll period for a business using two methods, manual and computerized.

AC150 FEDERAL INCOME TAX I

Credits: 3 Course Offering: As Needed
Prerequisites: Placement into MA097 or higher
Corequisites: None
A study of the basic forms and structures of federal taxation, particularly aspects which affect individual taxpayers, to include: components of tax formula, the use of the standard deduction. Personal exemption qualifications, filing systems, tax tables, exclusions from income, various categories of deductions, investment losses and passive activity losses, net operating losses, and tax credits.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain what the federal income tax is and distinguish it from other types of federal taxes.
2. Differentiate between the regular income tax and the alternative minimum tax.
3. Apply necessary steps to compute a taxpayer's federal income tax liability and apply tax language and terms appropriately throughout the process of computing a taxpayer's federal income tax return.

AC210 INTRODUCTION TO FINANCIAL MANAGEMENT

Credits: 3 Course Offering: As Needed
Prerequisites: AC211 Corequisites: AC212
This course covers the basic fundamentals of financial management. Major topics include financial statement analysis, forecasting, markets, risk and rate of return, time value of money, valuation of stock and bonds, cost of capital, capital structure, dividend policy, and financial planning, and working capital management.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Interpret and apply financial ratios to financial statements to evaluate future prospects of the business.
2. Compare risk with the rate of return in a single investment and a portfolio investment and to perform valuations of stocks and bonds.
3. Explain the concept of working capital and its components in order to manage cash conversion cycles.

AC211 ACCOUNTING PRINCIPLES I

Credits: 4 Course Offering: As Needed
Prerequisites: Placement into MA098 or higher
Corequisites: None
This course prepares the student for entry-level accounting jobs, such as accounting clerk and bank teller. Students will interpret and apply accounting principles and concepts to record and report accounting data for sole proprietorship and merchandise business; apply internal control procedures, such as special journals and subsidiary ledgers; apply inventory costing methods; processing account issues for receivables, bank reconciliation and petty cash; calculate depreciation schedules for assets; and record data for intangible assets.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Interpret and apply accounting principles and concepts to record and report business financial data for effective management decision making.
2. Demonstrate the proper procedures to perform all the steps of the accounting cycle for a service and merchandise business.
3. Demonstrate the ability to calculate inventory data using various types of inventory costing methods.

AC212 ACCOUNTING PRINCIPLES II

Credits: 4 Course Offering: As Needed
Prerequisites: AC211 Corequisites: None
Accounting theory and principles are discussed relating to corporations, manufacturing, budgeting and cost analysis. Specific topics include current and contingent liabilities,
accounting for corporations, accounting for corporate income taxes, investments in bonds, accounting for bonds payable, the Statement of Cash Flows, Financial Statement analysis, job
order and process costing systems.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate proficiency to prepare corporate financial statements including the statement of cash flows and statement of stockholder's equity.
2. Contrast the accounting systems used by manufacturing businesses: job order and process costing.
3. Explain and illustrate how standards are used in budgeting.

AC225 HOSPITALITY INDUSTRY ACCOUNTING

Credits: 3 Course Offering: Fall
Prerequisites: AC211 and AC212
(can also be taken concurrently)
Corequisites: None
This course presents the fundamentals of financial accounting through hospitality industry simulation-problems and experiences using American Hotel and Lodging Association Educational Institute (AHLEI) materials. Accounting topics include procedures for merchandise and supplies inventories, fixed assets and depreciation methods, current liabilities and payroll, internal controls of cash, receivables and payables, which are major elements of financial statements for the hospitality industry are emphasized. A Hospitality Industry Financial Accounting certificate will be provided to those who pass the AHLEI exam with a score of 70% or better.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Implement procedures for merchandise and supplies inventories, fixed assets and depreciation methods, current liabilities and payroll, internal controls of cash, receivables and payables.
2. Perform analysis and interpretation of financial statements of the hospitality industry.
3. Discuss computerized accounting systems prevalent in hospitality businesses that use special journals and subsidiary ledgers.

AC233 ACCOUNTING ON THE COMPUTER USING QUICKBOOKS

Credits: 3 Course Offering: As needed
Prerequisites: AC110, AC150, AC212
Corequisites: AC212
Students will apply accumulated accounting knowledge and skills from accounting fields such as payroll, federal tax, inventory, merchandising, accounts receivable, accounts payable, and cash management using an accounting software called QuickBooks. Students will develop extensive skills about the features of QuickBooks.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Apply accumulated accounting knowledge and skills from accounting fields such as payroll, federal tax, inventory, merchandising, accounts receivable, accounts payable and cash

management using accounting software called QuickBooks.
2. Develop extensive skills to use basic features of QuickBooks accounting software.
3. Review accounting knowledge and adapt such knowledge to computer accounting skills.

AC240 CERTIFIED BOOKKEEPER REVIEW

Credits: 3 Course Offering: As Needed
Prerequisites: AC211, AC110, & AC150
Corequisites: None
A detailed study and review structured to prepare students to pass the national test for Certified Bookkeeper (CB) given by the American Institute of Professional Bookkeepers (AIPB). This course covers specific topics such as adjusting entries, reconciliation and errors, payroll, depreciation, and inventory.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain mastery-level skills required in bookkeeping.
2. Apply proper procedures in bookkeeping.
3. Discuss the universal Code of Ethics for bookkeepers

AC250 FEDERAL INCOME TAX II

Credits: 3 Course Offering: Spring only
Prerequisites: AC150
Corequisites: None
This course is the second of two courses on Federal Taxation structure. Emphasis is given to the unique factors involved in taxation of individuals, and other U.S. Federal tax returns such as partnership and corporation. It includes the latest developments in federal tax laws, covering information on property transactions, retirement plans, partnerships/S corporation basis and loss limitations.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Discuss with basic understanding, the formation and operation of corporations related to corporate taxation.
2. Discuss corporate taxation regulations related to corporate distributions to shareholders.
3. Analyze taxation issues for stock redemptions treated as a sale or exchange or as a dividend.

AC280 PERSONAL FINANCE

Credits: 3 Course Offering: As Needed
Prerequisites: EN110, MA110A placement or equivalent
Corequisites: None
This course is designed to introduce students to the basic terminology, concepts, and practices of personal finance. This course is not intended to make anyone a financial expert. It will provide the foundation to understand and discuss the "language" of routine financial activities, and provide a solid foundation for future studies. Managing personal finances, tax problems, insurance, credit, budgeting, financial planning, home ownership, bank accounts, investments, and social insurance programs.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
Apply theory learned in the classroom to the work environment.

1. Plan financially using critical thinking skills and concepts.
2. Demonstrate financial responsibility through course projects
3. Set financial goals that reflect the acquisition of course content.

AC292 ACCOUNTING PRACTICUM

Credits: 3 Course Offering: As Needed
Prerequisites: AC233 or DC or Instructor recommendation for approval by TPS Dean
Corequisites: None
This course provides students with the opportunity to demonstrate professionalism, employ reflective practices while working and/or volunteering for a total of 180 hours at an employer setting under the supervision of an accountant or supervisor. The Cooperative Education program provides an opportunity to qualified associate degree seeking students to receive credit and work experience related to Accounting.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Apply theory learned in the classroom to the work environment.
2. Practice effective interpersonal skills in the workplace.
3. Document the synthesis of knowledge and skills gained through work experience in a reflection paper.

Architectural Engineering (AE)

AE103 BASIC BLUEPRINT READING

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course introduces students to basic principles of blueprint reading and shop sketching, including a study of drafting principles and concepts and all the related technical information necessary to interpret a drawing. Trade terminology and shop and field practices are defined and applied in operational notes, which appear on drawings.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Identify basic specifications and codes of various trades-related industries.
2. Recognize and sketch basic lines.
3. Apply symbols, notes, and conventions to the creation of drawings and sketches.

AE121 TECHNICAL ENGINEERING DRAWING I

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
A study of the use of drawing instruments and techniques for mechanical, civil and architectural drawings involving freehand sketches, lettering, orthographic views and pictorial drawings. Skill development will focus on the use of drawing instruments to redraw given drawings calling for accurate measurements with detailed instructions on how to do it. Course offering: As needed.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Demonstrate proper use of drafting instruments to draw existing plans.
2. Accurately measure existing drawings.
3. Describe basic components of a blueprint.

AE122 TECHNICAL ENGINEERING DRAWING II

Credits: 3 Course Offering: As Needed
Prerequisites: AE121 Corequisites: None
A study of how to prepare partial working drawings of simple building structures, floor plan, front and rear elevations, left and right elevations, transverse and longitudinal sections, cabinet, closet and bar details, plumbing, electrical, site and plot plans including how to prepare topographic maps.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Prepare a partial working drawing.
2. Accurately depict different elevation views.
3. Draw plumbing components found in a typical house plan.

AE138 BUILDING CODES, SPECIFICATIONS & CONSTRUCTION MANAGEMENT

Credits: 3 Course Offering: As Needed
Prerequisites: Placement into EN110 or equivalent
Corequisites: None
An interpretation and study of local and national building codes and standards, construction documents and office organization. This course will be of value to anyone who plans to enter, or is presently working in the field of construction.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Explain local and national building codes and standards.
2. Identify the process for acquiring a building permit.
3. Explain the various agencies' functions in the permitting process.

AE150 COMPUTER AIDED DESIGN & DRAFTING (CADD) I

Credits: 3 Course Offering: As Needed
Prerequisites: AE121, CS101
Corequisites: None
An introduction to computer aided design and drafting software as a drafting/design tool. This course is designed to introduce students to the use of computers in producing line drawings. Topics include equipment components, terminology, drawing with the computer, storing and retrieving drawings, and printing and plotting. This hands-on course uses the design computer-aided drafting and design software application.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Produce line drawings using computer technology.
2. Demonstrate and explain basic equipment components and terminology used in the

Computer Aided Design & Drafting (CADD) career.
3. Demonstrate basic proficiency using design software.

AE160 COMPUTER AIDED DESIGN & DRAFTING (CADD) II

Credits: 4 Course Offering: As Needed
Prerequisites: AE121, AE150
Corequisites: None
This course builds on the topics covered in AE150 and presents intermediate editing techniques. This course covers the fundamentals of how to utilize Computer Aided Design and Drafting (CADD) to create and manage a set of construction documents for a single building project. Students will gain knowledge and practical experience leading to entry-level jobs by performing many of the duties of an architectural or engineering CADD operator.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Utilize a computer workstation to create a construction drawing set consisting of at least six sheets from a design.
2. Compile information about a building from architectural and engineering reference materials and produce an appropriate document that complies with building codes and save it in an electronic medium.
3. Demonstrate intermediate two and three dimensional editing techniques.
4. Demonstrate how to prepare two and three dimensional drawings for architecture, interior design, mechanical and structural engineering, and other design fields.

AE170 REVIT ESSENTIALS

Credits: 3 Course Offering: As Needed
Prerequisites: AE150, AE160
Corequisites: None
Revit Architecture Essentials course is designed to teach students the Revit functionality as it would be used in the design process. The objective of the training is to enable students to create 3D architectural project models and set up working drawings. Technical training focuses on theory, concepts, and basic tools of BIM (Building Information Modeling) to work with Autodesk Revit Architecture.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Identify the purpose of Building Information Management (BIM) and how it is applied in Revit.
2. Demonstrate the Revit Architecture workspace and interface.
3. Create drawings with the basic drawing and editing tools in Revit.
4. Create Levels and Grids as datum elements for models.

AE216 DESCRIPTIVE GEOMETRY

Credits: 3 Course Offering: As Needed
Prerequisites: MA161B Corequisites: None
This course covers the analysis and solution of three-dimensional problems through application of the principles of multi-view projection. Topics include spatial relationships typical of engineering problems, auxiliary views, revolutions, curved lines and surfaces, intersections of surfaces and shades and shadows. This course is recommended for pre-engineering students and drafting majors.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Apply graphical methods to solve three-dimensional space problems.
2. Set up projection planes to satisfy specific requirements.
3. Use computer drafting software such as AutoCAD® to create a three-dimensional object with integration of geometric shapes and save to an electronic medium.

American Sign Language (ASL)

ASL100 AMERICAN SIGN LANGUAGE I

Credits: 4 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course provides students with beginning skills in American Sign Language, including fingerspelling the alphabet, signing basic numbers and using basic vocabulary to facilitate communication with the Deaf in ASL. In addition, students will be introduced to deaf culture and the importance of using body and facial expressions to convey information and to develop visual acuity.
Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Increase vocabulary in American Sign Language to include subject-specific terminology and figures of speech such as idioms, metaphors and similes.
2. Develop current local, national and global vocabulary skills.
3. Interact with deaf people in an accepting and sensitive manner.

ASL110 AMERICAN SIGN LANGUAGE II

Credits: 4 Course Offering: As Needed
Prerequisites: ASL100 Corequisites: None
This course is a continuation of American Sign Language I. The course objective is to continue to develop basic syntactic knowledge of American Sign Language, vocabulary, fingerspelling and conversational skills. Aspects of the deaf community and culture are also incorporated.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Demonstrate basic understanding of American Sign Language (ASL) that includes manually-coded English and finger spelling.
2. Demonstrate expanded vocabulary and conversational range such as talking about other people and activities, giving directions, describing people, and making requests.
3. Use ASL to communicate with individuals who are Deaf or hard of hearing.

ASL120 AMERICAN SIGN LANGUAGE III

Credits: 4 Course Offering: As Needed
Prerequisites: ASL110 Corequisites: None
The course provides intermediate conversational skills in American Sign Language with an emphasis on expressive and receptive skills development. Students will further their understanding of American Sign Language syntax, vocabulary, and signing skills. The Deaf and Hard of Hearing culture will be further explored.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Utilize American Sign Language (ASL) to include manually coded English and finger spelling at an intermediate level.
2. Expand their ASL vocabulary and conversational range (i.e. classifiers, giving directions, describing people, using number/time concepts, and making requests).
3. Interact and communicate with the Deaf and Hard of Hearing population at an intermediate level.

ASL130 AMERICAN SIGN LANGUAGE IV

Credits: 4 Course Offering: As Needed
Prerequisites: ASL120
Corequisites: None
This is the fourth course in the American Sign Language (ASL) sequence. This course continues to develop advanced competency and fluency in American Sign Language, grammar, and syntax. Cultural features and variations in ASL are also addressed.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Demonstrate advanced communicative competence and fluency in basic understanding of American Sign Language.
2. Acquire knowledge and understanding of the language and culture of the deaf community.
3. Demonstrate critical thinking and appropriate ethical responses required by the Registry of Deaf Interpreter's Code of Professional Conduct.

Automotive Service Technology (AST)

AST100 INTRODUCTION TO AUTOMOTIVE SERVICE

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course introduces the student to core principles in Automotive Service Technology, providing them with the foundational knowledge necessary for success in all additional Automotive Service Technology upper 100-level courses. Students will become familiar with basic concepts and practices related to automotive service, safety and customer service.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Demonstrate proper shop safety concepts and practices.
2. Identify basic hand tools and shop equipment and demonstrate proper use.
3. Explain how a gasoline engine functions and perform basic automotive measurements and compare results to specifications.

4. Perform basic maintenance checks on the lubrication system and explain the functions of engine seals, gaskets, liquid sealers, and bearings.
5. Identify components in a vehicle's electrical system to include the starting, charging, lighting, ignition, and computer systems

AST110 ENGINE REPAIR

Credits: 3 Course Offering: Spring Only
Prerequisites: AST100 Corequisites: None
This course covers elements of engine repair including diagnoses, adjustments and repair of external engine accessory such as batteries and starting systems, fuel, air induction, ignition, lubrication, cooling, and exhaust systems, and repair of the valve train, cylinder heads, valve train synchronization, engine short blocks and complete engine assemblies.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Explain the basic functioning of the engine mechanical system.
2. Identify and interpret engine mechanical concerns and determine necessary action.
3. Perform basic service and repair procedures on an engine.
4. Inspect cylinder head, water and oil passage condition, and identify wear patterns, determine necessary action.

AST113 HYBRID ENGINES AND MOTOR/GENERATORS

Credits: 4 Course Offering: As Needed
Prerequisites: AS100, AST160, AST110, AST180A, AST180B, AST120
Corequisites: None
This course introduces the student to core principles of hybrid electric vehicle engine and motor/generator propulsion technology providing skillsets necessary for diagnosing and making repairs to hybrid electric vehicles.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Demonstrate proper safety practices when servicing high-voltage hybrid electric vehicles.
2. Diagnose hybrid engine failures and perform needed repairs.
3. Illustrate operation of permanent magnate and induction electric motors.
4. Describe functionality of electrical inverter and converter components.
5. Troubleshoot faults in the electric propulsion sensing system and perform needed repairs.

AST120 AUTOMATIC TRANSMISSION AND TRANSAXLE I

Credits: 3 Course Offering: As Needed
Prerequisites: AST100 Corequisites: None
This course covers all on-car diagnosing, adjusting, replacing, and repairing of both domestic and foreign automatic transmissions, as well as the process of rebuilding complete transmissions/transaxles.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Perform in-vehicle transmission routine maintenance to include assessing fluid level concerns and identifying corrective action.
2. Remove and reinstall automatic transmission.
3. Perform leak test on transmission assembly and peripheral components.

AST123 HYBRID ELECTRIC VEHICLE ENERGY MANAGEMENT AND TRANSAXLES

Credits: 3 Course Offering: As Needed
Prerequisites: AST100, AST160, AST110, AST180A, AST180B, AST120, AST113
Corequisites: None
This course introduces the student to core principles of hybrid electric vehicle energy management and transaxle providing skillsets necessary for diagnosing and making repairs to hybrid electric vehicles.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Describe functionality of hybrid electric vehicle energy management system.
2. Illustrate hybrid transaxle construction.
3. Perform drive system fault analysis.

AST130 MANUAL DRIVE TRAIN AND AXLES

Credits: 3 Course Offering: As Needed
Prerequisites: AST100 Corequisites: None
This course introduces the student to core principles in manual drive train and axle systems, providing them with the foundational knowledge necessary for

more advanced study and experiential development of skills in diagnosing and making repairs to manual drive train and axle systems.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Perform general drive train diagnostics and develop an action plan.
2. Diagnose and repair transmission and transaxle to include clutch system.
3. Ascertain cause of failure and perform needed repairs to the drive shaft assembly, constant-velocity joint (CV), universal joint, and front wheel drive (FWD) wheel bearings and hubs.
4. Determine structural integrity of differential drive components and perform preventive maintenance.
5. Inspect four-wheel drive components for proper operation.

AST133 HYBRID ELECTRIC VEHICLE BATTERIES & BELTED ALTERNATOR STARTER (BAS) SYSTEM

Credits: 3 Course Offering: As Needed

Prerequisites: AST100, AST160, AST110, AST180A, AST180B, AST120, AST113

Corequisites: None

This course introduces the student to core principles of hybrid electric vehicle batteries and Belted Alternator Starter (BAS) system providing skillsets necessary for diagnosing and making repairs to hybrid electric vehicles.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Illustrate hybrid electric vehicle battery construction.
2. Explain Belted Alternator Starter (BAS) system
3. Troubleshoot battery system faults and perform needed repairs.

AST140 SUSPENSION AND STEERING

Credits: 3 Course Offering: Spring Only

Prerequisites: AST100 Corequisites: None

This course covers wheel alignment and correction, wheels and tires, active and passive suspension systems, steering and steering assist, progressive steering systems, and replacement of worn or damaged parts.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify and interpret short and long arm and strut suspension faults and determine necessary action.
2. Perform preventive maintenance procedures on power steering system.
3. Diagnose tire related concerns and determine necessary action.
4. Service and adjust parallelogram, and rack and pinion steering systems.

AST143 HYBRID ELECTRIC VEHICLE POWER ELECTRONICS AND SUPPORT SYSTEMS

Credits: 3 Course Offering: As Needed

Prerequisites: AST100, AST160, AST110, AST180A, AST180B AST120, AST113

Corequisites: None

This course introduces the student to core principles of hybrid electric vehicle power electronics and support systems providing skillsets necessary for diagnosing and making repairs to hybrid electric vehicles.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify hybrid support systems power electronics and explain functionality
2. Diagnose hybrid power electronic system faults and perform needed repairs.
3. Perform hybrid support system fault analysis and perform needed repairs.

AST150 BRAKES

Credits: 3 Course Offering: As Needed

Prerequisites: AST100 Corequisites: None

This course introduces the student to core principles in brake systems, providing them with the foundational knowledge necessary for more advanced study and experiential development of skills in diagnosing and making repairs to automobile brake systems.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Perform general brake assessment to determine causes for concern.
2. Inspect and service hydraulic brake system.
3. Diagnose disc and drum brake system faults and perform basic service.
4. Describe functionality of vacuum actuated power-assist units.

5. Service wheel bearings, parking brakes and brake-related electrical components.

AST160 ELECTRICAL/ELECTRONIC SYSTEMS

Credits: 3 Course Offering: Fall Only
Prerequisites: AST100 Corequisites: None
This course covers diagnoses, repair and replacement of components involved in vehicular starting, charging, internal illumination, external illumination, instrumentation, horns, wiper systems, supplemental inflatable restraints (air bags) and accessories. Emphasis is given to interpretation and utilization of electrical diagrams.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Perform general electrical system diagnosis.
2. Service battery and starting system.
3. Diagnose and repair lighting system.
4. Determine cause of inoperative electronic gauges and accessories, determine required action.

AST170 HEATING AND AIR CONDITIONING

Credits: 3 Course Offering: Spring Only
Prerequisites: AST100 Corequisites: None
This course covers diagnoses, performance checks, repair of air conditioning compressors, replacement of heating and air conditioning components, repairs and/or replacement of liquid cooling system components, and servicing of ventilation systems.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Conduct performance check on A/C system and determine concern.
2. Recover and recycle refrigerant and charge A/C system.
3. Service A/C system components.
4. Perform diagnostics on heating, ventilation, and engine cooling system and perform needed repairs.
5. Diagnose and repair A/C and heating related controls.

AST180A ENGINE PERFORMANCE I

Credits: 3 Course Offering: As Needed
Prerequisites: AST100 Corequisites: None
This course introduces the student to core principles in systems related to the performance of an engine providing them with the foundational knowledge necessary for more advanced study and experiential development of skills in diagnosing and making repairs to engine performance control systems.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Ascertain mechanical integrity of engine.
2. Test ignition system input sensors and replace failed components.
3. Perform engine computer control system diagnostics.
4. Demonstrate required service to fuel, air induction, and exhaust systems.

AST180B ENGINE PERFORMANCE II (FUELS & EMISSIONS SYSTEMS)

Credits: 3 Course Offering: Fall Only
Prerequisites: AST100, AST180A
Corequisites: None
This second engine performance course involves diagnoses, adjustments, replacement of worn, damaged or inoperative components in the air induction, fuel delivery, electronic engine control and emission control systems.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Perform intermediate level engine diagnostics.
2. Diagnose and repair faults in the fuel, air induction, and exhaust system.
3. Determine fault causes in the emission control system and perform needed repairs.

AST210 THEORY/PRACTICUM: ENGINE REPAIR

Credits: 3 Course Offering: Fall Only
Prerequisites: AST100, AST110
Corequisites: None
This theory/practicum course builds on AST110, offering students a more in-depth conceptual understanding of engine repair and providing them with the opportunity to apply this knowledge in continually developing their automotive skills.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:

1. Remove and reinstall engine assembly with minimal supervision.
2. Repair problems related to the cylinder head and valve train.
3. Diagnose and repair cylinder block related faults.
4. Service cooling and lubrication system.

AST220 AUTOMOTIVE TRANSMISSION AND TRANSAXLE II

Credits: 3 Course Offering: As Needed
Prerequisites: AST120 Corequisites: None
This course will present students with comprehensive theoretical and conceptual information in the area of automatic transmission / transaxle systems; students are also given the opportunity to demonstrate their transmission / transaxle diagnosis and repair knowledge and skill through practical, experiential application.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Diagnose hydraulic pressure concerns.
2. Perform in-vehicle transmission repairs.
3. Overhaul transmission.

AST230 THEORY/PRACTICUM: MANUAL DRIVE TRAIN AND AXLES

Credits: 2 Course Offering: Spring Only
Prerequisites: AST100, AST130
Corequisites: None
This theory/practicum course builds on AST130, offering students a more in-depth conceptual understanding of manual drive trains and axles, and providing them with the opportunity to apply this knowledge in continually developing their automotive skills.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Perform general transmission and transaxle diagnostics with minimal supervision.
2. Replace clutch pack components.
3. Remove, disassemble, repair, and reinstall transmission, transaxle, and differential assemblies.
4. Service and Repair drive shafts, half shafts, and constant velocity joints.

AST240 THEORY/PRACTICUM: SUSPENSION AND STEERING

Credits: 2 Course Offering: Fall Only
Prerequisites: AST100, AST140
Corequisites: None
This theory/practicum course builds on AST140, offering students a more in-depth conceptual understanding of suspension and steering, and providing them with the opportunity to apply this knowledge in continually developing their automotive skills.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Perform general suspension and steering systems diagnostics.
2. Repair steering & suspension system faults.
3. Adjust wheel alignment angles.
4. Diagnose and repair wheel & tire failures.

AST250 THEORY/PRACTICUM: BRAKES

Credits: 2 Course Offering: Spring Only
Prerequisites: AST100, AST150
Corequisites: None
This theory/practicum course builds on AST150, offering students a more in-depth conceptual understanding of brakes, and providing them with the opportunity to apply this knowledge in continually developing their automotive skills.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Diagnose general brake system malfunctions.
2. Repair the hydraulic system.
3. Ascertain and remedy drum brake system failures.
4. Diagnose and repair disc brake system failures.
5. Diagnose and repair antilock brake and traction control systems.

AST260 THEORY/PRACTICUM: ELECTRICAL/ELECTRONIC SYSTEMS

Credits: 4 Course Offering: Spring Only
Prerequisites: AST100, AST160
Corequisites: None
This theory/practicum course builds on AST160, offering students a more in-depth conceptual understanding of electrical / electronic systems, and providing them with the opportunity to apply this knowledge in continually developing their automotive skills.
Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Perform advance body electrical system diagnostics.
2. Test and service battery.
3. Diagnose and repair faults in the charging and starting system.

AST270 THEORY/PRACTICUM: HEATING AND AIR CONDITIONING

Credits: 2 Course Offering: Fall Only
Prerequisites: AST100, AST170
Corequisites: None
This theory/practicum course builds on AST170, offering students a more in-depth conceptual understanding of heating and air conditioning systems, and providing them with the opportunity to apply this knowledge in continually developing their automotive skills.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Perform advance diagnostics on air conditioning and heating systems.
2. Replace air conditioning and heating system components with minimal supervision.
3. Diagnose and repair operating and control system.

AST280 THEORY/PRACTICUM: ENGINE PERFORMANCE

Credits: 5 Course Offering: Spring Only
Prerequisites: AST100, AST180A, AST180B
Corequisites: None
This theory/practicum course builds on AST180A and AST180B, offering students a more in-depth conceptual understanding of engine performance, and providing them with the opportunity to apply this knowledge in continually developing their automotive skills.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Perform advance engine performance diagnostics.
2. Locate faults in the computerized control system with minimal supervision.
3. Diagnose and repair ignition, fuel, air induction, and exhaust related problems with minimal supervision.

Early Childhood Development (CD)

CD110 EARLY CHILDHOOD EDUCATION ORIENTATION

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
The course provides an overview of entry-level knowledge and skills in the early childhood education field. The course also covers developmentally appropriate practices (DAP) in early childhood, careers, employment skills, and opportunities for those entering the early childhood education field.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Differentiate among the physical, social, emotional, and cognitive developmental domains related to early childhood.
2. Integrate activities and components of a developmentally appropriate learning environment for young children.
3. Produce a written Student Education Plan based on exploration of various careers in early childhood education.

CD140 NUTRITION AND PHYSICAL HEALTH

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course provides students with strategies in promoting the health, safety and nutrition of young children in the childcare settings. This includes safety and health assessments, taking care of ill children, meal planning, detecting child abuse and neglect, working with families, and planning activities for young children that teach health, safety and nutrition.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Demonstrate strategies that promote best practices in nutrition within the early childhood environment.
2. Design age appropriate physical activities for young children from birth to eight years.
3. Create healthy and balanced meal plans for young children to include recommended portion sizes.

CD180 LANGUAGE ARTS IN EARLY CHILDHOOD

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
Students will develop knowledge and skills of language development in young children, including oral and written language. Emphasis is placed on planning and implementation of activities which enhance and develop language and literacy skills. In addition, students will develop resources and materials that are appropriate to teach language arts to young children.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate knowledge in the language development domains as it relates to young children.
2. Create activities that build literacy skills.
3. Plan and implement a lesson plan for young children which develop and enhance language skills.

CD221 CHILD GROWTH & DEVELOPMENT

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course provides students with an overview of the interrelationship between physical, emotional, cognitive, language and social growth in young children from conception through the primary school years. Topics include prenatal care, brain research, and the effects of heredity and environment. The roles of the family, culture, community and society and how they impact development is also explored.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe the social, physical, and cognitive development of children birth to age eight.
2. Explain factors that promote a healthy pregnancy and first few years of life.
3. Describe the impact of family, culture, community and society on development.

CD240 COGNITIVE & CREATIVE DEVELOPMENT IN EARLY CHILDHOOD

Credits: 3 Course Offering: As Needed
Prerequisites: CD221 or ED220
Corequisites: None
In this course, students will plan and implement developmentally appropriate practices that promote the cognitive and creative domains of development in young children birth to age eight. Topics include science, mathematics, cognitive, creative, visual and performing arts, and literacy.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Incorporate creativity in all content areas of developmentally appropriate early childhood environments through original lesson plan design.
2. Plan, write, and implement creative lessons and activities for young children that incorporate cognitive and creative goals aligned with Guam Early Learning Guidelines, Common Core, and/or Guam Dept. of Education standards.
3. Demonstrate current practices and methods for teaching science, mathematics, cognitive, creative, arts, and literacy.

CD260 SOCIAL & EMOTIONAL DEVELOPMENT

Credits: 4 Course Offering: As Needed
Prerequisites: CD110 or CD221 (or concurrently)
Corequisites:
This course teaches skills needed to promote social and emotional development in young children and use positive guidance strategies to handle inappropriate behavior. Temperament, parenting styles, and child rearing issues such as feeding, potty training, and tantrums are a few of the topics covered. This course also provides students opportunities to plan and implement activities that promote children's self-concept, emotional, social and pro-social development.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate knowledge in the domains of social and emotional development in young children.
2. Plan and implement a lesson plan which promotes self-concept, emotional, social and/or pro-social development.

3. Apply skills in using positive guidance in an early childhood setting.

CD285 CHILDCARE MANAGEMENT

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course provides students with an overview of local requirements for starting and managing a profitable childcare business on Guam. Topics covered include financing, marketing, staff supervision, staff training, writing policies, licensing requirements, and other operating procedures.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Identify current laws and regulations controlling the child care industry.
2. Explain information needed in a business plan for the start-up of a child care center.
3. Create a handbook of operating policies and procedures.

CD292 EARLY CHILDHOOD EDUCATION PRACTICUM

Credits: 3 Course Offering: As Needed
Prerequisites: Department Chair approval
Corequisites: None
This course provides students with the opportunity to demonstrate professionalism and employ reflective practices while working and/or volunteering 135 hours in an early childhood (birth to third grade setting) under the supervision of a mentor. Practicum students will be required to assist in the classroom as needed which may include conducting observations and assessments, attending meetings, creating a conducive learning environment, and implementing age-appropriate activities.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Advocate appropriate practices for children, model professionalism, and demonstrate ethical conduct based on guidelines from the National Association for the Education of Young Children (NAEYC).
2. Communicate with students, staff and families including those from diverse backgrounds and special populations.
3. Implement various developmentally and age-appropriate teaching, assessment and guidance strategies needed to effectively work with young children from birth to age eight.

Civil Engineering Technology (CE)

CE121 PROPERTIES OF MATERIALS

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course is a study of the mechanical, thermal, electrical, and chemical properties of metals, alloys, plastics, and other nonmetallic materials used in construction.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. List all the types of materials used in the building construction field.
2. Describe basic properties that differentiae the various types of building material.
3. Identify the correct application for any given material used in the construction industry.

CE210 STATICS

Credits: 3 Course Offering: As Needed
Prerequisites: MA161B, SI141
Corequisites: None
Statics is the study of bodies at rest - in a state of balance with their surroundings. Through the applications of the principles of statics, several questions emerge: What load will the column have to support? What is the tension of the bridge cable? What is the mechanical advantage of the block and tackle? Statics is an analytical subject and it makes extensive use of mathematics in all of its forms: Algebra, Geometry, and Trigonometry.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Successfully apply Algebra, Geometry, and Trigonometry as needed when solving problems.
2. Identify and describe key concepts of Force Systems, Center of Gravity, Equilibrium, Force Analysis of Structures, Friction, and Movement.
3. Identify and analyze given information and data and employ proper procedures and formulas to solve problems.
4. Solve problems using appropriate technology.

CE211 PLANE SURVEYING I

Credits: 3 Course Offering: As Needed
Prerequisites: MA161B Corequisites: None
A beginning course in surveying techniques designed to give the student an understanding of the fundamentals of chaining, leveling, and proper use of the transit. Care and adjustment of instruments and office procedure are also considered. Provision is made by appropriate fieldwork for practical application of the techniques learned.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe the fundamentals of chaining, leveling, and use of transit as it relates to plane surveying.
2. Properly care, adjust, and use equipment in the plane surveying field.
3. Given a set of tasks, demonstrate proper use and application of surveying equipment and tools.

CE213 HYDRAULICS

Credits: 3 Course Offering: As Needed
Prerequisites: MA161B, SI141
Corequisites: None
This course is designed to present the basic principles to fluid mechanics and the application of those principles to practical applied problems. Students will develop skills in the solution of problems involving fluid statics, flow of fluids in pipes, open channel flow, flow measurement, and forces developed by fluids in motion. The course will also educate students in water treatment practices and community water systems components.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify and describe basic fluid mechanics principles.
2. Analyze water treatment operations and generate solutions to problems.
3. Solve problems using appropriate tools including logic, models and applicable formulas.
4. Apply knowledge by functioning as an aide to a civil engineer or a sanitary engineer in the design of ducts, piping and channels for irrigation systems.

CE214 STRUCTURAL DESIGN

Credits: 4 Course Offering: As Needed
Prerequisites: CE221 Corequisites: None
This course will acquaint the student with all the facts of concrete and structural steel design. This includes having the student become familiar with various structural members of bridges and buildings and provisions of AISC (American Institute of Steel construction) and ACI (American Concrete Institute) publications in designing steel and concrete structural members. The first part of the course deals with structural steel design; the latter portion deals with concrete structural design. Various structural members are addressed- first as to their functions and second as to types of loading. The publications and specifications of AISC are closely followed to include the use of tables and design aids.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Apply provisions of AISC and ACI publications in designing steel and concrete structural members.
2. Identify and make use of appropriate tables and design aids as required.
3. Apply knowledge by functioning as an aide to an architect or an engineer in the design of structural members.

CE215 CONSTRUCTION PROCEDURES

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
A study of construction organization, building codes, foundations, construction materials, methods and techniques of cast-in-place reinforced concrete, precast and pre-stressed concrete, steel and masonry construction, wood and plastics, thermal and moisture protection and building equipment.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain the difference between precast and post stress concrete.
2. Describe the process involving the construction of a building foundation.
3. Chronologically sequence the steps related to the construction process.

CE221 STRENGTH OF MATERIALS

Credits: 3 Course Offering: As Needed
Prerequisites: CE210 Corequisites: None
A study of the relationship between the stresses, strains, deformations, and loads applied to structural members. Axial, torsional, bending and combined stresses are discussed. Stability and the buckling of columns are introduced.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe the strengths and limitations of various types of building materials.
2. Discuss the testing process involved in determining stress, strains, deformations, and loads.
3. Explain typical applications for various types of construction materials.

CE222 PLANE SURVEYING II

Credits: 3 Course Offering: As Needed
Prerequisites: CE211 Corequisites: None
This course is a continuation of Plane Surveying I dealing with modern surveying including construction surveying and surveying for engineering design. The students are introduced to modern surveying technology including Global Positioning Systems (GPS) and Geographic Information Systems (GIS). Reconnaissance and field procedures and methods are discussed and the students will be divided into survey teams and given area assignments to perform survey fieldwork including topographic surveys for contour maps. The students are exposed to the prospects of employment as survey and civil engineering technicians.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Successfully apply Mathematics including Algebra, Geometry, and Trigonometry as needed to solve surveying problems.
2. Demonstrate a variety of surveying techniques.
3. Apply appropriate skills using proper surveying instruments given various surveying tasks.
4. Solve surveying problems using technology such as calculators or computers, total stations, global positioning systems, or leveling instruments as appropriate.

CE224 HIGHWAYS

Credits: 3 Course Offering: As Needed
Prerequisites: MA161A, CE211, CE213
Corequisites: None
This course introduces the different aspects of Traffic and Highway Engineering and the potential employment opportunities in the field. This course provides an overview of the relevance of roadway transportation in our society, introduces basic concepts of Highway Safety, Traffic Engineering, Level of Service, Intersection Design, Signal Timing, Transportation Planning, Forecasting Travel Demand, the Environmental Process in roadway projects, Geometric Design, Roadway Drainage, Roadway Geotechnical Engineering, and Pavement Design.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe current state of the art and science of Highway Engineering.
2. Apply the concept of Level of Service in highways and intersections.
3. Solve problems of Signal Timing.
4. Solve problems relating to basic roadway design.
5. Solve problems involving pavement design.

CE225 CONSTRUCTION PLANNING & ESTIMATING

Credits: 3 Course Offering: As Needed
Prerequisites: AE121, CE215, MA161A
Corequisites: None
This course covers methods of estimating construction costs including excavation, highway, structures, piling and foundations; methods to determine qualities of materials, equipment, labor, and money required for construction projects; characteristics and capabilities of work equipment; methods of obtaining unit cost of in place construction; and field reporting practices and responsibilities of field inspection.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Determine costs needed for various construction projects.
2. Estimate the amount of time required to complete a given construction project.
3. Apply critical thinking to determine labor hours versus equipment costs versus material costs.

Chamorro Language (CH)

CH110 CHAMORRO I

Credits: 4 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course provides basic Chamorro language rules, simple conversation skills, and vocabulary for students with little to no knowledge of the language. Students will learn to use Chamorro to initiate basic conversations, communicate about themselves, and negotiate basic exchanges in various social settings. Students will gain knowledge of Chamorro history and culture to better understand the language.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate basic conversation skills in Chamorro
2. Comprehend basic written Chamorro
3. Compose short paragraphs
4. Memorize at least 300 vocabulary words
5. Demonstrate basic awareness of Chamorro language, culture, customs, familial names, and culturally relevant events

CH111 CHAMORRO II

Credits: 4 Course Offering: As Needed
Prerequisites: CH110 Corequisites: None
This course is a continuation of CH110 Chamorro I. Students will increase their ability to perform a range of language functions in self-expression and social exchanges by reviewing and building upon basic language rules, conversation skills and vocabulary. Students will continue to develop an appreciation for Chamorro language and culture.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Compose sentences orally and in written form in Chamorro.
2. Apply knowledge and skills learned in CH110 with a focus on increasing basic proficiency in self-expression and social interactions.
3. Express themselves in a range of real-life tasks.

Intelligence Analysis (CHLS)

CHLS102 INTELLIGENCE ANALYSIS AND SECURITY MANAGEMENT

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
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.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate operational knowledge of intelligence gathering and analysis pertinent to homeland security and other threats facing government and private sectors.
2. Outline basic intelligence policies and functions of the United States Government.
3. Articulate the meaning and purpose for the Intelligence Reform & Terrorism Prevention Act of 2004.

Criminal Justice (CJ)

CJ100 INTRODUCTION TO CRIMINAL JUSTICE

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course offers an overview of the criminal justice system from its early historical development to its evolution within the United States. It also identifies the various agencies of justice-law enforcement, courts, corrections, and the juvenile justice system, their functions, expectations and interrelationships.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe the history and development of the Criminal Justice System.
2. Identify the role of the Criminal Justice System in contemporary society.

3. Describe the functions of law enforcement, courts and corrections.
4. Describe the functions of probation, parole and the Juvenile Justice System.

CJ101 JUVENILE JUSTICE PROCESS

Credits: 3 Course Offering: As Needed
Prerequisites: CJ100, EN110 placement or equivalent
Corequisites: None
This course is designed to provide students with a fundamental understanding of the history, philosophy, and practical application of the American Juvenile Justice System. Students will examine the juvenile justice responsibilities of police, courts, and juvenile corrections with additional emphasis on current practices of Juvenile Justice agencies in Guam
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Describe the history, philosophy, and development of the Juvenile Justice System.
2. Identify and distinguish the various components of the Juvenile Justice System.
3. Apply Title 19 Guam Code Annotated, Chapter 5, The Family Court Act, to hypothetical situations.

CJ102 FIRST RESPONDER

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
The First Responder course shall be at least 48 hours of classroom training. It aims to provide training in emergency medical care for those who are apt to be the first person responding to an accident. When the course is completed, the student will possess the same knowledge of patient care as the EMT, but not the same equipment skills. Can be repeated for credit.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Diagnose emergency situations and provide appropriate emergency treatment.
2. Explain and discuss the role of a First Responder.
3. Demonstrate the First Responder skill set at an acceptable level as required by local regulations.
4. Demonstrate proficiency in BLS and CPR by passing the final skills practical exams and written exam required by the DOT to become a certified First Responder.

CJ104 DYNAMICS OF SUBSTANCE ABUSE

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course is designed to introduce students to the problems of substance abuse in our society. Students will examine the history of dangerous drug use, basic pharmacology and classification, the social impact of drug abuse, physical and psychological consequences of drug use and dependence, various treatment modalities, legal implications of illicit drug use, and current law enforcement efforts.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Articulate the medical, social and/or psychological aspects of addiction.
2. Demonstrate understanding of the different schedules under the Controlled Substances Act.
3. Identify and apply the detection, suppression, apprehension and prosecution procedures of substance abuse violations.

CJ107 INTRODUCTION TO CORRECTIONS

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
An introduction and overview of fundamental processes, trends, and practices of juvenile and adult probation, institutional treatment, parole, and contemporary community-based correctional programs, both public and private will be covered in this course. Included is a review of the history and philosophy of corrections, with emphasis on the constitutional rights of offenders. **Student Learning Outcomes (SLOs)**
Upon successful completion of this course, students will be able to:

1. Explain and analyze the correctional process, the correctional system, and the role of corrections in contemporary society.
2. Evaluate the history and evolution of the correctional process.
3. Identify the various correctional systems.
4. Examine the administration and trends in corrections.

CJ122 INTRODUCTION TO FORENSIC SCIENCE

Credits: 4 Course Offering: As Needed
Prerequisites: CJ100 Corequisites: None
Cross Listed as SI122. This course introduces students to the field of forensic science. Students will be able to identify the various principles, methods and procedures used in the preservation, collection, processing, and investigation of the crime scene as well as identify the various scientific techniques used to evaluate and analyze the evidence to resolve criminal matters. Students will also be familiar with some of the legal and ethical issues in forensic science.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe the history and development of forensic science.
2. Identify the role of forensic science within the criminal justice system.
3. Identify the various analytical tools used to evaluate, process, investigate and adjudicate criminal cases.
4. Describe the various scientific techniques used to preserve, collect and analyze evidence.
5. Identify some of the legal and ethical issues in forensic science.

CJ126 OFFICER SURVIVAL

Credits: 3 Course Offering: As Needed
Prerequisites: Instructor permission
Corequisites: None
This course provides law enforcement academy recruits with the knowledge and skills necessary to perform a variety of police tasks safely and effectively. This course is designed for career public safety officers and recruits. Instructor permission is required.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify the safety techniques to use when approaching a potentially dangerous or life threatening situation.
2. List street survival skills an officer should acquire while on duty.
3. Demonstrate the ability to apply officer safety and street survival skills at an acceptable level in mock situations.

CJ126L OFFICER SURVIVAL LABORATORY

Credits: 1 Course Offering: As Needed
Prerequisites: CJ126 Corequisites: None
This course provides students with the opportunity to practice and demonstrate “hands on” application of survival skills learned in CJ126. The laboratory may be conducted by interested law enforcement agencies at the conclusion of the Basic Law Enforcement Academy. This course is designed for career public safety officers and recruits. Instructor permission is required.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Practice the various officer safety and street survival skills in mock situations.
2. Demonstrate proficiency in the use of the various officer safety and street survival skills at acceptable levels.

CJ132 EMERGENCY VEHICLE OPERATOR COURSE (EVOC)

Credits: 3 Course Offering: As Needed
Prerequisites: Permission by CJ Advisor/Department Chair
Corequisites: None
This course is restricted to students enrolled the Criminal Justice Academy or Law Enforcement Cycle. It prepares students and fire recruits to safely operate emergency vehicles used by their respective agencies.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify major components of an emergency response vehicle.
2. Explain the local and federal laws governing the operations in responding to emergency situations.
3. Utilize basic emergency vehicle operator skills during controlled, emergency response scenarios.

CJ135 FIREARMS USE/SAFETY/CARE

Credits: 3 Course Offering: As Needed
Prerequisites: Current firearms identification card
Corequisites: None
This course is restricted to students enrolled in the Criminal Justice Academy or Law Enforcement Cycle. It is designed to teach students the proper use and care of firearms. Emphasis is placed on safety, use of

deadly force, marksmanship, judgmental shooting, and the care and cleaning of weapons.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify the physical attributes and mechanics of a firearm.
2. Apply basic firearm safety techniques.
3. Identify the various laws related to firearms use.
4. Practice safe use of firearms within a controlled environment.
5. Demonstrate use of firearms at prevailing acceptable and passing levels.

CJ140 DEFENSIVE TACTICS

Credits: 4 Course Offering: As Needed
Prerequisites: Instructor permission
Corequisites: None

Stressing control through verbal persuasion is strongly preferred to physical force. This course is especially designed to control prisoners and maximize protection of the public, corrections officers, and inmates. Physical fitness is emphasized. This course is designed for career public safety officers and recruits.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Perform control and self-defense tactics.
2. Demonstrate understanding of prevention, intervention and resolution techniques.
3. Demonstrate how to apply the use of force and the continuum of force.
4. Explain the legal issues involved in handling persons in custody, detainees, prisoners and inmates.

CJ145 PHYSICAL DEVELOPMENT

Credits: 3 Course Offering: As Needed
Prerequisites: Instructor permission
Corequisites: None

This course is designed to develop a positive attitude toward physical fitness and to understand the relationship between physical fitness, productivity, health, and safety. This course is designed for career public safety officers and recruits.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Develop a positive attitude toward physical fitness.
2. Demonstrate understanding of the relationship between physical fitness, productivity, health, and safety.
3. Participate in physical development exercises.
4. Demonstrate the use of the various physical development exercises.

CJ148 TRAFFIC LAW ENFORCEMENT

Credits: 3 Course Offering: As Needed
Prerequisites: CJ100, CJ150
Corequisites: None

This course provides students with the knowledge and skills necessary in the identification and enforcement of Guam's traffic law enforcement duties. Students will be acquainted with the terminology, facts and concepts of pedestrian, bicycle and motor vehicle violations to include an understanding of Title 16 Guam Code Annotated, the Vehicle Code of Guam. Additionally, students will be able to recognize what immediate steps are required at a traffic related scene necessary to protect life and property, how to give traffic citations, how to deal with DDUI offender cases, how to operate radar and laser devices, and how to conduct traffic direction and accident investigation.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Interpret and apply Title 16, Guam Code Annotated (the Vehicle Code of Guam) and related statutes to hypothetical situations. Explain the various traffic statutes and offenses.
2. Demonstrate the use operations, and limitations of radar laser and other traffic enforcement devices.
3. Demonstrate Guam Police Department (GPD) protocols concerning the enforcement of Guam's Safe Street Act laws including DUI Checkpoint Procedures, DUI Traffic Stops, Field Sobriety and Breathalyzer Testing and Arrest and Post-Arrest protocols.
4. Demonstrate GPD Red-Light Running and Buckle-Down Protocols.

CJ150 CRIMINAL PROCEDURE

Credits: 3 Course Offering: As Needed
Prerequisites: CJ100, EN110 placement or equivalent
Corequisites: None

This course provides an overview of the criminal justice process, the court system, and the U.S. Constitution with emphasis on the method of case interpretation of the U.S. Supreme Court and the Criminal Procedure Code of Guam.

Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Identify the various legal sources that establish the basic rights of individuals accused or convicted of crimes in the United States.
2. Describe the various stages and established procedures of the American Criminal Justice System.
3. Identify landmark US Supreme Court and other appellate court decisions that impact the criminal justice process.
4. Apply and demonstrate the use of the Guam Law and case law to hypothetical situations.

CJ200 CRIMINAL LAW

Credits: 3 Course Offering: As Needed
Prerequisites: CJ100, EN110 placement or equivalent
Corequisites: None
This course is designed to introduce students to the history, philosophy, and application of U.S. Federal and Guam criminal laws. It provides students with an understanding of crime classifications, matters affecting criminal responsibility, criminal statutes including those of Guam, and the role of criminal law in contemporary society.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Describe the origin and evolution of U.S. Criminal Laws and the U.S. Federal and Guam/State Court Systems and their relationship to each other.
2. Identify the basic principles of Criminal Law.
3. Distinguish the elements of various common law and statutory crimes.
4. Apply Guam's substantive criminal laws under the Guam Code Annotated (GCA) to hypothetical situations.

CJ204 INTRODUCTION TO CRIMINOLOGY

Credits: 3 Course Offering: As Needed
Prerequisites: CJ100, SO130 or PY120
Corequisites: None
This course provides a fundamental understanding of criminal behavior, crime topologies, and the various theories of crime causation. Students will also explore the efforts of society to remedy, correct, and prevent crime and delinquency.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Identify the role of the criminal justice system in criminology.
2. Compare and contrast major theories of crime causation and typologies.
3. Explain the evolution of criminology as it relates to the current criminal justice system.

CJ205 REPORT WRITING FOR LAW ENFORCEMENT

Credits: 3 Course Offering: As Needed
Prerequisites: Instructor approval and placement into EN110 or equivalent
Corequisites: None
This course is designed to emphasize the key principles and techniques in the development of various types of report writing for law enforcement professionals. Report writing proficiency will focus upon evidence gathering, report organization, sentence and content development. Formerly CJ205 Police Report Writing.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Organize relevant information to write an effective report.
2. Differentiate amongst the various types of evidence required for different law enforcement report forms.
3. Demonstrate writing techniques for effective report writing.

CJ206 SOCIAL VALUES & THE CRIMINAL JUSTICE PROCESS

Credits: 3 Course Offering: As Needed
Prerequisites: SO130 Corequisites: None
This course is designed to provide an in-depth exploration consistent with the philosophy that social value and ethics are basic principles of a sound criminal justice process, and the roles of the administration of justice practitioners in relation to the public they serve. Through interaction and study, the student will become aware of the interrelations and role expectations of the human dimension required by practitioners in developing empathy, sensitivity and acceptable behavior. Instruction on the importance of open communication and accountability to those within and without the justice process is explored. Permission from instructor and/or advisor is required.
Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Explain and analyze community-based philosophy of policing.
2. Demonstrate understanding of the role of police and professionalism
3. Identify the various ethical issues of policing.
4. Identify how political, social, and economic issues relate to law enforcement.

CJ209 CONCEPT OF POLICE OPERATIONS

Credits: 3 Course Offering: As Needed
Prerequisites: CJ100, EN110 placement or equivalent
Corequisites: None
This course provides students with operational knowledge needed to function successfully in a modern police agency. Concepts are particularly useful for first-line supervisors and managers. Topics include effective supervision, communication skills, problem solving, time management, motivation and morale, effective discipline, interpersonal conflict, stress management, productivity issues, and performance appraisals.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Explain and evaluate the structure, organization, and management of police or other law enforcement agency.
2. Explain and analyze the various types of police operations and the methods and strategies used to implement policies and other executive decisions.
3. Demonstrate understanding of the interrelations, role, conflict and trends of police and law enforcement in modern society.

CJ225 CRIMINAL INVESTIGATION

Credits: 3 Course Offering: As Needed
Prerequisites: CJ100, CJ205, EN110 placement or equivalent
Corequisites: None
This course provides students with the knowledge and technical skills necessary to successfully investigate crime scenes, identify suspects, and successfully present evidence in court. Skills learned and practiced include processing crime scenes, preserving and evaluating evidence collected, interviewing witnesses and suspects, case preparation, and presenting evidence in court.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Apply the various methods used in investigating criminal cases to hypothetical situations.
2. Explain and evaluate the investigation, processing, and preservation of a crime scene.
3. Identify and analyze the various methods used to obtain information.

CJ250 POLICE ORGANIZATIONAL THEORY

Credits: 3 Course Offering: As Needed
Prerequisites: CJ100, EN110 placement or equivalent
Corequisites: None
This course examines and analyzes the traditional concepts, techniques, policies and operating systems in the police component of the criminal justice system. Basic knowledge of the police organizational function, structure, processes, and behavior is emphasized. Theories related to the practice applied to the administration of justice process and the comprehension of administrative phenomena is explored. Course offering:
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Apply the various management theories and styles.
2. Explain and evaluate the structure and organization of police and other law enforcement agencies.
3. Identify and analyze the concepts of leadership, decision making, accountability, responsibility, and liability.

CJ292 CRIMINAL JUSTICE PRACTICUM

Credits: 3 Course Offering: As Needed
Prerequisites: CJ100, CJ150, CJ200
Corequisites: None
This course is capstone for the Associate of Science Degree in Criminal Justice and a required course for the Certificate in Criminal Justice. In addition, this course allows students first hand, practical experience in observing and participating in the daily operations of an agency in a criminal justice related field. the principles, theories and methodologies acquired in the Criminal Justice courses will be applied to actual situations. The experience will create an awareness for specific problems encountered in a particular criminal justice related agency to further acquaint the student with terminology, facts and conceptions relating to that

agency and to develop within the student an understanding of the importance of that agency's roles in the criminal justice process. Supervised work experience affords students the opportunity to develop skills necessary to succeed in the Criminal Justice field.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Integrate classroom knowledge and theories with outside work experience.
2. Develop practical work related skills.
3. Explain the operations of a criminal justice related agency.
4. Practice the daily operations policy of a criminal justice related agency.

Cosmetology (CM)

CM101 COSMETOLOGY I

Credits: 10 Course Offering: As Needed
Prerequisites: None Corequisites: None
The primary purpose of this course is for students to acquire basic manipulative skills in shampooing, haircutting, nail care, and skin care with compliance to infection control and all safety operations in order to obtain licensure and competency in entry-level positions required in the field of cosmetology. Students will have the opportunity to complete 450 hours of in-class and salon practices under the supervision of a licensed cosmetologist.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Perform analytical skills to determine the desired look for a client's hair, skin, and nails.
2. Apply entry level cosmetology techniques for hair, skin, and nails.
3. Adhere to the Guam Board of Cosmetology's Rules and Regulations while performing cosmetology services.
4. Utilize proper sanitation and safety guidelines during all services rendered.

CM102 COSMETOLOGY II

Credits: 10 Course Offering: As Needed
Prerequisites: CM101 Corequisites: None
CM102 Cosmetology II This lecture/lab course is offered in the second semester of the program. It includes instruction in haircutting, hair coloring, chemical texture, principles of hair design, hairstyling, and pedicure services. Successful completion of this course will help students reach the goal of obtaining licensure and competency in entry-level positions required in the field of cosmetology. Students will have the opportunity to complete 450 hours of in-class and salon practices under the supervision of a licensed cosmetologist.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Perform procedures in various haircutting, styling, chemical texture, and hair coloring services to a client's satisfaction.
2. Model basic nail services in a class and/or salon setting, to include foot and leg massage.
3. Demonstrate procedures to perform various haircutting, styling, chemical texture, and hair coloring services to a costumer's satisfaction.
4. Apply critical thinking and problem solving skills, adhering to the Guam Board of Cosmetology's Rules and Regulations, while conducting cosmetology services.

CM104A COSMETOLOGY III

Credits: 5 Course Offering: As Needed
Prerequisites: CM102 Corequisites: None
This course emphasizes skills introduced and practiced in CM101 Cosmetology I and CM102 Cosmetology II, to develop a mastery skill level in a salon/lab environment. This lab opened to the public, is designed to give the students the opportunity to perfect their cosmetology skills. The level of performance rendered, is at minimum needed for an entry-level skilled position in the field of cosmetology (450 clock hours). Formerly CM 104 Course

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Respond to customers appropriately when performing hair cutting services.
2. Successfully apply the necessary skills and knowledge for hair-color services.
3. Demonstrate the ability to perform chemical texture services.

CM104B COSMETOLOGY IV

Credits: 5 Course Offering: As Needed
Prerequisites: CM102, CM104A
Corequisites: None
This course continues to emphasize skills introduced and practiced in CM101 Cosmetology I and CM102 Cosmetology II, to develop a mastery skill level in a

salon/lab environment. This lab opened to the public, is designed to give the students the opportunity to perfect their cosmetology skills. The level of performance rendered, is at minimum needed for an entry-level skilled position in the field of cosmetology (450 clock hours). Formerly CM 104

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Respond to customers appropriately when performing hair cutting services.
2. Successfully apply the necessary skills and knowledge for hair-color services.
3. Demonstrate the ability to perform chemical texture services.

Computer Science (CS)

CS101 INTRODUCTION TO COMPUTER SYSTEMS & INFORMATION TECHNOLOGY

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

This course provides students with an overview of computer technology, computer hardware and software, data communications, Internet resources, programming concepts and other technologies that are an integral part of everyday life.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Apply knowledge of computer systems and information technology such as history, terminology, algorithms, and other basic concepts.
2. Choose the proper application to produce a desired result.
3. Navigate the Internet using a variety of resource tools.

CS102 COMPUTER OPERATIONS

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

This course features hands-on experience in multiprogramming computer systems with various I/O devices. Operation procedures are given on the data entry stations, workstations, diskette drives, and system printers. Students learn control commands of display and console stations, control command statements, supplied procedures, utility programs, and program products. They are also introduced to the organization of a data processing center and its operations procedures.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Be able to operate single user and multi-user operating systems.
2. Use system utilities at the basic level on AS/400.
3. Create a simple menu system using Command Language (CL) program and Screen Design Aid (SDA).

CS103 REPORT PROGRAM GENERATOR (RPG)

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

This course provides the student with the programming concepts and techniques necessary to solve business type problems. Students will learn program logic. They are also taught how to code, compile, test, debug, and execute programs. RPG (Report Program Generator) is the programming language used in this course.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Comprehend basic syntax and command structure of RPG.
2. Properly use commands to create programs to solve problems.
3. Debug programs to find syntax and logical errors.

CS104 VISUAL BASIC PROGRAMMING

Credits: 3 Course Offering: Fall & Spring
Prerequisites: CS101 Corequisites: None

This course covers the introductory fundamentals of the Visual Basic programming language. Students will learn object oriented and event-driven programming concepts and develop applications using Visual Basic. Permission from instructor and/or from a computer science advisor is required.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe basic syntax and command structure of Visual Basic Programming.
2. Properly use commands to create programs to solve problems.
3. Debug programs to find syntax and logical errors.

CS110 INTRODUCTION TO THE INTERNET

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course introduces the student to the basic concepts of the Internet and explores the latest online tools and technologies.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Use a variety of Internet tools to connect, communicate, and interact online.
2. Evaluate information obtained online for reliability.
3. Explain positive and negative social issues when using the Internet.

CS112 INTRODUCTION TO LINUX

Credits: 3 Course Offering: Fall
Prerequisites: None Corequisites: None
Introduction to Linux course presents students with an open source alternative to Windows operating system. This course discusses installation, simple administrations, and usage of Linux systems as both workstation and server. Questions about where to find, how to install and configure, and how to use open source software will be covered.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify practical differences between Windows and Linux operating systems.
2. Install a Linux workstation and perform a simple configuration.
3. Use Linux system for everyday purposes.

CS151 WINDOWS APPLICATIONS

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
The students will learn fundamental nature of microcomputers: the hardware devices that make up the physical machine, the operating systems, and the major types of application software. Students are exposed to the concepts and applications of the word processing, graphics, desktop publishing, spreadsheet, database, and communications software. They are shown the far reaching effects of computers and technology, and the applications that computers have to their own lives. Finally, the course provides students hands-on experience with real world applications using the Windows environment and the application software for Windows: Word Processing, Spreadsheet, Database and Presentation.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Understand the basic functionality of Microsoft Word, Excel, Access, and PowerPoint.
2. Apply knowledge of Microsoft applications in completion of projects and activities.
3. Integrate use of Microsoft applications in the Windows environment.

CS152 MACINTOSH APPLICATIONS

Credits: 3 Course Offering: As Needed
Prerequisites:
Corequisites: None
The students will learn fundamental nature of microcomputers: the hardware devices that make up the physical machine, the operating systems, and the major types of application software. Students are exposed to the concepts and applications of the word processing, graphics, desktop publishing, spreadsheet, database, and communications software. They are shown the far reaching effects of computers and technology, and the applications that computers have to their own lives. Finally, the course provides students hands-on experience with real world applications using the Macintosh environment and the application software for Macintosh: Word Processing, Spreadsheet, Database and Presentation.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Understand the basic functionality of Microsoft Word, Excel, Access, and PowerPoint.
2. Apply knowledge of Microsoft applications in completion of projects and activities.
3. Integrate use of Microsoft applications in the Macintosh environment.

CS202 COBOL

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
The purpose of the course is to teach computer programming in COBOL (Common Business Oriented Language). A number of practical programs are written. Program problems deal with processing small volume of data using workstation keyboard and large volume of data using the printer and disk/diskette drives. Printer output includes titles, headings, vertical and horizontal spacing, etc. Statements of input/output, data manipulation,

arithmetic, conditional, and procedure branching are covered. Arrays and subscripts, tables, subroutines, files, and other COBOL features are also discussed.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Comprehend basic syntax and command structure of COBOL.
2. Properly use commands to create programs to solve problems.
3. Debug programs to find syntax and logical errors.

CS203 SYSTEMS ANALYSIS & DESIGN

Credits: 3 Course Offering: Fall
Prerequisites: CS101 and CS103 or CS104 or CS202
Corequisites: None

This course will emphasize systems analysis and stress information flow as the best approaches to understanding business data processing requirements. Computer hardware/software, systems design, and systems management will be described. Organizational aspects will be explained and examples of various systems will be presented.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Investigate the initial system request.
2. Analyze various aspects of the system request, and produce system requirement documents.
3. Design the solution to meet the system requirement documents (virtual solution).
4. Develop program codes to meet the system requirement (actual solution).
5. Implement the actual solution into the system and fine tune it to best meet the needs of the users.

CS204 C++ PROGRAMMING

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

The purpose of the course is to teach students how to use the C++ programming language. The C++ language concepts and methods to be covered include program development, algorithms, data types, operators, expressions, input/output and files, program control, pointers, functions and macros, variable storage and memory models, arrays, data structures, unions, graphics, and BIOS services. Structured program design will be emphasized. It is not recommended to be the students' first programming course.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Use basic syntax and command structure of C++ Language.
2. Properly use commands to create programs to solve problems.
3. Debug programs to find syntax and logical errors.

CS205 NETWORK COMMUNICATIONS

Credits: 4 Course Offering: As Needed
Prerequisites: None Corequisites: None

Networking has become the foundation of the modern world. The interconnection of computers, individuals, and society as a whole has become interdependent. The students will obtain the basic knowledge on Local Area Networks (LANs), Wide Area Networks (WANs), the Internet and the Cloud. They will be able to design a simple network such as a local area network. They will also learn how to keep up with the changing hardware and software and how to maintain networks and expand them as needed.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate an understanding of how the Internet progresses from how we know it today, and how it will continue to evolve.
2. Describe the Open Systems Interconnection model (OSI) and how it characterizes and standardizes the internal functions of a networking communication system by partitioning it into 7 abstraction layers.
3. Design a basic network, make network connections using various access methods and troubleshoot network problems

CS206 JAVA I

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

Students who take this course need not have a previous programming background. This course introduces problem-solving methods and algorithm development using the high-level programming language Java. Students will learn to design, code, debug, and document programs using modern engineering techniques in a PC or Linux based environment. By creating and executing Java applications that leverage the object-oriented features of the Java language, such as encapsulation, inheritance, and polymorphism, students will increase their understanding of how data, classes,

objects and methods interact in an object-oriented environment. Students will also implement error-handling techniques using exception handling.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify basic syntax and command structure.
2. Properly use commands to create programs to solve problems.
3. Debug programs to find syntax and logical errors.

CS210A CONFIGURING WINDOWS SYSTEMS

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

This course is intended for IT professionals who are interested in expanding their knowledge base and technical skills about Windows 7 client. In this course, students learn how to install, upgrade, and migrate to Windows 7 client. Students then configure Windows 7 client for network connectivity, security, maintenance, and mobile computing. This course helps students prepare for the Microsoft Certification Exam 70-680: Windows 7 Configuring.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Perform a clean installation of Windows 7, upgrade to Windows 7, and migrate user-related data and settings from an earlier version of Windows.
2. Secure Windows 7 client computers.
3. Optimize and maintain the performance and reliability of a Windows 7 client computer.

CS211 JAVASCRIPT PROGRAMMING

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

This hands on course will provide students with the skills to design and develop dynamic, interesting and interactive web pages using JavaScript. The basics of web page creation using Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS) will also be introduced.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify JavaScript basic syntax and command structure.
2. Create programs using JavaScript programming language.
3. Integrate JavaScript with HTML and CSS to create dynamic and animated web pages.

CS212 PYTHON PROGRAMMING

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

Python is a general purpose interpretive programming language for a broad range of operating systems. Students will learn the basic concepts and techniques of programming with Python.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify Python basic syntax and command structure.
2. Create programs using Python programming language.
3. Debug Python programs to find syntax and logical errors.

CS213 PHP PROGRAMMING WITH MYSQL

Credits: 3 Course Offering: As Needed
Prerequisites: CS211 Corequisites: None

PHP: Hypertext Preprocessor is an open source programming language that is used for developing interactive Web sites. MySQL is an open source relational database that is often used with PHP. Together, PHP and MySQL are becoming one of the most popular technology combinations for Web site development. This course teaches Web development with PHP and MySQL. At the beginning of the course, students will learn how to install Apache, PHP and MySQL open source free software on the computers. This course covers the basic functionality of PHP and MySQL along with introductions to advanced topics, including using PHP and MySQL to integrate object-oriented programming and how to build Web sites that incorporate authentication and security. At the end of the course, students will be able to use PHP and MySQL to build professional, dynamic and database-driven Web sites.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Write a complete program using PHP programming language.
2. Create a database using MySQL relational database language.

3. Build a professional, dynamic and database-driven website using PHP and MySQL.

CS252 ADVANCED RPG

Credits: 3 Course Offering: Spring
Prerequisites: CS101, CS103
Corequisites: None
This course provides the students with advanced application techniques in computer programming in the RPG/ILE (Report Language Generator/Integrated Language Environment). The concepts of structured programming and top down design, RPG/ILE advanced statements, and utility programs are taught. The students learn how to apply the above concepts to program planning, program design, coding, presentation, and documentation.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Describe basic syntax and command structure.
2. Properly use commands to create programs to solve problems.
3. Debug programs to find syntax and logical errors.
4. Integrate the previously covered material into a larger complex system using RPG/ILE, CL (Command Language), SEU (Source Entry Utility), SDA (Screen Design Aid), and IDDU (Interactive Data Definition Utility).

CS266 ADVANCED JAVA

Credits: 3 Course Offering: Fall
Prerequisites: CS206 Corequisites: None
This course builds on Java course CS206 or its equivalent and covers advanced programming topics. Designed for the more experienced Java developer, the students are expected to have a good working knowledge of the Java programming language before taking this course. This course introduces students to advanced features and concepts of the Java programming language. Students will learn how to use inheritance, interfaces, exception handling, file input and output, and generic types, and how to incorporate graphical user interfaces (GUIs) into their programming applications. Students will also learn how to apply object-oriented design and programming principles to their programs. Course Offering: Fall only **Student Learning Outcomes (SLOs)**
Upon successful completion of this course, students will be able to:
1. Describe and apply advanced Java programming language concepts.
2. Apply advanced object-oriented design techniques and programming skills.
3. Use Java advanced features to create full-featured, easy-to-use Java programs and Java applets.

CS299 COMPUTER SCIENCE CAPTSONE

Credits: 4 Course Offering: As Needed
Prerequisites: CS206 Corequisites: None
This course covers advanced programming topics. Students are expected to have a good working knowledge of Java, C++, PHP, and other programming languages before taking this course. This course provides students with the opportunity to complete at least three significant programming projects, which emphasize on-project definition, testing, presentation, and implementation. The projects demonstrate the knowledge and skills the students have acquired over the course of completing the Computer Science program.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Apply knowledge of fundamental algorithms, advanced features and concepts of the programming languages.
2. Complete and test the fully designed projects.
3. Deliver technical presentations.

CS292 COMPUTER SCIENCE PRACTICUM

Credits: 1-6 Course Offering: As Needed
Prerequisites: Complete at leat 18 credits in Technical Requirements Corequisites: None
This course provides students a supervised work experience where they develop skills necessary to be successful in an information technology position. Formerly CS298.
Student Learning Outcomes (SLOs):
Upon successful completion of this course, students will be able to:
1. Obtain supervised work experience to develop skills necessary to succeed in information technology positions.
2. Demonstrate effective human relation skills with co-workers and subordinates according to the expectations of a supervisor.
3. Apply principles of personal responsibility and ethical behavior to the community and in the workplace.

Construction Trades (CT)

CT100 INTRODUCTION TO CONSTRUCTION TRADES

Credits: 5 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course introduces students to core principles in the construction trades, providing them with the foundational knowledge necessary for study and experiential development of skills in each of GCC's construction trades areas. This course focuses on basic construction safety, construction mathematics, hand tools, power tools, reading of blueprints, basic rigging, communication skills and employability skills. It also focuses on the development of an appropriate attitude as related to professional work, and the acquisition of knowledge and information essential for success in initial pursuit of a career in the construction trades.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe basic knowledge and skills needed in various construction trades areas.
2. Identify the proper names of tools and equipment used in the construction technology field.
3. Develop an appropriate work ethic and attitude necessary to succeed in the construction field.

CT140 INDUSTRIAL SAFETY

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course develops safe working concepts and habits for the prevention of accidents resulting in personnel injury and damage to building facilities and equipment. Students also learn about requirements of federal and local legislation for personnel and equipment safety.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify accident prevention practices within the construction trades industry.
2. Demonstrate proficiency in recognizing safety hazards and corrective measures on a job site.
3. List national (international) and local agencies that provide safety standards and be familiar with available resources.

CT152 FUNDAMENTALS OF PLUMBING

Credits: 4 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course introduces the student to the use, safety, care and maintenance of special tools and equipment for basic cold water supply (pipes, fittings, valves, safety devices, appliances), and drainage systems (sewers, drains, vents, traps, test, and maintenance).

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate understanding of the basic science concepts and core principles related to plumbing and piping.
2. Explain the correct use of tools, supplies, and equipment needed in the plumbing industry.
3. Discuss the various local and global career opportunities for professional plumber/pipe-fitters.
4. Demonstrate basic knowledge of cold water supply and drainage system concepts.
5. Identify and explain the correct use of tools, supplies, and equipment needed in the plumbing field.
6. Discuss industry related safety standards.

CT152A PLUMBING LEVEL I

Credits: 4 Course Offering: As Needed
Prerequisites: CT152 Corequisites: None
This course builds on content from CT152, and introduces students to core principles in plumbing, providing them with the foundational knowledge necessary for more advanced study and experiential development of skills in this trade area. This course focuses on the use, care, safe operations and maintenance of hand and power tools; the use, care and safe handling of supplies and materials; the development of an appropriate attitude as related to professional plumbing work, and the acquisition of knowledge and information essential for success in initial pursuit of a career in plumbing. Specific emphasis is placed on cast-iron pipe and fittings, carbon steel pipe and fittings, corrugated stainless steel tubing, fixtures and faucets, drain, waste and vent systems, and water distribution systems.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate the correct use of tools, supplies, and equipment needed in the plumbing field adhering to all industry safety standards.

2. Develop and exhibit professionalism and work ethic as related to the plumbing and pipefitting career.
3. Demonstrate understanding of cast-iron pipe and fittings, carbon steel pipe and fittings, corrugated stainless steel tubing, fixtures and faucets, drain, waste and vent systems, and water distribution systems.

CT153 INTRODUCTION TO CARPENTRY

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This introductory course is designed to familiarize students with the use, care, safe operations and maintenance of hand and power tools; to develop their skills in the use, care, and safe handling of supplies and materials; and to provide them with occupational information about carpentry.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Identify commonly used tools, supplies, and equipment in the carpentry profession.
2. Explain the safe use and care of various carpentry tools, supplies and equipment.
3. Identify common terminology in the carpentry field.
4. Discuss the various local and global career opportunities for professional carpenters.

CT154A MASONRY LEVEL I

Credits: 4 Course Offering: As Needed
Prerequisites: CT100 Corequisites: None
This course focuses on the skills and academic competencies necessary for safe, professional, as well as effective practice of basic masonry in entry-level masonry-related occupations. Safety, proper use, care and maintenance of masonry tools and equipment will be emphasized. Mastery of selected construction-related competencies will be demonstrated through the completion of projects. Students will be oriented to the process of securing entry-level masonry positions. **Student Learning Outcomes (SLOs)**
Upon successful completion of this course, students will be able to:
1. Demonstrate the knowledge and skills needed to properly construct a concrete structure.
2. Properly complete the laying of blocks for walls and columns.
3. Demonstrate the correct use of tools, supplies, and equipment needed in the construction of a masonry project.

CT154B MASONRY LEVEL II

Credits: 4 Course Offering: As Needed
Prerequisites: CT100, CT154A
Corequisites: None
This course builds on content addressed in CT154A, and introduces students to core principles in masonry, providing them with the foundational knowledge necessary for more advanced study and experiential development of skills in Construction Trades. This course focuses on masonry design, layout and project planning, on laying blocks, walls and columns, and on construction procedures. It also reviews students' knowledge of, and ability to safely use supplies, equipment, hand tools, and power tools.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Design the layout of a masonry project.
2. Demonstrate understanding of core principles in masonry.
3. Demonstrate the correct use of tools, supplies, and equipment needed in the construction of a masonry project adhering to all industry safety standards.

CT158 HEAVY EQUIPMENT OPERATION

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course offers training in the maintenance and operations of selected power construction equipment ranging from air compressors to dozers to tractor trailers. **Student Learning Outcomes (SLOs)**
Upon successful completion of this course, students will be able to:
1. Identify all heavy equipment components and their functions.
2. Demonstrate how to properly operate any given heavy equipment.
3. Demonstrate how to properly service any given heavy equipment.

CT165A ELECTRICITY LEVEL I

Credits: 5 Course Offering: As Needed
Prerequisites: CT100 Corequisites: None
This course introduces students to core principles in electricity, providing them with the foundational knowledge necessary for more advanced study and experiential development of skills in Construction Trades. This course focuses on the use, care, safe operations and maintenance of electrical tools and

equipment, supplies and materials; the development of an appropriate attitude as related to professional electrical work, and the acquisition of knowledge and information essential for success in initial pursuit of a career as an electrician. Specific emphasis will be placed on students' development of knowledge and skills related to introductory electrical concepts, safety procedures, hand bending, hand and power tools, fasteners and anchors, electrical mathematics, electrical concepts and theories and electrical test equipment.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain skills needed by a licensed electrician.
2. Demonstrate understanding of safe operation and maintenance of electrical tools.
3. Develop an appropriate attitude related to professional electrical work.
4. Discuss the variety of electrical career paths.

CT165B ELECTRICITY LEVEL II

Credits: 5 Course Offering: As Needed
Prerequisites: CT100, CT165A
Corequisites: None

This course introduces students to core principles in electricity, providing them with the foundational knowledge necessary for more advanced study and experiential development of skills in Construction Trades. This course focuses on the use, care, safe operations and maintenance of electrical tools and equipment, supplies and materials; the development of an appropriate attitude as related to professional electrical work, and the acquisition of knowledge and information essential for success in initial pursuit of a career as an electrician. Specific emphasis will be placed on students' development of knowledge and skills related to National Electric Code (NEC), raceways, boxes and fittings, conductors, electrical blueprints, and commercial, industrial and residential electrical wiring.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate appropriate use and care of various hand and power tools used by professional electricians.
2. Develop the knowledge and skills related to National Electric Code (NEC), raceways, boxes and fittings, conductors, and electrical blueprints.
3. Demonstrate knowledge and skills needed in the electrical wiring of commercial, industrial, and residential areas.

CT165C ELECTRICITY LEVEL III

Credits: 5 Course Offering: As Needed
Prerequisites: CT100, CT165A, CT165B
Corequisites: None

This course introduces students to core principles in electricity, providing them with the foundational knowledge necessary for more advanced study and experiential development of skills in Construction Trades. This course focuses on the use, care, safe operations and maintenance of electrical tools and equipment, supplies and materials; the development of an appropriate attitude as related to professional electrical work, and the acquisition of knowledge and information essential for success in initial pursuit of a career as an electrician. Specific emphasis will be placed on students' development of knowledge and skills related to alternating current, motors, grounding, conduit bending, boxes and fittings.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Acquire entry-level skills that are essential for success in the initial pursuit of a career as an electrician.
2. Demonstrate knowledge and skills related to alternating current, motors, grounding, conduit bendign, boxes and fittings.
3. Demonstrate knowledge of basic physics concepts related to electricity and identify common terminology.

CT165D ELECTRICITY LEVEL IV

Credits: 5 Course Offering: As Needed
Prerequisites: CT100, CT165A, CT165B, CT165C
Corequisites: None

This course introduces students to core principles in electricity, providing them with the foundational knowledge necessary for more advanced study and experiential development of skills in Construction Trades. This course focuses on the use, care, safe operations and maintenance of electrical tools and equipment, supplies and materials; the development of an appropriate attitude as related to professional electrical work, and the acquisition of knowledge and information essential for success in initial pursuit of a career as an electrician. Specific emphasis will be placed on students' development of

knowledge and skills related to conductor installations, cable trays, conductor terminations and splices, installation of electrical services, circuit breakers and fuses, contactors and relays, and electric lighting.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate use and care of various hand and power tools used by professional electricians adhering to all industry safety standards.
2. Demonstrate the knowledge and skills related to conductor installations, cable trays, conductor terminations and splices, installation of electrical services, circuit breakers and fuses, contractors and relays, and electric lighting.
3. Demonstrate professionalism and an appropriate work ethic needed to succeed as an entry-level electrician.

CT172 PLUMBING INSTALLATION AND DESIGN

Credits: 3 Course Offering: As Needed
Prerequisites: AE103
Corequisites: None

This course provides the student with the application of methods and theory in installation and design of residential and commercial plumbing systems of cold water supply, hot water supply and drainage systems.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Determine correct elevations required in setting up wastewater lines.
2. Properly install water pipes as detailed by given blueprints.
3. Test all plumbing systems using a pressurized method.

CT173 ROUGH FRAMING AND EXTERIOR FINISHING

Credits: 3 Course Offering: As Needed
Prerequisites: CT153, AE103
Corequisites: None

This course concentrates on basic structure construction, which includes footing and foundation, sill, floor, wall partition, roof framing, and door and window framing.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate the knowledge and skills needed to properly construct a structure.
2. Demonstrate basic skills needed to complete the framing of a given project.
3. Demonstrate the correct use of tools, supplies, and equipment needed in the framing and finishing of a project.

CT182 UNIFORM PLUMBING CODE

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

This course concentrates on achieving familiarity with and understanding of the Uniform Plumbing Code. Students will be expected to use the Uniform Plumbing Code manual as a resource to determine specifications during design, construction and installation of plumbing systems. This course does not require any previous knowledge or skill in plumbing.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate knowledge of laws and ordinances governing plumbing systems.
2. Explain the dynamics of the installation of residential and commercial plumbing systems.
3. Efficiently use the Uniform Plumbing Code manual.

CT183 FINISHING

Credits: 3 Course Offering: As Needed
Prerequisites: CT153 Corequisites: None

This course is designed to help students know and understand the use, methods, and materials needed in finishing a residential house. The course covers the installation of wall and ceiling panels, hanging windows and doors, construction of cabinets and closets, application of molds and trims, bathroom materials and finishing hardware.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Dial in angles and make accurate cuts with a slide compound saw.
2. Demonstrate skills needed to center windows, cabinets, and doors using wedges and levels.
3. Install a variety of trims as specified in given blueprints.

CT185A REFRIGERATION AND AIR CONDITIONING LEVEL I

Credits: 5 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course introduces students to core principles in air conditioning and refrigeration, providing them with the foundational knowledge necessary for more advanced study and experiential development of skills in Construction Trades. Specific instructional emphasis is placed on refrigeration and air conditioning safety, blueprint reading, copper and plastic piping, soldering and brazing, ferrous metal piping, basic electricity, and introduction to cooling. This course focuses on the use, care, safe operation and maintenance of equipment; the use, care and safe handling of supplies and materials; the development of an appropriate attitude as related to professional refrigeration and air conditioning work, and the acquisition of knowledge and information essential for success in initial pursuit of a career in the air conditioning and refrigeration trade.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Demonstrate understanding of the core principles and terminology related to air conditioning and refrigeration.
2. Identify the safe use of equipment, supplies, and materials used in Heating, Ventilation, and Air-Conditioning (HVAC).
3. Explain the various careers associated with the HVAC industry, both locally and globally.

CT185B REFRIGERATION AND AIR CONDITIONING LEVEL II

Credits: 5 Course Offering: As Needed
Prerequisites: CT100, CT185A
Corequisites: None
This course introduces students to core principles in air conditioning and refrigeration, providing them with basic knowledge necessary for more advanced study and experiential development of skills in Construction Trades. Specific instructional emphasis is placed on introductory HVAC, trade mathematics, tools, air distribution systems, chimneys, vents and flues, and maintenance skills for the service technician. This course focuses on the use, care, safe operations and maintenance of equipment; the use, care and safe handling of supplies and materials; the development of an appropriate attitude as related to professional refrigeration and air conditioning work, and the acquisition of knowledge and information essential for success in initial pursuit of a career in the air conditioning and refrigeration trade.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Explain the basic knowledge and skills necessary for more advanced study in the Heating, Ventilation, and Air-Conditioning (HVAC) industry.
2. Demonstrate basic mathematical skills needed in the HVAC industry.
3. Acquire skills needed for the HVAC service technician.

CT185C REFRIGERATION AND AIR CONDITIONING LEVEL III

Credits: 5 Course Offering: As Needed
Prerequisites: CT100, CT185B
Corequisites: None
This course introduces students to core principles in air conditioning and refrigeration, providing them with basic knowledge necessary for more advanced study and experiential development of skills in Construction Trades. Specific instructional emphasis is placed on alternating current, introduction to control circuit troubleshooting, metering devices, and leak detection, evacuation, recovery and charging. This course focuses on the use, care, safe operations and maintenance of equipment; the use, care and safe handling of supplies and materials; the development of an appropriate attitude as related to professional refrigeration and air conditioning work, and the acquisition of knowledge and information essential for success in initial pursuit of a career in the air conditioning and refrigeration trade.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Demonstrate the proper use, care, and safe operation and maintenance of equipment, supplies and materials used in the Heating, Ventilation, and Air-Conditioning (HVAC) industry.
2. Exhibit professionalism and work ethic deemed necessary to succeed as an entry-level refrigeration and air-conditioning technician.

CT196A FUNDAMENTALS OF OXYACETYLENE WELDING I

Credits: 5 Course Offering: As Needed
Prerequisites: CT100 Corequisites: None

This course introduces students to core principles in oxyacetylene welding, providing them with the foundational knowledge necessary for more advanced study and experiential development of skills in Construction Trades. This course focuses on the identification, use, care, safe operation, maintenance, assembling and disassembling of welding equipment and tools; the use, care and safe handling of supplies and materials; the development of an appropriate attitude as related to professional work, and the acquisition of knowledge and information essential for success in initial pursuit of a career in the field of welding.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate the foundational knowledge necessary for a professional welding career.
2. Discuss the various local and global career opportunities for professional welders.
3. Identify commonly used tools, supplies, and equipment in the welding profession.
4. Explain the safe use and care of various welding tools, supplies and equipment.
5. Identify and explain codes governing welding.

CT196B FUNDAMENTALS OF OXYACETYLENE WELDING II

Credits: 5 Course Offering: As Needed
Prerequisites: CT100, CT196A
Corequisites: None

This course builds upon content of CT196A, introducing students to core principles in oxyacetylene welding, providing them with the foundational knowledge necessary for more advanced study and experiential development of skills in Construction Trades. This course reviews students' knowledge and skills as related to careers and occupations using oxyacetylene welding, safety procedures, identification of supplies, equipment and tools, setting up and disassembling equipment and working with the torch flame. The course then focuses in-depth on performing cutting procedures and on portable oxyfuel cutting machine operation.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate the knowledge and skills required for basic oxyacetylene welding.
2. Demonstrate the correct use of supplies, tools, and equipment adhering to all industry safety standards.
3. Correctly set up, assemble, and disassemble equipment such as a torch flame and oxyfuel cutting machine.

CT197 NON-FERROUS WELDING LEVEL I

Credits: 5 Course Offering: As Needed
Prerequisites: None Corequisites: None

This course focuses on the skills and academic competencies necessary for safe, professional, and effective practice in non-ferrous welding. This course also introduces and emphasizes basic non-ferrous welding skills, including gas metal arc welding, gas tungsten arc welding, flux cored arc welding, submerged arc welding, and plasma arc cutting. Mastery of competencies is demonstrated through completion of projects.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate skills needed to weld select non-ferrous material using oxyfuel, shielded metal arc welding (SMAW), gas tungsten arc welding (GTAW), and metal to inert gas (MIG) processes.
2. Cut select non-ferrous materials using a plasma cutter.
3. Identify select non-ferrous material and explain its properties.

CT197A SHIELDED METAL ARC WELDING I

Credits: 5 Course Offering: As Needed
Prerequisites: CT100 Corequisites: None

This course focuses on the skills and academic competencies necessary for safe, professional and effective practice in basic shielded metal arc welding. Emphasis will be placed on core principles in shielded metal arc welding, including use, care, safe operations and maintenance of welding tools; the use, care and safe handling of supplies and materials; the development of an appropriate attitude as related to professional work, and the acquisition of knowledge and information essential for success in initial pursuit of a career in the field of welding. **Student Learning Outcomes (SLOs)**

Upon successful completion of this course, students will be able to:

1. Demonstrate the knowledge and skills required for basic shielded metal arc welding including selection of metals and electrodes, the making of beads, fillet welds, and groove welds.

2. Demonstrate the professionalism and an appropriate attitude necessary in the welding field.
3. Acquire skills needed for an entry-level position in the welding field.

CT197B SHIELDED METAL ARC WELDING II

Credits: 5 Course Offering: As Needed
Prerequisites: CT100 Corequisites: None
This course builds on the content addressed in CT197A, focusing on the skills and academic competencies necessary for safe, professional and effective practice in intermediate shielded metal arc welding. This course concentrates on knowledge and skills necessary for completion of Shielded Metal Arc Welding (SMAW) open V-butt welds in all positions. Emphasis will be placed on core principles in shielded metal arc welding, including use, care, safe operations and maintenance of welding tools; the use, care and safe handling of supplies and materials; the development of an appropriate attitude as related to professional work, and the acquisition of knowledge and information essential for success in initial pursuit of a career in the field of welding.

Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:

1. Demonstrate skills needed in intermediate level shielded metal arc welding.
2. Perform shielded metal arc welding (SMAW) open V-butt welds in all positions.
3. Demonstrate the use, care, and proper maintenance of welding tools, equipment, and supplies following industry safety standards.

CT292 CONSTRUCTION PRACTICUM

Credits: 3 Course Offering: As Needed
Prerequisites: Completion of all CT concentration courses
Corequisites: None
This course covers the application of field work related to the skills acquired in one of the seven concentration areas: carpentry, electricity, HVAC, masonry, plumbing, reinforcing metal worker, and welder. Students will experience a real work environment under the supervision of an industry qualified manager. Through on-the-job experience, students will gain a greater vision of what it means to be employed in the construction industry. Course offering: As needed.

Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:

1. Demonstrate proficiency in the operations of equipment and instruments needed for concentration area.
2. Demonstrate professional and ethical conduct as required by specific trade.
3. Apply employment skills in resume writing, job portfolio preparation, networking, and interviewing.
4. Troubleshoot problems within discipline area and make appropriate corrections.

Culinary Arts (CUL)

CUL120 FOODSERVICE SAFETY AND SANITATION

Credits: 2 Course Offering: As Needed
Prerequisites: None Corequisites: None
Using the NRA ServSafe training module, this course is designed to develop an understanding of the basic principles of sanitation and safety and to be able to apply them in foodservice operations.

Student Learning Outcomes (SLOs):
Upon successful completion of this course, students will be able to:

1. Identify the factors that affect the growth of food borne bacteria in food.
2. Demonstrate proper hygienic procedures or processes that foodservice employees use to prevent the spread of food borne illness and cross contamination of food.
3. Discuss and demonstrate personal hygiene habits and food handling practices that protects the health of the consumer.

CUL140 CULINARY FOUNDATIONS I

Credits: 4 Course Offering: As Needed
Prerequisites: CUL120 Corequisites: None
This course is designed to introduce the student to the basic principles of food preparation, including: understanding of food and kitchen safety and sanitation practices, chemistry of foods and cooking processes, food identification, basic culinary terminology and techniques, proper use of kitchen tools and equipment. Food labs and demonstrations play a significant role in the course. Conforms to ACF Knowledge Area: Food Preparation; Sustainability.

Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:

1. Develop knife skills, properly handle culinary tools, and safely operate kitchen equipment.
2. Apply principles of food preparation to produce a variety of food products.
3. Explain the importance of employability and entrepreneurship skills.
4. Demonstrate how to read, follow, and prepare recipes.

CUL145 CULINARY MATH

Credits: 3 Course Offering: As Needed
Prerequisites: Placement into MA110 equivalent
Corequisites: None
This course provides the student with the understanding of the mathematical concepts required of being a successful professional in the foodservice industry. This course is reserved exclusively for declared Associate of Arts in Culinary Arts students, Cooks Apprentices and Associate of Food & Beverage Management students and meets the General Education Math requirement for the degree.

Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:

1. Demonstrate comprehension of key theories and concepts in culinary mathematics to include conversions of units of measure of volume & weight and calculations of yields for recipes.
2. Perform mathematical calculations relevant to the kitchen and restaurant operation.
3. Calculate food and beverage labor costs and selling price of menu items.
4. Apply critical thinking skills in calculating various kitchen costs.

CUL160 CULINARY FOUNDATIONS II

Credits: 4 Course Offering: As Needed
Prerequisites: CUL140 Corequisites: None
This course is the second part of Culinary Foundations where student are taught the basic principles of food preparation. This course introduces students to the principles European cuisines. Foundations II focuses on applying the various food production techniques introduced in Foundations I through cooking labs. Food labs and demonstrations and evaluation of foods produced play a considerable part in this course. Conforms to ACFEF Knowledge Area: Food Preparation; Sustainability.

Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:

1. Demonstrate understanding in the basic principles of European and Mediterranean Cuisine, both contemporary and the traditional methods.
2. To further develop skills in knife, tool and equipment handling.
3. Apply principles of food preparation to produce a variety of food products.
4. Apply the fundamentals of Europe and the Mediterranean of cookery by preparing and presenting foods from the region.
5. Evaluate quality of a variety of prepared foods.

CUL180 GARDE MANGER

Credits: 4 Course Offering: As Needed
Prerequisites: CUL160 Corequisites: None
This course enables the student to prepare a variety of cold entrees such as hors d'oeuvres, pates, terrine, roulades, and canapés. The student will learn preservation techniques including curing, smoking, and aging for meat, seafood, and poultry items. The student will be able to describe a variety of cheese categories and their uses.

Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:

1. Define, describe, and evaluate the quality of various appetizers and canapés.
2. Prepare items appropriate for buffet presentation, including decorative pieces.
3. Prepare foods for preservation and prepare preserved foods.
4. Prepare and present a variety of forcemeat products.
5. Discuss how various cheeses are made and their uses.

CUL200 BASIC BAKING I: BREADS AND BAKING

Credits: 4 Course Offering: As Needed
Prerequisites: CUL160 Corequisites: None
This course is a study of the fundamentals of baking including, dough, quick breads and basic items made in a bakery. It focuses on the basic principles behind formulas – ratios, sequence, time and temperature- and how these factors impact all quality – baked products. Students will learn each step in the process of bread making including the science of bread production, the measuring of ingredients, and the proper evaluation of recipes. Techniques on the

preparation of breads commonly produced in bakeries will also be introduced.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. To apply the fundamentals of baking science to the preparation of a variety of products.
2. To use and care for equipment normally found in the bakeshop or baking area.
3. Demonstrate knowledge and apply the twelve (12) step baking process.
4. Discuss the importance of starters, structure builders, tenderizers, moisteners and driers in bread making.
5. Prepare and evaluate different types of breads using various baking methods.

CUL220 BAKING II: PATISSERIE

Credits: 4 Course Offering: As Needed

Prerequisites: None Corequisites: None

Building on the basic principles learned in "Baking I: Breads and Baking", this course will emphasize pastry production techniques. This course conforms to ACFEF Knowledge Area: Basic Baking.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. To apply the fundamentals of baking science to the preparation of a variety of products.
2. To use and care for equipment normally found in the bakeshop or baking area.
3. Demonstrate knowledge and skills in production of cakes, puff pastries, creams, and soufflés.
4. Demonstrate knowledge of the fundamentals of Patisserie in food service; emphasis is placed on the preparation and presentation of the different varieties of pastries.
5. Apply proper techniques associated with the demands in a professional pastry production kitchen.

CUL240 PACIFIC AND ASIAN CUISINE

Credits: 4 Course Offering: As Needed

Prerequisites: CUL140, CUL180

Corequisites: None

This class is offered to introduce culinary students to the myriad of foods from the different cultures and styles of cookery of the Pacific region and Asia. The course introduces iconic cuisines from the various islands and countries most familiar to the island.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Define, describe, and evaluate the quality of various appetizers and canapés.
2. Prepare items appropriate for buffet presentation, including decorative pieces.
3. Prepare foods for preservation and prepare preserved foods.
4. Prepare and present a variety of forcemeat products.

CUL280 CULINARY CAPSTONE

Credits: 4 Course Offering: As Needed

Prerequisites: CUL120, CUL140, CUL160, CUL180, CUL200, CUL220, CUL240

Corequisites: None

This class is offered to the culinary students to prepare for an ACFEF Certified Culinarian (CC) certification. A CC is an entry level culinarian within a commercial foodservice operation responsible for preparing and cooking sauces, cold food, fish, soups and stocks, meats, vegetables, eggs and other food items.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate a thorough working knowledge of safety and sanitation skills.
2. Evaluate organization skills, organization, work flow, and proper utilization of all ingredients.
3. Demonstrate craftsmanship skills through creativity, classical knife cuts, and proper cooking techniques, utilizing correct methods of preparation, serving, and portion size.
4. Demonstrate finished product skill, serving methods and presentation, portion size and nutritional balance, ingredient compatibility, flavor, taste, texture, and doneness.

CUL293 CULINARY PRACTICUM

Credits: 3 Course Offering: As Needed

Prerequisites: CUL180, CUL220, CUL240

Corequisites: None

This course provides students a structured work-base involving practical application and the opportunity to hone their skills and competencies learned through coursework and labs. Practicum students are placed in the food production department of a hotel or restaurant property.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate professionalism and positive work ethic through teamwork at the assigned worksite.
2. In a work environment, apply knowledge and skills and competencies and techniques gained from the program coursework and lab experiences.
3. Perform duties as assigned by the supervisor in charge relevant to the competency requirements adhering to all safety regulations.

Economics (EC)

EC110 PRINCIPLES OF ECONOMICS

Credits: 3 Course Offering: As Needed
Prerequisites: Placement into EN110 or equivalent
Corequisites:
This course is designed to help students understand the economic challenges and opportunities found in the United States mainland and Guam. This introductory course focuses on describing economic events, explaining why they occur, predicting similar future events, and recommending solutions. Financial responsibilities always impact people's lives and their dependents. Understanding the relationship between financial decisions and outcomes is extremely important for all citizens.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Discuss with understanding the basic principles and theories of economics.
2. Apply economic principles and theories to decisions societies make (Micro).
3. Demonstrate understanding of the relationships between various global markets and the impact those relationships have on the entire world economy (Macro).

Education (ED)

ED150 INTRODUCTION TO TEACHING

Credits: 3 Course Offering: Fall & Spring
Prerequisites: None Corequisites: None
This course presents a unique and realistic approach to the fundamentals of teaching as a career. Not only are the rewards of teaching established and explored, but also the challenges educators face in the classroom. The course also introduces students to the larger topics of education, including discipline, history, philosophy, learning theories, teaching techniques, assessment, classroom management and diversity.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Develop a philosophy of education that includes self-efficacy.
2. Formulate a comprehensive academic plan to include goals and objectives related to a profession in education.
3. Demonstrate diverse teaching strategies and integration of curricula standards on a chosen subject area.

ED180 EDUCATIONAL METHODS

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course provides the knowledge and skills necessary to plan, prepare and implement educational activities and teaching strategies in a K-12th grade educational setting. The course is designed for individuals interested in pursuing a career in an educational setting. Course content focuses on identifying the diversity of learners' needs, instructional approaches to best address this diversity, planning and implementing activities, and project based learning.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Present at least three effective educational methods and/or strategies for primary, middle, and secondary programs.
2. Develop a written plan for an interdisciplinary project which aligns with Common Core and local standards.
3. Design a learning center based on Bloom's Levels of Taxonomy which addresses at least three learning styles.

ED220 HUMAN GROWTH & DEVELOPMENT

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course covers the study of human growth and development from birth to death with a special emphasis on the formative and school years. An overview of the interrelationship between physical, emotional, intellectual, and social growth will be presented. The role of the family, culture, community and society and the impact on development is also explored.

Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Describe the social, physical, and cognitive development of school-age learners.
2. Explain the social, physical, and cognitive development of adolescent and young adult learners.
3. Illustrate the impact of family, culture, community and society on development.

ED231 INTRODUCTION TO EXCEPTIONALITIES

Credits: 3 Course Offering: As Needed
Prerequisites: CD221 or ED220
Corequisites: None
This course provides students with an introduction to exceptionalities. An overview of all aspects of exceptionality including etiology, legal aspects, assessment, and service delivery will be provided.
Formerly: Introduction to Exceptional Children
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Describe ways to meet the needs of students with exceptionalities using the Universal Design for Learning model.
2. Develop strategies to communicate with and empower families of students with exceptionalities.
3. Explain the process of referral, screening, and assessment, including knowledge of the roles and responsibilities of primary members.

ED292 EDUCATION PRACTICUM

Credits: 3 Course Offering: As Needed
Prerequisites: Department Chair approval
Corequisites:
This course provides students with the opportunity to demonstrate professional behaviors and implement their knowledge and skills while working with students in a variety of school settings under the supervision of a credentialed educator. A minimum of 135 hours of work is required, which may include observations, meetings with parents and professionals, and professional development activities.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Demonstrate appropriate and ethical practices for students and model professionalism.
1. 2. Effectively and respectfully communicate with students, staff and families including those from diverse backgrounds and special populations.
2. 3. Implement various developmentally and age-appropriate teaching, assessment and guidance strategies needed to effectively work with students in Kindergarten to twelfth grade.

Electronics (EE)

EE103 DIRECT CURRENT CIRCUITS

Credits: 4 Course Offering: Fall & Spring
Prerequisites: None Corequisites: None
This beginning course in electricity provides a thorough, comprehensive, and practical coverage of direct current circuit's concept and application. It covers electrical safety, scientific notation, electricity, resistors, ohm's law, series circuits, parallel circuits, series-parallel circuits, conductors and insulators, analog and digital multi-meter, batteries, magnetism, and electromagnetic induction.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Follow national, state, and local industry established electrical safety.
2. Explain and illustrate the elements and properties of electrical circuits.
3. Design, analyze, and calculate electrical quantities of series, parallel, and series-parallel circuits.

EE104 ALTERNATING CURRENT CIRCUITS

Credits: 4 Course Offering: Fall & Spring
Prerequisites: EE103 Corequisites: None
This second course in electricity provides a thorough, comprehensive, and practical coverage of alternating current circuit's concept and application. It includes basic of trigonometry, alternating current and voltage, capacitance, capacitive reactance, capacitive circuits, inductance, inductive reactance, inductive circuits, RC and RL time constant, alternating current circuits, resonance, and filters.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Follow national, state, and local industry established electrical safety procedures.

2. Illustrate and describe AC voltage and the characteristics of AC voltage source.
3. Design, experiment, and troubleshoot alternating current circuits.

EE107 INTRODUCTION TO INSTRUMENTATION

Credits: 3 Course Offering: As Needed
Prerequisites: EE112 Corequisites: None
This is an introductory course in instrumentation that covers typical metered electronic measuring devices used in a wide range of technical and scientific fields. The student will receive a thorough grounding in meter theory, design, and application.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Demonstrate and explain the purpose and use of voltmeters, ammeters, and ohmmeters in measuring voltages, currents and resistances.
2. Illustrate and calculate the meter shunt, resistance multiplier, and the current limiting resistances of a voltmeter, ammeter and ohmmeter.
3. Explain and illustrate the advantages of digital meters over an analog type of meter.
4. List four integrating techniques as applied to digital meters and explain the operation of each.
5. Identify the various oscilloscope controls and illustrate how they are being used to measure average value, RMS or effective value, peak value, peak to peak value, frequency, period, pulse time, pulse repetition frequency, and phase shift of an AC circuit.

EE112 ELECTRONIC DEVICES

Credits: 4 Course Offering: As Needed
Prerequisites: EE104 Corequisites: None
This is a preparatory course covering the fundamentals of semiconductor devices as applied to electronic circuits. Through lecture and lab work, students will become familiar with basic and advanced semiconductor devices and electronic circuits with an emphasis on electronic troubleshooting.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Design a power supply circuit.
2. Identify each part of a power supply system.
3. Calculate the voltage gain for a transistor amplifier circuit.

EE116 DIGITAL TECHNOLOGY

Credits: 4 Course Offering: As Needed
Prerequisites: EE104, EE112
Corequisites: None
This course provides an introduction to digital techniques, semiconductor devices for digital integrated circuits, Boolean Algebra, flip-flop registers, sequential logic circuits, counters, clocks, shift registers, combination logic circuits, digital design and applications
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Design a simple counter circuit.
2. Simplify logic circuits using k-map.
3. Identify different types of logic circuits.

EE211 IT ESSENTIALS I

Credits: 4 Course Offering: As Needed
Prerequisites: None Corequisites: None
IT Essentials 1 (ITE) emphasizes practical knowledge and experience to help students develop fundamental computer and career skills. ITE helps students prepare for entry-level career opportunities in IT and for the CompTIA A+ certification exam. The course also provides a learning pathway to Cisco CCNA Routing and Switching, Linux Essentials, and Introduction to the Internet of Everything (IoE).
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Describe the internal components of a computer.
2. Assemble a computer system meeting all required standards.
3. Install and understand operating systems on computers and mobile devices.

EE215 IT ESSENTIALS II

Credits: 3 Course Offering: As Needed
Prerequisites: EE211 Corequisites: None
IT Essentials II helps students prepare for the CompITA A+ Practical Application exam, which builds on the CompTIA A+ Essentials knowledge and skills, with more of a hands-on orientation and scenarios in which troubleshooting and tools must be applied to resolve problems
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Upgrade laptop components based on customer needs.

2. Perform preventive maintenance and troubleshooting on components of a printer/scanner.
3. Install a network; upgrade components based on customer needs and perform preventive maintenance and advanced trouble shooting.

EE242 PRINCIPLES OF VOICE AND DATA CABLING

Credits: 2 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course is designed for students interested in the physical aspects of voice and data network cabling and installation. This course stresses documentation, design, installation, laboratory safety, as well as working effectively in group environments. Students will become familiar with cabling issues related to data and voice connectivity, media and transmission practices, and cabling customer support. This course provides an overview of cabling and networking industry standards as well as emerging cabling technologies.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Design basic network infrastructure systems.
2. Install, terminate, and test network cabling systems.
3. Define standards and codes pertaining to the IT field.
4. Pass the National Certification Exam (Data Cabling Installer Certification), sponsored by Electronics Technicians Association (ETA).

EE243 FIBER OPTICS INSTALLATION

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course is designed for personnel who work with fiber optic cables or individuals who want a working knowledge of fiber optics. Students in this course will learn how to splice, terminate, and test fiber optics cables/systems.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Install, terminate, and splice fiber optic cables.
2. Troubleshoot and repair fiber optic cables.
3. Use test equipment for troubleshooting (light source & power meter, optical time domain, reflectometer, & visible light source).

EE265 COMPUTER NETWORKING I

Credits: 4 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Define and describe the importance of addressing and naming schemes at various layers of data networks in IPv4 and IPv6 environments
2. Design, calculate, and apply subnet masks and addresses to fulfill given requirements in IPv4 and IPv6 networks
3. Build a simple Ethernet network using routers and switches

EE266 COMPUTER NETWORKING II

Credits: 4 Course Offering: As Needed
Prerequisites: EE265 Corequisites: None
This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPng, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Define and describe basic switching concepts and the operation of Cisco switches.
2. Define and describe the purpose, nature, and operations of a router, routing tables, and the route lookup process.
3. Configure and troubleshoot an Open Shortest Path First (OSPF) network.

EE267 COMPUTER NETWORKING III

Credits: 4 Course Offering: As Needed
Prerequisites: EE266 Corequisites: None
This course describes the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, and STP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement a WLAN in a small-to-medium network.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Understand, configure and troubleshoot enhanced switching technologies such as VLANs, Rapid Spanning Tree Protocol (RSTP), Per VLAN Spanning Tree Plus Protocol (PVST+), and EtherChannel.
2. Understand, configure, and troubleshoot wireless routers and wireless clients.
3. Configure and troubleshoot routers in a complex routed IPv4 or IPv6 network using single-area OSPF, multiarea OSPF, and Enhanced Interior Gateway Routing Protocol (EIGRP).

EE268 COMPUTER NETWORKING IV

Credits: 4 Course Offering: As Needed
Prerequisites: EE267 Corequisites: None
This course discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students will also develop the knowledge and skills needed to implement virtual private network (VPN) operations in a complex network.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Understand, configure, and troubleshoot Network Address Translation (NAT) operation.
2. Understand and describe different WAN technologies and their benefits.
3. Understand, configure, and troubleshoot serial connections.

EE271 ADVANCED COMPUTER NETWORKING I

Credits: 4 Course Offering: Fall
Prerequisites: EE268 or CCNA Certificate
Corequisites: None
This course is the first course in the Cisco Certified Networking Professional (CCNP) curriculum. This course will cover the configuration of Cisco routers for operation in large or growing multiprotocol Internet works. This course includes lectures and labs that focus primarily on scalable technologies and the Cisco IOS software features that are most useful in building large or growing Internet works. These features that are most useful in building large or growing Internet works. These features include scalable routing protocols such as Open Shortest Path First (OSPF), Enhanced Interior Gateway Routing Protocol (EIGRP), Intermediate System to Intermediate System (IS-IS), Border Gateway Protocol (BGP), Variable Length Subnet Mask (VLSM), Classless Inter Domain Routing (CIDR), route redistribution, and route summarization.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Implement EIGRP and OSPF in an enterprise network.
2. Implement BGP to allow an enterprise network to connect to an ISP.
3. Implement IPv6 in an enterprise network.

EE275 ADVANCED COMPUTER NETWORKING III

Credits: 4 Course Offering: As Needed
Prerequisites: EE268 or CCNA Certificate
Corequisites:
CCNP 3: Multilayer Switching is the third of four courses leading to the Cisco Certified Network Professional (CCNP) designation. CCNP 3 introduces students on the deployment of the state-of the-art campus LANs. The course focuses on the selection and implementation of the appropriate Cisco IOS services to build reliable scalable multilayer-switched LANs. Students will develop skills with VLANs, VTP, STP, inter-VLAN routing, multiplayer switching, redundancy, Cisco AVVID solutions, QoS issues, campus LAN security, and emerging transparent LAN services. This hands-on, lab oriented course stresses the design, implementation, operation, and troubleshooting of switched and routed environments.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Implement, monitor, and maintain switching in an enterprise campus network.
2. Implement VLANs in campus networks.
3. Configure and optimize the Hot Standby Routing Protocol (HSRP) on switches.

EE283 NETWORK SECURITY

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course is targeted toward an Information Technology (IT) professional with the recommendation that he/she has networking and administrative skills in Windows-based TCP/IP networks and familiarity with other operating systems, such as NetWare, Macintosh, UNIX/Linux, and OS/2, who wants to: further a career in IT by acquiring a foundational knowledge of security topics; prepare for the CompTIA Security+ Certification examination; or use Security+ as the foundation for advanced security certifications or career roles.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Identify fundamental concepts of computer security.
2. Identify security threats.
3. Secure network communications.
4. Monitor the security infrastructure.

Electro Mechanical (EM)

EM112 NATIONAL ELECTRICAL CODE

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course provides knowledge and understanding of the National Electrical Code governing the installation of residential and commercial electrical systems.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Correctly reference information using the National Electric Code in various electrical appliances.
2. Identify faulty installations based on the National Electric Code.
3. Select the proper codes to apply to residential or commercial applications.

Emergency Medical Service (EMS)

EMS103 EMERGENCY MEDICAL TECHNICIAN (EMT) - BASIC

Credits: 8 Course Offering: As Needed
Prerequisites: HL121, EN110 or equivalent,
Corequisites:
This course is designed for ambulance service members and others who need to be trained to the level of EMT. Students will learn how to provide emergency care to victims of accidents and illness, recognize the nature and seriousness of the patient's condition, assess the patient's requirements for emergency care, and administer appropriate pre-hospital care to stabilize the patient's condition. Upon completion of this course students will be eligible to test for the National Registry of EMT (NREMT), national certifying examination.
*Minimum age 18 years old. Police, Court & Drug clearance will be needed 30 days prior to clinicals. Physical Exam (no older than 6 months prior to clinicals). Driver's License.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Describe all types of emergencies.
2. Demonstrate skills needed to provide emergency care to victims.
3. Determine the extent of a patient's condition and assess requirements for care.

EMS109 EMERGENCY MEDICAL TECHNICIAN - REFRESHER

Credits: 3 Course Offering: As Needed
Prerequisites: EMS103 Corequisites: None
This course is a refresher for qualified EMTs who must update their training and must re-certify every two (2) years. The course involves review and updating of the materials presented in EMS103. Formerly CJ109.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Explain various types of emergencies.
2. Demonstrate knowledge and skills needed to care for victims in emergencies.
3. Demonstrate most current practices of Emergency Medical Technicians.

EMS170 EMERGENCY MEDICAL TECHNICIAN - INTERMEDIATE I

Credits: 7 Course Offering: As Needed
Prerequisites: Valid EMT-Basic Certification from Guam or the NREMT
Corequisites:
This course is the first of two modules of EMT-Intermediate for EMT's who wish to increase their knowledge and deliver a more sophisticated level of emergency medical care in the Advanced Life Support (ALS) area. The course is designed for ambulance service members and others who wish to be trained in this advance level of EMT. Can be repeated for credit. Formerly CJ170.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain the roles and responsibilities of an Intermediate Emergency Medical Technician.
2. Deliver an advanced level of emergency care in the ALS area.
3. Demonstrate knowledge and skills needed of an EMT at an intermediate level.

EMS175 EMERGENCY MEDICAL TECHNICIAN INTERMEDIATE II

Credits: 7 Course Offering: As Needed
Prerequisites: 18-Years-old
Corequisites:
This course is the second of two modules of EMT Intermediate for EMTs who wish to increase their knowledge and deliver a more sophisticated level of emergency medical care in the Advanced Life Support (ALS) area. The course is designed for ambulance service members and others who wish to be trained to this advance level of EMT. Formerly CJ175.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain various types of emergencies and care needed at an advanced level.
2. Deliver an advanced level of emergency care in the ALS area.
3. Demonstrate knowledge and skills needed of an EMT at an advanced level.

EMS176 EMERGENCY MEDICAL TECHNICIAN - INTERMEDIATE REVIEW

Credits: 3 Course Offering: As Needed
Prerequisites: Valid EMT-Intermediate certification from either Guam or the NREMT, EMS175
Corequisites:
This course is designed to maintain EMT-Intermediate's proficiency and certification. Students will review essential components of the National Standard Curriculum for EMT Intermediates and will also be presented with additional EMT-Intermediate knowledge and skills pertaining specifically to Guam's EMS system.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate an understanding of the National Standard Curriculum for EMT Intermediates.
2. Demonstrate knowledge and skills needed for the local EMS system.
3. Acquire nationally recognized EMT certification.

English (EN)

EN068 LANGUAGE ARTS LITERACY

Credits: 3 Course Offering: As Needed
Prerequisites: Placement via CASAS assessment (236)
Corequisites: None
This course is designed to develop and improve the students' current reading skill level as determined by the Comprehensive Adult Student Assessment System (CASAS) and writing skills. The course incorporates the College and Career Readiness Standards (CCRS) for adult education; the standards will enhance students' reading and writing skills which will prepare them for postsecondary education and the workforce. Relevant individualized instruction provides reading and writing activities to enable students to become empowered, competent, critical, and reflective in their reading and writing.
At the end of each semester, students enrolled in this course are required to complete the post-test component of CASAS; students scoring a 245 or above in the CASAS reading assessment will be considered to have achieved the Student Learning Outcomes (SLOs) for the course and can be awarded a CR grade for the course.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Read closely to determine what the text says explicitly and to make logical inferences.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

3. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
4. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
6. Use technology, including the Internet, to produce and publish and to interact and collaborate with others.

EN081 LITERATURE SURVEY

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course is designed to familiarize the student with a selection of writings by noted authors of the shorter genre of Literature: the short story, poetry, the essay, and short dramatic selections. Areas of instruction include the structure of and literary elements contained in these genre, reading comprehension, vocabulary development, and Literature-based composition.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Determine a theme or central idea of a text. (RL.9-10.2, L.9-10.1, L11-12.6)
2. Conduct literary analysis (short story, poetry, etc.). (RI.11-12.3)
3. Write informative/explanatory texts to examine and convey complex ideas, concepts, and information. (W.9-10.2b-c, W.11-12.9a)

a. 4. Develop writing by planning, revising, editing, rewriting, or trying a new approach. (W.910.2a-f , W.11-12.5, W.11-12.9a, L.9-10.1-3, L.11-12.4a-d)

EN091 FUNDAMENTALS OF COMMUNICATION

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course is a study of communication and speech and introduces students to the ongoing, ever-changing process of communication. This course will focus on the basic channels of communication, the principles of interpersonal communication, communication within groups, and the process of preparing and delivering speech presentations.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
2. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
3. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
4. Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for speaking and listening at the college and career readiness level.
5. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

EN096 BASIC ENGLISH LEVEL I

Credits: 6 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course provides reading and writing instruction for students who require extensive preparation to succeed in college-level English courses or in certification into the workforce. Placement into this course is based on an Accuplacer Reading score of 22-51. Upon successful completion students may enroll into EN 110.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Show ability to brainstorm, organize, draft, revise, edit, and proofread academic writing. (Affective, Level 1 – recall)
2. Apply skimming, scanning, and critical reading comprehension techniques to analyze literal, interpretive, and applied college-level texts. (Behavioral, Level 2 – skill/concept).
3. Utilize technology to communicate, problem-solve, and research for information in the academic setting. (Behavioral, Level 2 – skill/concept)
4. Incorporate critical thinking skills when exploring college-level reading materials and composing academic writing.(Affective, Level 3 – strategic thinking).

5. Create well-developed, coherent, and unified writing pieces. (Cognitive, Level 4 – extended thinking).

EN097 BASIC ENGLISH LEVEL II

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
Provides reading and writing instruction for students who require intermediate preparation to succeed in college-level English courses or in certification into the workforce where applicable. Students are placed into this course based on an Accuplacer Reading Score in the range of 52 - 74. Upon successful completion, student may enroll into EN 110.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Show ability to brainstorm, organize, draft, revise, edit, and proofread academic writing.
2. Apply skimming, scanning, and critical reading comprehension techniques to analyze literal, interpretive, and applied college-level texts.
3. Utilize technology to communicate, problem-solve, and research for information in the academic setting.
4. Incorporate critical thinking skills when exploring college-level reading materials and composing academic writing.
5. Create well-developed, coherent, and unified writing pieces.

EN110 FRESHMAN COMPOSITION

Credits: 3 Course Offering: As Needed
Prerequisites: Placement into EN110 or equivalent
Corequisites:
Emphasizing critical reading, writing, and thinking, this course focuses on communicating clearly and effectively using standard written English in an academic setting, as well as in other communities. Students will practice exploring ideas, conveying information, and developing their writing process. They will demonstrate logical reasoning, clarity, organization, and appropriate language choices in their writing.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Employ the writing process (prewriting, organizing, drafting, revising, editing) and writing strategies.
2. Examine the connection between reading and writing.
3. Compose effective and strategic essays.

EN111 WRITING FOR RESEARCH

Credits: 3 Course Offering: As Needed
Prerequisites: EN110 Corequisites: None
This course builds on the content covered in EN 110. Emphasis is placed on academic research processes and writing. Students will develop information literacy skills to access both primary and secondary sources. Students will also engage in critical analyses of print, electronic, and observational data.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Evaluate the credibility of primary and secondary sources.
2. Compose essays that summarize, paraphrase, quote, and synthesize information gathered from research.
3. Apply appropriate documentation style.
4. Develop an argumentative essay supported by research.

EN125 INTRODUCTION TO HUMAN COMMUNICATION AND SPEECH

Credits: 3 Course Offering: As Needed
Prerequisites: Placement into EN110 or equivalent
Corequisites: None
This course surveys speech communication theories, concepts and skills existing in interpersonal, intercultural, small group, and organizational interactions, as well as oral public presentations. This course offers a combination of humanistic and pragmatic approaches to understanding and evaluating communication. A significant portion of the course covers the preparation and presentation of oral assignments (speeches).

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate listening and information gathering skills.
2. Explain the differences in cultural communication patterns.
3. Apply oral communication skills through actual applications.
4. Develop and deliver speeches for a variety of purposes.

EN194 TECHNICAL COMMUNICATION

Credits: 3 Course Offering: Spring
Prerequisites: None Corequisites: None

This course prepares students to communicate effectively for business, industry, and professions. Students will engage in the writing process and develop examples of technical communication as well as deliver professional, oral presentations.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Define technical communication and its major traits.
2. Create audience profiles and employ the technical communication writing process to produce correctly written and formatted technical communication.
3. Create various types of properly formatted technical communication.
4. Deliver professional, oral presentations for technical communication purposes.

EN210 INTRODUCTION TO LITERATURE

Credits: 3 Course Offering: Fall & Spring
Prerequisites: None Corequisites: None

This course is designed to familiarize students with the major division of literature: fiction, poetry, and drama. Students will develop an understanding of and appreciation for literary elements.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Recognize the differences between literary genres, including but not limited to poetry, fiction, and drama.
2. Demonstrate basic familiarity and comprehension of vocabulary for discussing literary texts.
3. Write analytically about literature.

Family Services (FA)

FA192 Family Services Practicum

Credits: 3 Course Offering: As Needed
Prerequisites: Department Chair approval
Corequisites: None

Students will have the opportunity to implement their knowledge and skills while working under the mentorship of a qualified social services professional and faculty member. A minimum of 135 hours of work is required, which may include observations, meetings with clients and professionals, and professional development activities.

Student learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate effective communication skills with clients and co-workers.
2. Demonstrate appropriate competency needed in the effective delivery of human services.
3. Demonstrate professionalism and ethical conduct within the field.

Fire Science Technology (FS)

FS100 INTRODUCTION TO FIRE PROTECTION

Credits: 3 Course Offering: Fire Academy
Prerequisites: Instructor approval
Corequisites: None

This course covers the philosophy and history of fire protection; history of loss of life and property by fire; review of municipal fire defenses; study of the organization and function of federal, state, county and private fire protection agencies, survey of professional fire protection career opportunities. This course is designed for career public safety officers and recruits. Course offering: Fire Academy only.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify career opportunities in the fire science field.
2. Research and examine local, state and federal fire protection agencies.
3. Discuss the philosophy and history of fire protection.

FS101 INTRODUCTION TO FIRE SUPPRESSION

Credits: 3 Course Offering: Fire Academy
Prerequisites: Instructor approval
Corequisites: None

This course is a study of techniques of effective fire prevention to include fire hazards and causes; judging fire load, building construction, inspection techniques; storage of flammable and combustible liquids and hazardous materials security. This course is designed for career public safety officers and recruits

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain strategies for effective fire protection.

2. Identify inspection techniques used in fire protection careers.
3. Identify various types of building structures and explain the importance of basic fire resistance requirements.

FS103 FIRE FIGHTER I

Credits: 6 Course Offering: Fire Academy
Prerequisites: Instructor approval
Corequisites:
This course is based on National Fire Protection Association (NFPA) 1001, Standard for Fire Fighter Professional Qualifications. This course is designed for the person who seeks the knowledge and skills to function as an integral member of a firefighting team under direct or general supervision in hazardous conditions. Enrollment is limited to students currently in the Fire Science Academy. **Student Learning Outcomes (SLOs)**
Upon successful completion of this course, students will be able to:

1. Demonstrate the knowledge and skills to perform basic firefighting emergency and rescue operations and duties.
2. Demonstrate the knowledge and skills to operate basic firefighting rescue tools and equipment.
3. Demonstrate the knowledge and skills to pass the National Professional Qualifications System (NPQS) certification test for Firefighter I level.

FS104 FIRE FIGHTER II

Credits: 3 Course Offering: Fire Academy
Prerequisites: Instructor approval
Corequisites: None
This course is based on the National Fire Protection Association (NFPA) 1001, Standard for Fire Fighter Professional Qualifications. The course is designed for the person who seeks the knowledge and skills to function as an integral member of a firefighting team under direct or general supervision in hazardous conditions. Enrollment is limited to students currently in the Fire Academy.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:

1. Demonstrate the knowledge and skills to perform basic firefighting emergency and rescue operations and duties.
2. Demonstrate the knowledge and skills to operate basic firefighting rescue tools and equipment.
3. Demonstrate the knowledge and skills to pass the National Professional Qualifications System (NPQS) certification test for Firefighter II level.

FS105 FIRE PREVENTION

Credits: 3 Course Offering: Fire Academy
Prerequisites: Instructor approval
Corequisites: None
A study of techniques of effective fire prevention to include fire hazards and causes; judging fire load, building construction; inspection techniques; storage of flammable and combustible liquids and hazardous materials security. This course is designed for career public safety officers and recruits.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:

1. Explain the authority to inspect, responsibilities of the fire inspector, the types of organizational structures that may affect inspection activities and public education.
2. List the steps involved to prepare for inspection and inspection procedures and the purpose of follow up inspections.
3. List and explain the different types of occupancy classifications and the different components of the means of egress.
4. List and describe the different types of fire protection systems, and list the components of an effective water distribution system.

FS107 REPORT WRITING FOR THE FIRE SERVICE

Credits: 3 Course Offering: Fire Academy
Prerequisites: Instructor approval
Corequisites: None
Emphasis on principle and techniques of report writing; methods of writing the basic who, what, when, where, why and how; and procedures of gathering information and developing various types of reports. Study is designed to produce proficiency in report writing and to reinforce and expand skills previously acquired.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:

1. Understand the importance of accurate report writing and record keeping.
2. Understand the standards and formats of basic fire service report forms.

3. Properly complete required reports relative to fire and other emergency incidents.
4. Develop administrative reports, memorandums, and correspondence related to the fire service organization.

Hospitality Food & Beverage (HFB)

HFB215 PURCHASING AND RECEIVING

Credits: 2 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course is an introduction to basic concepts and issues in purchasing and receiving. To support the purchasing role in identifying high - value sources of goods and services, strengthen relationships with supply chain partners, and ensure timely delivery of goods.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate an understanding of the principles of purchasing and receiving from a theoretical approach to practical applications using industry standards and measures.
2. Understand contract negotiation principles and employ contract negotiation techniques and identify supplier adoption procedures utilizing industry standards and measures.
3. Describe the value of creating effective supplier relationships.
4. Identify the diverse rules and regulations and ethical conduct essential to purchasing and receiving.

History (HI)

HI121 HISTORY OF WORLD CIVILIZATION I

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
Students will explore the most important aspects of world civilizations from pre-historic time to 1500 A.D. from the Fertile Crescent to the medieval feudal states. Students will study the birth of ancient peoples and societies.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Develop an understanding of the basic principles and theories involved with world civilizations.
2. Explain the development and evolution of ancient people and societies.
3. Develop an appreciation of world civilizations from pre-historic to 1500 A.D. from the Fertile Crescent to the medieval feudal states.

HI122 HISTORY OF WORLD CIVILIZATION II

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
The course plots civilizations from the 1500's to the modern era. Students will examine a variety of historic experiences, discoveries, and inventions as well as the cultural, political, and economic forces that have shaped modern society.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Develop an understanding of the basic principles and theories involved with world civilizations.
2. Apply principles and theories to major events related to world civilizations.
3. Develop an appreciation of world civilizations from the 1500's to modern day period.

HI176 GUAM HISTORY

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
Guam History covers the ancient settlement period prior to Ferdinand Magellan's arrival in 1521 up to the modern United States military buildup on Guam. The Spanish, Japanese and United States administration periods and development of self-rule will be discussed and analyzed. This course is designed to inform those interested about the diverse influences that have contributed to the culture and history of Guam.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate knowledge of Guam history.
2. Respect Chamorro culture and values.
3. Appreciate the qualities that make Guam unique.

Allied Health (HL)

HL120 MEDICAL TERMINOLOGY

Credits: 2 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course provides students with the elements of medical terminology. The study includes origins of medical terminology, the basic structure of medical words, word element combinations, medical terminology for specialties, and medical abbreviations.

Student Learning Outcomes (SLOs):

1. Define 350 medical words and elements.
2. Build and dissect medical terms from roots/suffixes to understand the word element combinations that create medical terminology
3. Define abbreviations and symbols.

HL130 FIRST AID & SAFETY

Credits: 1 Course Offering: Fall & Spring
Prerequisites: None Corequisites: None
This course provides students with the basic knowledge and skills necessary in an emergency to call for assistance and provide standard first aid care, including CPR. This course also includes information on the prevention of injury and illness with a focus on personal safety.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate knowledge and skills of first aid and safety including cardiopulmonary resuscitation (CPR).
2. Explain the Chain of Survival according to the American Red Cross.

HL131 BASIC LIFE SUPPORT FOR HEALTH CARE PROVIDERS

Credits: 1 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course provides students with the knowledge and skills necessary in an emergency such as rescue breathing and cardiopulmonary resuscitation (CPR). This course is a related technical requirement for the Certificate and Associate of Science in Medical Assisting.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate one- and two-person resuscitation of a simulated adult in cardiac arrest.
2. Evaluate the effective use of ventilation when using a barrier device.
3. Apply concepts to use an Automated External Defibrillator (AED) correctly.

HL135 HEARTSAVER FIRST AID CPR AED

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course will provide students with the knowledge and skills to provide Basic First Aid and Cardiopulmonary Resuscitation (CPR) with an automated external defibrillator (AED).

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate how to perform Cardiopulmonary Resuscitation (CPR) on an adult manikin.
2. Practice effective use of an Automated External Defibrillator (AED) on an adult victim.
3. Administer basic first aid techniques.

HL150 STUDY OF DISEASES

Credits: 3 Course Offering: As Needed
Prerequisites: HL120 Corequisites: None
This course provides the basic concepts and characteristics of disease processes, which include disease description, etiology, signs and symptoms, diagnosis, treatment, prognosis, and prevention and terminology pertaining to injuries and disease process.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe the etiology of commonly encountered diseases.
2. Identify signs and symptoms of common diseases.
3. Define basic medical terminology as related to diseases.

HL190 INTRODUCTION TO ANATOMY AND PHYSIOLOGY FOR ALLIED HEALTH PROFESSIONAL

Credits: 4 Course Offering: As Needed
Prerequisites: EN110 placement of equivalent
Corequisites: None
This course is designed to serve students in the Career Technical Programs. This course will be part of the Medical Assistant Program core curriculum. Material covered includes the structure and function of the human body. Basic chemistry and cell

structures are covered, as well as the organization of tissues, organs, and organ systems. Correlations can then be made between this material and disease states commonly encountered in the practice of these fields.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe the effects on cells placed in an isotonic solution, hypertonic solution, or a hypotonic solution.
2. Differentiate between the effects of the sympathetic system and parasympathetic system on system organs.
3. List the cellular components of blood and their functions.

HL202 NUTRITION

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

This course provides students with the basic knowledge of nutrition. The knowledge from this course will allow students to understand the relationship between health and nutrition and how to make wise choices that contribute to a healthy lifestyle. The course further discusses methods in optimizing the use of different food choices in reducing or avoiding health-related implications and/or illnesses.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Upon successful completion of this course, students will be able to:
2. Identify the six functions of nutrients.
3. Apply the food pyramid to effectively maintain a healthy lifestyle.
4. Recommend a dietary meal plan that provides a corrective treatment to common illnesses.

HL252 PATHOLOGY FOR HEALTH PROFESSIONS

Credits: 3 Course Offering: As Needed
Prerequisites: HL190 Corequisites: None

The objective of this course is for the students to gain an understanding of underlying principles, manifestations and clinical implications of disease processes and alterations of function in body systems in all age groups through clinical case study.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe type II hypersensitivity reaction, and how it induces hemolytic anemia. (Immunopathology)
2. Describe the distribution of fluid between the intracellular and extracellular compartments. (Fluid and hemodynamics)
3. List common causes and discuss the pathogenesis of pneumonia. (Respiratory pathology)

Human Services (HM)

HM110 INTRODUCTION TO COMMUNITY SERVICES

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

Students will become familiar with services available in the community to meet human needs and to help with social problems. Emphasis is on the development of knowledge from the perspective of a consumer and of skills necessary to locate, gain access to, and effectively utilize such services.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Recognize different ways of thinking about community.
2. Explain basic concepts of individual and collective human needs.
3. Define concepts and typologies of community services, particularly those on Guam.

HM150 HUMAN DEVELOPMENT DIVERSITY

Credits: 3 Course Offering: As Needed
Prerequisites: SO130 Corequisites: None

The course examines concepts and principles concerning human diversity. It sensitizes students to the complex social-economic-political issues diverging from human equality, conflict resolution, as well as examining the effects of social injustice toward persons of race, gender, sexual orientation and disability. Additionally, students are provided awareness of social change affecting the professional commitment to ensure nondiscriminatory treatment and equal access for clients at all levels of practice interventions.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Examine human development diversity as it relates to race, gender, sexual orientation and disability.
2. Relate how issues of social change and advocacy promote human development diversity.
3. Assess social progress and challenges in promoting fair and equitable treatment.

HM180 HUMAN SERVICES PRACTICUM ORIENTATION

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
The course is designed as a "bridge course" to foster a learning environment that enables students to explore their career pathway in human services. Students gain the knowledge of what to expect from a practicum experience and build awareness about the various human service practicum sites, services provided to its clients, as well as meeting with practicum instructors. By the end of the course, students select the practicum site to conduct field practicum hours.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe the practicum integrative processing model.
2. Employ student values with career options when selecting a field practicum.
3. Explain the relationship between student learner and field practicum agency.

HM201SOCIAL WELFARE & DEVELOPMENT: GLOBAL CHALLENGES

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
Students will critically examine social welfare from an international and cross-cultural perspective with a focus on the importance of cultural and value systems on a society's allocation of resources, on the development of informal and formal systems of care, and on the evolving mission, roles, and functions of social work.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate knowledge of basic concepts of the structure and functions of social welfare.
2. Demonstrate knowledge of social work pertaining to human behavior and the social environment within a bio-psycho-social-spiritual framework.
3. Demonstrate ways that global trends shape the future of social work and social work education.

HM205 FOUNDATIONS OF CASE MANAGEMENT

Credits: 3 Course Offering: As Needed
Prerequisites: HM201 Corequisites: None
The course examines strengths based case management practice models, interpersonal skills to foster a client-driven culturally sensitive partnering approach to care, communication/interviewing skills, service delivery, service coordination planning and proper documentation in case management. Students will further recognize the role of case managers within human service agencies and informal support systems.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify case management principles, models and strategies for effective delivery of human services.
2. Apply the basic skills of case management functions in service coordination.
3. Contrast the different phases of the case management process with one another.

HM225SUBSTANCE ABUSE PREVENTION

Credits: 3 Course Offering: As Needed
Prerequisites: HM110, PY120
Corequisites: None
The course critically examines the field and practice of substance abuse prevention in human services. Students will gain knowledge into the evidence-based, prevention research and programming, as well as facts about drugs and other prevention work such as community awareness, prevention education and evaluation. Students will gain firsthand experience in learning about various community-based programs aimed at substance abuse prevention.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe the three dominant theoretical orientations in substance abuse prevention.
2. Articulate the science base prevention steps of substance abuse prevention programming.
3. Compare the role of cultural competency, advocacy and ethics with science based

community prevention programming and education.

HM250 ETHICS AND VALUES IN HUMAN SERVICES

Credits: 3 Course Offering: As Needed
Prerequisites: HM150, HM201
Corequisites: None
The course is designed to help students integrate values and ethics into all aspects of human services and ultimately the practice in the field of human services and its related services.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Recognize historically important traditions in ethics.
2. Articulate the credibility of information sources.
3. Distinguish the relationship between values and ethics in human services.

HM292 Human Services Practicum
Credits: 3 Course Offering: As Needed
Prerequisites: HM110, HM201
Corequisites: None

Student Learning Outcomes (SLOs):

Upon successful completion of this course, students will be able to:

1. Demonstrate effective communication skills with clients and co-workers,
2. Demonstrate appropriate competency needed in the effective delivery of human services and;
3. Demonstrate professionalism and ethical conduct within the field.

Hospitality (HS)

HS140 MENU PLANNING

Credits: 3 Course Offering: As Needed
Prerequisites: CUL145 Corequisites: None
This course is designed to provide students with an understanding of menu planning; its qualities and importance in a foodservice operation. Students will learn how to plan, write, and adjust menus for individuals with different needs and plan menus for a variety of foodservice operation.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain terms and styles associated with menu planning.
2. Develop and plan menus considering the influence of location, customers, goals, and limitations of a foodservice establishment
3. Write menus following the descriptive terminology, truth-in-menu guidelines and layout.
4. Discuss menu cost and menu price and evaluate menus for profitability.

HS150 WELCOME TO HOSPITALITY

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course provides an overview of the hospitality, travel and tourism industry: an understanding of the concepts and facets of the hospitality and tourism and travel industries interacting in the framework of product and service distribution systems. This course examines the importance of professionalism, guest relations, and developing positive work habits, values, attitudes expected of hospitality employees, and career exploration.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe the main components of the hospitality, tourism, and travel industry.
2. Explain the need for a hospitality attitude.
3. Identify career opportunities in the hospitality and tourism industry.

HS152 CUSTOMER SERVICE

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course is designed to examine, challenge, and refine the principles of guest service management in various service organizations. Students will gain an understanding of "service products" and apply the tools to deliver these services and use these concepts in their own work experiences. Included is the American Hotel and Lodging Association Educational Institute's Guest Service Gold® program designed to train employees to be guest service-oriented to provide memorable service. A Certified Guest Service Professional (CGSP) examination is offered to those seeking a CGSP designation.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate the accepted protocol for resolving guest complaints and apply the steps to take a negative customer encounter and turn it into a positive customer service.

2. Assess the customer's wants and needs through the use of demographics and other database information.
3. Design a customer service campaign that appeals to the wants and needs of a visitor.

HS154 NUTRITION FOR FOODSERVICE PROFESSIONALS

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course is an introduction to nutrition related to the foodservice industry covering fundamentals of nutrition and foods; developing and marketing healthy recipes and menus; and nutrition's relationship to health life span. This course covers the study of nutrients and nutrition deficiencies, digestion and metabolism, dietary guidelines and restrictions, diet and diseases, and basic principles for health conscious cooking.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. List the current USDA Food Guide and recommend daily servings and guidelines.
2. Describe and identify major nutrients and their sources.
3. Evaluate and prepare diets and menus in accordance with dietary guidelines and restrictions.
4. Explain healthy cooking techniques; be able to analyze and modify recipes for healthier food production.

HS155 BASIC HOTEL & RESTAURANT ACCOUNTING

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This is an introductory course in basic hotel and restaurant accounting. Emphasis is placed on understanding and use of financial reports such as trial balance, income, and balance sheet statements. Topics such as the double entry system and types of inventory systems are included. Uniform systems of accounts for use in the lodging and restaurant industry is discussed.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Utilize the uniform systems of accounts to create a chart of accounts.
2. Demonstrate accurate journaling with the double-entry system and analyze income and balance sheets.
3. Summarize accounts and perform a trial balance in accordance with accounting standards.

HS157 TOURISM PLANNING AND DEVELOPMENT

Credits: 3 Course Offering: As Needed
Prerequisites: HS150 Corequisites: None
This course provides an overview of the tourism industry and how its components-destination, marketing, demand, and travel, interact with each other in order to create a successful tourism product. Students will learn principles of destination planning, development, and marketing and apply these principles in the study of Guam's tourism industry.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain the importance of tourism in the economy.
2. Discuss the components of a tourism system.
3. Create a tourism marketing program for Guam.

HS158 INTRO TO MEETINGS, EXPOSITIONS, EVENTS AND CONVENTIONS (MEEC)

Credits: 3 Course Offering: As Needed
Prerequisites: HS150 Corequisites: None
This course provides students with knowledge and abilities that prepares them to assist with or manage the implementation and monitoring of meeting, exposition, event, or convention (MEEC). Students will learn tasks, activities, and issues involved in producing a meeting or event. Course competencies are aligned to Meeting and Business Event Competency Standards (MBECS) - a global, industry-endorsed descriptions of the knowledge and abilities that meeting professionals need in order to be successful.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Discuss the role and function of a meeting planner.
2. Identify the legal and ethical responsibilities of a meeting planner.
3. Create a project management plan for meeting, exhibition, event, and convention (MEEC).

HS160 HOSPITALITY SUPERVISION

Credits: 3 Course Offering: As Needed
Prerequisites: HS150 Corequisites: None
This course provides hospitality students with proven ways to get maximum results by directing and leading. They will be prepared to juggle the expectations of management, guests, employees, and governmental agencies. In addition, students will be able to develop creative strategies for effectively managing change and resolve conflicts.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify fundamental supervisory responsibilities.
2. Describe how supervisors work with the human resources department to recruit new employees.
3. Distinguish coaching from counseling and disciplining.
4. Describe issues supervisors should be aware of as they assume the role of team leader.
5. Explain why it is important for supervisors to take control of their personal development, and describe how to execute a career development plan.

HS208 MANAGING FOOD & BEVERAGE SERVICE

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course will give students a basic understanding of managing service in food and beverage operations. The emphasis of this course is to explore aspects of food and beverage services common to restaurants, cafeterias, hotels, and conference centers and clubs.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate knowledge and skills in providing various styles and specialized forms of service, and identify when these styles and forms of service can be applied, and develop an appropriate sequence of service for various food and beverage establishments.
2. Describe a typical food and beverage establishment's standard operating procedure.
3. Identify causes, assess potential solutions, and formulate a plan of action to address all negative "moments of truth".

HS211 MANAGING FRONT OFFICE OPERATIONS

Credits: 3 Course Offering: As Needed
Prerequisites: HS150 Corequisites: None
Managing Front Office Operations provides an in-depth look at management of the front office and how this department interacts with other hotel departments to create a memorable guest experience. This course presents a systematic approach to front office procedures by detailing the flow of business through a hotel, from the reservations process to check-out and account settlement. It also examines the various elements of effective front office management, paying particular attention to the planning and evaluation of front office operations and to human resources management

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe the importance of operating an efficient front office in view of overall hotel performance.
2. Apply various front office skills in the four stages of the guest cycle.
3. Demonstrate knowledge of front office terminology and guest relations strategies when presented with various work situations.

HS215 MANAGING HOUSEKEEPING OPERATIONS

Credits: 3 Course Offering: Fall & Spring
Prerequisites: HS150 Corequisites: None
Housekeeping is critical to the success of today's hospitality operations. This course exemplifies what it takes to direct day-to-day operations of this department, from big-picture management issues to technical details for cleaning each area. This course provides students with an understanding of managing housekeeping operations and provides strategies and tools to achieve housekeeping standards that meet guest expectations.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify responsibilities and plan the work of housekeeping in a hotel operation.
2. Discuss housekeeping operation's concepts of environmental and energy management.
3. Summarize the routine of guestroom cleaning from room assignments, through inspections, and turndown service.

HS216 HUMAN RESOURCE MANAGEMENT

Credits: 3 Course Offering: As Needed
Prerequisites: HS150 Corequisites: None
This course is an introduction on managing the important human resources who provide services within a hospitality operation. Students will learn the latest strategies for attracting employees, minimizing turnover, and maximizing productivity. Topics include organizational culture and social responsibility issues, including what companies are doing (and not doing) right.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe and list major areas of equal employment opportunity laws and its implication for hospitality human resources.
2. Discuss planning and recruitment for human resources needs and assess the strengths and weaknesses of different types of interview approaches.
3. Describe the steps and identify options for establishing pay structures.
4. Explain the proper use of discipline in a hospitality organization.

HS217 HOTEL SECURITY MANAGEMENT

Credits: 3 Course Offering: As Needed
Prerequisites: HS150, EN110
Corequisites: None
This course explains the issues surrounding the need for individualized hotel security programs, examines a wide variety of security and safety equipment and procedures, discusses guest protection and internal security for asset protection, explores risk management and loss prevention issues, and outlines OSHA regulations that apply to lodging properties.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Discuss the security and safety responsibilities of hotels.
2. Explain the key issues in developing and setting up a hotel security program.
3. Identify strategies for managing employee safety and demonstrate how a hotel can establish a safety committee.

HS222 PLANNING AND CONTROL FOR FOOD & BEVERAGE OPERATIONS

Credits: 3 Course Offering: As Needed
Prerequisites: HS155, HS140
Corequisites: None
This course emphasizes the control processes used to reduce costs in the food and beverage operations. It explores how planning and control functions can help operations work more efficiently, compete for market share and provide value to guests.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate how to use standard purchase specifications, standard recipes and determine standard yields.
2. Calculate a base selling price for menu items using different pricing methods.
3. Describe revenue control procedures of a typical food and beverage operation.

HS254 HOSPITALITY & TRAVEL MARKETING

Credits: 3 Course Offering: As Needed
Prerequisites: HS150 Corequisites: None
This course examines the hospitality and travel marketing system. Students will learn the different types and roles of hospitality and travel industry organizations, how marketing applies to different travel components and various departments of a hospitality organization. Topics such as core principles of marketing, marketing approaches, strategic and tactical marketing, marketing research and analysis, marketing strategy, and marketing plan development, and methods to effectively implement and control as well as evaluate the marketing plan will be covered.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain the core principles of marketing and their application to the Hospitality and Travel components of the tourism industry.
2. Conduct marketing research by developing a survey relevant to the chosen topic.
3. Create and present a Marketing Plan of their choice.

HS255 AIRLINE MANAGEMENT

Credits: 3 Course Offering: As Needed
Prerequisites: HS150 Corequisites: None
This course provides an understanding of the underlying marketing, operational and financial priorities that influence airline viability. Through project-based learning, students will analyze marketing and operation strategies employed by airline companies and how these strategies impact passenger service.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain business and marketing strategies used by airline companies.
2. Compare and contrast customers in the business air travel and leisure travel market.
3. Analyze operation strategies employed by airline companies.

HS257 PRINCIPLES OF TOUR GUIDING

Credits: 3 Course Offering: Fall & Spring
Prerequisites: None Corequisites: None
This course prepares students to become professional tour guides. Students will learn the principles of tour guiding and knowledge about Guam's history and culture. Students will visit Guam's historic and scenic sites and perform the role of tour guides.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Manage tour groups and keep them safe.
2. Explain the importance of customer service.
3. Apply public speaking techniques to describe historic and scenic sites.

HS265 ECO TOURISM

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
Ecotourism is a high-yield category in the tourism industry and a form of tourism that fosters learning and appreciation of the natural environment. This course focuses on best practices for planning and strategic management of ecotourism venues and discussion of the role of local and indigenous communities in ecotourism management.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain the value of ecotourism as an environmentally-focused, responsible and high-yield category of tourism.
2. Identify the role of local and indigenous communities in ecotourism management.
3. List the best practices for planning and strategic management of ecotourism venues.

HS266 INTERNATIONAL HOTELS: DEVELOPMENT AND MANAGEMENT

Credits: 3 Course Offering: As Needed
Prerequisites: HS150 Corequisites:
This course prepares students for leadership roles in tomorrow's worldwide lodging industry. Future international hotel managers will need a fuller understanding and deeper appreciation of management and marketing applications within a globalized context. **Student Learning Outcomes (SLOs)**

Upon successful completion of this course, students will be able to:

1. Describe the phases of hotel development and the criteria for selecting a location for an international hotel.
2. Explain the qualities required for a manager in an international hotel and the importance of understanding cultural diversity.
3. Cite the future growth of international hotels in the era of globalization.

HS268 MANAGING TECHNOLOGY IN THE HOSPITALITY INDUSTRY

Credits: 3 Course Offering: As Needed
Prerequisites: HS150 Corequisites: None
This course is an overview of the information needs of lodging properties. It will cover basics of purchasing, implementing, maintaining, and managing a variety of technology systems used in hospitality and security precautions needed.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify common technology systems used in hospitality operations.
2. Describe the elements of a rooms management module.
3. Define various threats to technology systems and the security precautions needed.

HS292 HOSPITALITY AND TOURISM PRACTICUM

Credits: 1-6 Course Offering: As Needed
Prerequisites: Department Chair Approval
Corequisites:
This course provides students with the opportunity to apply their knowledge and skills via on-the-job training in the hospitality and tourism industry.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Apply appropriate management styles in the workplace.
2. Exercise the importance of customer service in the hospitality and tourism industry.
3. Demonstrate desirable workplace behaviors such as punctuality, communications, and proper appearance.

HS292B FOOD & BEVERAGE MANAGEMENT PRACTICUM

Credits: 6 Course Offering: As Needed
Prerequisites: Completion of all Core and Technical Courses for program
Corequisites:
This course provides students with the opportunity to apply their knowledge and skills in a 600-hour practicum in the Food & Beverage industry. The Practicum is divided into four, 150 hour, work-site practicums. The practicum site may include, but is not limited to, assignment in Fast Food, Fine Dining, Buffet and Banquet to experience and have actual hands-on experience in a variety of F&B operations.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate knowledge, skills, and professionalism by applying the system approach method to analyze, evaluate, solve, and complete the requirements set by their Practicum experience.
2. Distinguish the role and importance of good management and supervision in the food & beverage worksite.
3. Demonstrate the aptitude to develop a comprehensive restaurant operating procedure manual.

Humanities (HU)

HU120 PAIFIC CULTURES

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
Pacific Cultures takes a look at the exploration of the Pacific peoples and their diverse cultural and biological heritages. The course provides a comprehensive survey about Pacific Island cultures. The course further examines the first migrations of indigenous navigators through the age of European exploration and colonialism, as well as exploring the unique cultural configurations of ritual practice, cosmology, and society.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe the culture, economy, and politics of the island nations and territories.
2. Compare and contrast various Pacific Island cultures.
3. Explain relevant sociological concepts as it applies to decolonization efforts to transform Pacific Island regional development and modernization.

HU220 GUAM CULTURES & LEGENDS

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course covers Guam's cultural development and conflicts. Cultural environments both past and present are explored. Emphasis is made on the study of Chamorro culture through folklore. Students will learn the effect, cultural interchange that will enable them to answer specific questions from visitors with a more accurate and deeper explanation.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Develop an understanding of the basic principles and theories of the origin of the Chamorro people and their culture.
2. Develop a deeper understanding and appreciation of the Chamorro people and their culture.

Interpreting (IN)

IN145 VOCABULARY DEVELOPMENT

Credits: 3 Course Offering: As Needed
Prerequisites: ASL110 Corequisites: None
This course provides students with information and instruction to develop skills aimed at increasing vocabulary and word choice repertoire for effective interpreting. This course will also include the study of how language is culturally based, the effects of culture on intercultural communication and possible cultural conflicts.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate critical thinking and appropriate responses in any social context using local, national and global vocabulary skills.
2. Improve and expand vocabulary in ASL conversation to include the use of idioms, common expressions, and other figures of speech.
3. Develop strategies and word choice repertoire to facilitate effective interpreting.

IN170 INTRODUCTION TO INTERPRETING

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course addresses basic theory and practice of interpretation in a variety of settings. Students will be introduced to the communication process as a whole and the way messages are constructed. Information on linguistic register, cultural characteristics, ethics and professional conduct, and the modes of interpreting will be explained and discussed.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate the different types of registry and modes of interpreting.
2. Identify settings for interpreting and demonstrate appropriate skills needed to facilitate communication.
3. Adhere to a set of values or code of ethics established for interpreting.

IN180 ECOLOGY OF DEAFNESS

Credits: 3 Course Offering: Fall
Prerequisites: None Corequisites: None
This course will expand the student's knowledge of the impact of deafness on language and cognitive development and the socialization of Deaf individuals in a hearing world. Students will also be acquainted with characteristics of Deaf culture.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify the parts and function of the ear and be able to decipher an audiogram.
2. Explain the difference between "DEAF" and "deaf" persons.
3. Explain cognitive development as it relates to typical language development.

IN220 VOICE TO SIGN INTERPRETING

Credits: 3 Course Offering: As Needed
Prerequisites: ASL100, IN170
Corequisites: None
The course will acquaint students with a basic understanding of what interpreting entails. This course focuses on building expressive interpreting skills such as assisting students in developing voice to sign interpreting skills and strengthening processing skills. Theoretical components and principles are also covered, including strategies for effective receptive listening.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Interpret spoken English into American Sign Language.
2. Demonstrate skills necessary for both consecutive and simultaneous interpretation.
3. Explain the dynamics of voice to sign language interpreting.
4. Demonstrate beginning proficiency skills as a sign language interpreter of the Deaf Community.

Japanese Language (JA)

JA110 BEGINNING JAPANESE I

Credits: 4 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course gives students basic Japanese language skills needed in real-life situations for varying communicative purposes. Language activities provide practice in listening, speaking, reading and

writing, and reinforce vocabulary, grammar and language functions. Students learn to read and write Hiragana, and to identify Katakana and select Kanji characters. Cultural aspects of Japan are also discussed to better understand the target language.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Comprehend simple spoken conversations.
2. Communicate orally in a limited variety of everyday situations using basic Japanese.
3. Comprehend short, simple sentences written in Japanese.
4. Identify and write Hiragana, and identify Katakana and 24 Kanji characters.

JA111 BEGINNING JAPANESE II

Credits: 4 Course Offering: As Needed
Prerequisites: JA110 Corequisites: None

A continuation of Beginning Japanese I, this course provides learners with language necessary for meaningful communicative interaction. Language functions and structures are practiced and applied to real-life situations through role-play, and pair/group tasks, and with a variety of audio, visual and computer activities. Listening and speaking skills are emphasized, with further practice in the reading of Hiragana, Katakana and Kanji. Cultural aspects of Japan are also discussed to better understand the target language.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Comprehend additional simple spoken conversations.
2. Communicate orally in a variety of everyday situations using basic Japanese.
3. Comprehend additional short, simple sentences written in Japanese.
4. Identify and write Hiragana and Katakana, and identify an additional 75 Kanji characters.

Korean Language (KE)

KE110 BEGINNING KOREAN I

Credits: 4 Course Offering: As Needed
Prerequisites: None Corequisites: None

This course is an introductory course in the Korean language. Students will develop language skills in pronunciation, basic grammar, reading, and writing. The course covers grammatical structures and vocabulary that is necessary for basic conversation geared to developing a solid foundation in the Korean language and insights in the culture.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate basic understanding of Korean culture and social norms.
2. Read and comprehend simple Korean language sentences and be able to answer appropriately in the correct contexts.
3. Demonstrate ability to have simple conversations in Korean using culturally acceptable expressions.

KE111 INTERMEDIATE KOREAN

Credits: 4 Course Offering: As Needed
Prerequisites: None Corequisites: None

This course will enable learners to achieve the intermediate level of speaking, listening, reading, writing, and grammar skills in Korean. Also, this course aims to help students understand various aspects of Korean culture and society.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe advanced understanding of Korean culture and social norms.
2. Read and comprehend advanced Korean language sentences and be able to answer appropriately in the correct contexts.
3. Incorporate culturally acceptable expressions using advanced conversational skills in the Korean language.

Mathematics (MA)

AEMA050 ALGEBRA I

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

This course is the first of two general mathematics courses designed to prepare students for college level mathematics courses or to have basic mathematical skills to succeed in the workplace. The Adult High School mathematics courses follow the College and Career Readiness Standards (CCRS) for Adult Education. The three shifts by CCRS (focus, coherence, and rigor) ensure that students understand and apply mathematical ideas.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Interpret the structure of expressions. (A.SSE.1)

2. Write expressions in equivalent forms to solve problems. (A.SSE.3)
3. Perform arithmetic operations on polynomials. (A.APR.1)
4. Create equations that describe numbers or relationships. (A.CED.1)
5. Solve equations as a process of reasoning. (A.REI.1)

AEMA060 GEOMETRY

Credits: 3 Course Offering: As Needed
Prerequisites: AEMA050 Corequisites: None
As one of the three mathematics courses, AEMA60 Geometry is designed to prepare students for college level mathematics courses or to have basic mathematical skills to succeed in the workplace. Topics include Expressing Geometric Properties with Equations, Congruence, Similarity, Right Triangles, Geometric Measurement and Dimension and Circles. The Adult High School mathematics courses follow the College and Career Readiness Standards (CCRS) for Adult Education. The three shifts by CCRS (focus, coherence, and rigor) ensures that students understand and apply mathematical ideas.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Experiment with transformations in the plane and develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments. (G.CO.1)
2. Make formal geometric constructions such as copying and bisecting a segment, copying and bisecting an angle, constructing perpendicular lines, including the perpendicular bisector of a line segment with a variety of tools and methods. (G.SRT.5)
3. Prove geometric theorems, theorems involving similarity and applying these theorems to solve problems. (G.MG.2)

AEMA070 ALGEBRA II

Credits: 3 Course Offering: As Needed
Prerequisites: "C" or better in AEMA050
Corequisites: None
This course is the third of three general mathematics courses designed to prepare students for college level mathematics courses or to have basic mathematical skills to succeed in the workplace. The Adult High School mathematics courses follow the College and Career Readiness Standards (CCRS) for Adult Education. The three shifts by CCRS (focus, coherence, and rigor) ensure that students understand and apply mathematical ideas.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Create equations that describe numbers or relationships. (A.CED.1)
2. Solve equations as a process of reasoning. (A.REI.1)
3. Interpret functions. (F.IF.1)
4. Build functions. (F.BF.1)
5. Interpret categorical and quantitative data. (S.ID.1)

MA052 GENERAL MATHEMATICS

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course is designed to be an overview of basic mathematical operations and concepts, measurements and converting units of measurement, ratios and proportions, basics of statistical graphs, and basic algebraic concepts.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Perform basic operations involving whole numbers, fractions, decimals, and percents.
2. Solve ratios and proportion problems.
3. Perform basic operations involving measurements, including converting units of measurement.
4. Summarize basic statistical tables, graphs, and charts.
5. Apply basic algebraic concepts.

MA065 ADULT MATHEMATICS

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course is designed to be an overview of several basic mathematical operations and concepts involving Real Numbers, Order of Operation, Basic Algebra, Measurement, Word Problems, Basic Statistics, Geometry, and Graphing. This course prepares students for General Education Development Testing Program (G.E.D) and the further learning of Algebra. Course offering: As needed
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Perform basic operation involving whole numbers, fractions, decimals, and percents.

2. Solve ratios, rates, and proportion problems.
3. Perform conversions among Units of Measure.
4. Understand basic statistical terms, tables, and charts.
5. Learn and apply basic algebraic concepts.

MA096 PRE-COLLEGIATE MATHEMATICS

Credits: 4 Course Offering: As Needed
Prerequisites: None Corequisites: None
MA096 is an accelerated course that is designed for students to complete all developmental math requirements in one semester. This course will help students acquire the skills needed for a college-level mathematics course. Classroom instruction is comprised of the following: accelerated, modular and mastery instructional strategies, computer-assisted learning, and active, learning strategies. Upon successful completion of this course, students may register for MA110A.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Compute basic operations with whole numbers, decimals, fractions, proportions, and percentages.
2. Solve elementary algebraic expressions, quadratic and other equations, and inequalities including applications.
3. Identify and apply basic geometric and statistical concepts, with units of measurements.
4. Graph and solve systems of linear equations and inequalities.
5. Factor polynomials and solve equations with rational expressions and radicals.

MA097 PRE-ALEBRA

Credits: 4 Course Offering: As Needed
Prerequisites: None Corequisites: None
MA 097 Pre-Algebra is the first level in a fundamental mathematics course. This is a course designed for students to acquire the basic algebraic skills needed for a pre-algebra level mathematics course. This course may be conducted either at an accelerated pace for half a semester or traditional pace for a full semester. Upon successful completion of this course, students may register for MA 098.
Placement: Arithmetic score of 20-47

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Compute operations with whole numbers, decimals, fractions, proportions and percentages
2. Solve applications and conversions with unit measurements.
3. Calculate basic descriptive statistics and applications involving basic geometry.
4. Simplify expressions and solve equations and inequalities with real numbers.
5. Graph a linear equation and a linear inequality.

MA098 INTERMEDIATE ALEBRA

Credits: 4 Course Offering: As Needed
Prerequisites: MA097 or placement
Corequisites: None
MA 098 Intermediate Algebra is the second level in a fundamental mathematics course. This is a course designed for students to acquire the fundamental algebraic skills needed for a college level mathematics course. This course may be conducted either at a half a semester or at a full semester.
Placement: Arithmetic score of 48-120 or
Elementary Algebra score of 20-120 or
College Math score of 20-39

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Solving equations, inequalities and applications with real numbers.
2. Graph and solve systems of linear equations and system of linear inequalities.
3. Simplify and solve polynomial expressions and equations.
4. Simplify and solve rational expressions and equations.
5. Solve quadratics equations using the following methods: factoring, completing the square and quadratic formula.

MA107 MATHEMATICS FOR THE TRADES

Credits: 4 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course is especially designed for students seeking a Certificate in Automotive, Allied Health, and Construction Trades programs, as well as other technical and occupational areas. This course focuses on fundamental concepts of Arithmetic, Algebra, Geometry, and Trigonometry supported with practical applications in a variety of technical and career vocations, including but not limited to Automotive, Allied Health, and Construction Trades.

It is especially designed for students who find math challenging and for adults who have been out of school for a time. The course helps students to master the needed on-the-job math skills by a wide variety of real problems and situations.

Student Learning Outcomes (SLOS)

Upon successful completion of this course, students will be able to:

1. Identify numbers and perform arithmetic operations accurately.
2. Perform mathematical computations with ratios and percentages.
3. Apply measurements with both US and Metric Systems.
4. Read and interpret information from basic statistical graphs.
5. Solve application problems with basic algebraic skills and equations.

MA110A FINITE MATHEMATICS

Credits: 4 Course Offering: As Needed

Prerequisites: Placement into MA110A or equivalent

Corequisites: None

Topics include: Elementary Functions, Linear Equations, Polynomial Functions, Quadratic Functions, Exponential and Logarithmic functions, Systems of Linear Equations and Inequalities, including Matrix Equations, Matrices and Determinants, and Mathematics of Finance. **Student Learning Outcomes (SLOs):**

1. Demonstrate understanding of key theories and concepts, applying them to solve questions selected from the following topics: functions and their graphs, linear and quadratic equations, matrices, linear programming, and financial mathematics.
2. Solve problems in Finite Mathematics by completing daily homework assignments in problem solving.
3. Solve problems using appropriate technology translating problem from one form to another, using various problem solving strategies.
4. Think critically about Finite Mathematics by applying key theories, concepts, and methods of inquiry in Finite Mathematics to novel problems, to other disciplines, and to situations that require understanding rather than rote memory.

MA161A COLLEGE ALGEBRA & TRIGONOMETRY I

Credits: 4 Course Offering: As Needed

Prerequisites: "C" or better in MA110A or placement

Corequisites: None

This course is the first of two courses designed to provide the mathematical tools needed by students enrolled in selected technical occupational programs. Topics included in this course are equations and inequalities, functions and graphs, polynomial and rational functions, exponential and logarithmic functions, and systems of linear equations and inequalities with matrices.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate methods for solving basic linear and polynomial equations and inequalities.
2. Determine the graphical and algebraic characteristics of polynomial, rational, exponential, logarithmic, and other functions and their graphs.
3. Perform alternative methods in solving systems of linear equations and inequalities graphically and algebraically.

MA161B COLLEGE ALGEBRA & TRIGONOMETRY II

Credits: 4 Course Offering: As Needed

Prerequisites: "C" or better in MA161A

Corequisites:

This course is a continuation of MA161A and upon successful completion, a student will be calculus ready. Topics included in this course are trigonometric functions, trigonometric identities and equations, and applications of trigonometry and discrete algebra.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate understanding of the trigonometric concepts to solve trigonometry exercises and equations.
2. Determine which definition, concept, and identity should be implemented to find solutions to application problems.
3. Apply basic mathematical concepts and methods involving the concept of sequences, counting processes, probability and mathematical induction.

Automotive (ME)

ME161A INTRODUCTION TO AUTOBODY REPAIR

Credits: 3 Course Offering: Fall
Prerequisites: None Corequisites: None
This is an introductory course covering the basic concepts and practices in repairing damage to automobile bodies. Hand tools, power tools, materials, welding and their applications are stressed. Emphasis is on small dent repair and rust patching.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Follow shop safety procedures.
2. Prepare auto body components for repair.
3. Inspect, remove, replace and repair outer body panels.
4. Weld and cut various metals using GMAW (mig) and Gas welding equipment.

ME161B INTRODUCTION TO AUTOBODY PAINTING

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course is an introductory course covering the basic concepts and practices in partial and complete refinishing of auto body paint surfaces. Application and troubleshooting are stressed. Emphasis is placed on preparing the automobile for proper refinishing.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Perform corrosion protection restoration, sound deadening restoration and panel bonding.
2. Perform metal finishing and body filling procedures.
3. Inspect, remove, reinstall or replace, and align movable glass and hardware.
4. Perform repairs involving plastics and adhesives.

ME171A AUTOBODY COLLISION REPAIR

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This is an advanced auto body course that deals with repairing damage due to collision. Frame straightening and auto body repairs will be covered. Power equipment usage, glass replacement, shop operations, management and refinement of skills learned in prior courses will be stressed. Emphasis is on collision damage repair.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Follow painting and refinishing safety precautions.
2. Prepare surfaces for painting and refinishing.
3. Use a paint spray gun and related equipment.

ME171B AUTOBODY REFINISHING

Credits: 3 Course Offering: Fall
Prerequisites: None Corequisites: None
This is an advanced auto body course that deals with overall auto body painting. Refinement of skills learned in the prior course such as surface preparations and spot work will be stressed. Emphasis will be placed on complete paint jobs.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Mix, match, and apply paint.
2. Identify and correct paint defects.
3. Perform final detail procedures.

Medium/Heavy Truck (MHT)

MHT100A INTRO TO DIESEL TECHNOLOGY AND PREVENTIVE MAINTENANCE PART I

Credits: 3 Course Offering: As needed
Prerequisites: None Corequisites: None
This is the first of a two-part introductory course that prepares students for study within specific areas of Medium/Heavy Truck Diesel Technology. Topics covered include workshop safety practices, proper usage of hand tools, special tools and testing equipment, and preventive maintenance procedures on diesel engines, fuel systems, air induction and exhaust systems.

Student Learning Outcomes (SLOs):

Upon successful completion of this course, students will be able to:

Demonstrate proper workshop safety practices.
Identify, describe and demonstrate the proper usage of hand tools, special tools, and testing equipment.
Perform preventive maintenance procedures on diesel engines, fuel systems, air induction, and exhaust systems.

MHT100B INTRO TO DIESEL TECHNOLOGY AND PREVENTIVE MAINTENANCE PART II

Credits: 3 Course Offering: As needed
Prerequisites: MHT100A Corequisites: None
This is the second of a two-part introductory course that prepares students for study within specific areas of Medium/Heavy Truck & Diesel Technology. The course focuses on preventive maintenance procedures involving the cooling system, lubrication systems, cab and hood, safety equipment, hardware, Heating Ventilation & Air Conditioning (HVAC), electrical/electronics, charging systems, lighting systems. frame and chassis, hydraulic brakes, drive trains, suspension & steering systems, tires & wheels, and frame with fifth wheel.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Execute preventive maintenance procedures on cooling systems, lubrication systems, cab and hood.
2. Carry out preventive maintenance procedures on safety equipment, hardware, heating ventilation & air conditioning (HVAC), electrical/electronics, charging systems, lighting systems, frame and chassis
3. Perform preventive maintenance procedures on hydraulic brakes, drive trains, suspension & steering systems, tires & wheels, and frame with fifth wheel.

MHT110 DIESEL ENGINES PART I

Credits: 3 Course Offering: As needed
Prerequisites: MHT100A, MHT100B
Corequisites: None
This course introduces students to the theory and operation of diesel engines that includes general engine diagnostics, minor diagnosis and repair of cylinder head and valve train, engine block, lubrication system, and cooling system.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain general diesel engine operation and perform basic engine troubleshooting and repair.
2. Demonstrate cylinder head and valve train diagnostics and repair.
3. Expound engine block diagnostics and repair
4. Identify lubrication system components and diagnose and repair minor problems.
5. Name the major parts and explain the functions of the cooling system and execute minor diagnostic and repair procedures.

MHT120 MEDIUM/HEAVY TRUCK DRIVE TRAINS PART I

Credits: 3 Course Offering: As needed
Prerequisites: None Corequisites: None
This is an introductory course covering the functionality of diesel transmissions, fundamentals of diesel clutches, troubleshooting, and repair of basic transmission drivability faults.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe clutch operation.
2. Discuss diesel transmission functionality.
3. Troubleshoot elemental transmission drivability problems and repair elemental faults.

MHT130 BRAKE SYSTEMS PART I

Credits: 3 Course Offering: As needed
Prerequisites: MHT100A, MHT100B
Corequisites: None
This course provides instruction in Medium/Heavy Truck Brakes that includes basic diagnosis & repair of air supply and service systems, mechanical/foundation systems, and parking brakes.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Depict air supply and service systems operation.
2. Identify mechanical/foundation system components and perform minor repairs.
3. Explain parking brake operation.

MHT140 SUSPENSION & STEERING PART I

Credits: 3 Course Offering: As needed
Prerequisites: MHT100A, MHT100B
Corequisites: None
This is a study of elements in Medium/Heavy Truck Suspension & Steering that include introductory level steering system functions, diagnostics, and repair; suspension system functions, diagnostics, and repair; and wheel alignment diagnosis, adjustment, and repair.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Differentiate between different steering system designs and explain their functions.

2. Identify suspension system components and discuss basic functionality.
3. Perform wheel alignment diagnosis, adjustment, and repair.

MHT150 MEDIUM/HEAVY TRUCK HEATING, VENTILATION, & AIR CONDITIONING

Credits: 3 Course Offering: As needed
Prerequisites: MHT100A, MHT100B
Corequisites: None
This course gives students basic instruction in Medium/Heavy Truck Heating Ventilation & Air Conditioning (HVAC) that include HVAC systems diagnosis, service, and repair, general A/C system diagnosis, service, and repair, A/C compressor and clutch, diagnosis, service, and repair, and evaporator, condenser. and related components, diagnosis, service, and repair. Course offering:
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Depict basic HVAC system operation.
2. Troubleshoot general A/C system malfunctions.
3. Explain A/C compressor and clutch operation and perform basic repairs.
4. Describe evaporator, condenser, and related components' functionality.

MHT160 HYDRAULICS

Credits: 3 Course Offering: As needed
Prerequisites: MHT100A, MHT100B
Corequisites: None
This course provides students with fundamental instruction in Medium/Heavy Truck Hydraulic Systems that include entry level general hydraulic system diagnosis, service, and repair, hydraulic system pump diagnosis, service, and repair; and filtration/ reservoirs (tanks) diagnosis, service, and repair.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Recognize general hydraulic system components and carry out entry level diagnosis, service, and repair.
2. Ascertain basic hydraulic system failures and perform preliminary pump diagnosis, service, and repair.
3. Perform fundamental filtration/reservoirs (tanks) diagnosis, service, and repair.

MHT170 MEDIUM/HEAVY TRUCK ELECTRICAL/ELECTRONIC SYSTEMS PART I

Credits: 3 Course Offering: As needed
Prerequisites: None Corequisites: None
This course is designed to give students an elemental understanding of Medium/Heavy Truck Electrical/Electronic Systems that include general electrical systems diagnosis, battery diagnosis and repair, and starting system diagnosis and repair.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Perform general electrical systems diagnosis.
2. Discuss battery construction and determine cause/s of battery failure.
3. Demonstrate fundamental starting system diagnosis and repair.

MHT210 DIESEL ENGINES PART II

Credits: 3 Course Offering: As needed
Prerequisites: MHT110 Corequisites: None
This course builds on MHT110; the course of study includes air induction and exhaust systems diagnosis and repair, fuel supply system diagnosis and repair, mechanical fuel injection diagnosis and repair, electronic fuel management system diagnosis and repair, and engine brakes diagnosis and repair.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Troubleshoot intermediate level air induction and exhaust system failures and perform needed repairs.
2. Diagnose, intermediate level fuel supply system failures and perform needed repairs.
3. Ascertain intermediate level mechanical fuel injection faults and perform needed repairs.
4. Determine intermediate level electronic fuel management system problems and perform needed repairs.
5. Perform intermediate level engine brakes diagnosis and repair.

MHT230 BRAKE SYSTEMS PART II

Credits: 3 Course Offering: As needed
Prerequisites: MHT130 Corequisites: None
This course prepares students to perform complex diagnostics and repairs on hydraulic brakes, power assist units, and air and hydraulic Antilock Brake Systems (ABS) and Automatic Traction Control (ATC).
Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Ascertain hydraulic brake problem causes and rectify faults.
2. Demonstrate power assist unit failure analysis and take proper steps to correct failure.
3. Locate air and hydraulic Antilock Brake System (ABS) and Automatic Traction Control (ATC) faults and perform needed repairs.

MHT270 MEDIUM/HEAVY TRUCK ELECTRICAL/ELECTRONIC SYSTEMS PART II

Credits: 3 Course Offering: As needed
Prerequisites: MHT170 Corequisites: None
This course builds on MHT170; the course of study includes lighting systems diagnosis and repair, and the diagnosis and repair of warning devices, gauges, and related electrical systems.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Locate faults in the lighting system and correct problems.
2. Pinpoint failure causes in gauges and warning devices and take proper action to correct situation.

Marketing (MK)

MK123 PRINCIPLES OF MARKETING

Credits: 3 Course Offering: As needed
Prerequisites: None Corequisites: None
This course is an overview of fundamental marketing concepts and applications in a technology-driven world. Students will learn the skills required to be successful marketers today.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Describe fundamental marketing concepts.
2. Demonstrate oral and written communication skills using technological tools in marketing.
3. Evaluate various marketing career opportunities.

MK124 SELLING

Credits: 3 Course Offering: As needed
Prerequisites: MK123 Corequisites: None
This course includes a comprehensive range of techniques of professional selling and ethical behavior in business with both consumer and organizational sales and settings. Students will develop skills for successful selling and relationship marketing while incorporating technology into the sales process.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Prepare and execute a sales presentation with the use of technology.
2. Apply marketing knowledge by creating a promotional mix and pricing strategy for a product.
3. Identify and examine the components and functions of the sales management structures, process, and responsibilities.

MK125SOCIAL MEDIA MARKETING

Credits: 3 Course Offering: As needed
Prerequisites: None Corequisites: None
Social media is not just for personal socializing anymore. It is one of the hottest trends in the marketing field right now, and is essential in today's marketing success for any business. Students will gain valuable skills in social media marketing. This course will focus on implementation of social media marketing strategies across multiple platforms, to develop a winning social media marketing plan.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Explain how the use of social media marketing can improve marketing efforts for businesses.
2. Develop a social media marketing plan, utilizing the various platforms.
3. Select the most effective social media platform for various marketing activities.

MK205 ENTREPRENEURSHIP

Credits: 3 Course Offering: As needed
Prerequisites: None Corequisites: None
This course is an overview of the role of entrepreneurial businesses and its impact on the global economy. Students will evaluate skills and commitment necessary to successfully start and maintain a business.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Determine the characteristics and skills of a successful entrepreneur.

2. Design a business plan utilizing the latest technology.
3. Recognize the advantages and disadvantages of entrepreneurship as a career.

MK206 RETAILING

Credits: 3 Course Offering: Spring
Prerequisites: MK123 Corequisites: None
This course covers the fundamental retailing principles, incorporating the latest trends and practices in today's fast-paced retail market. It emphasizes how retailing is constantly changing and adjusting to competitive, technological, society and consumer needs. The course includes retail planning, the retail environment, market selection and analysis, retail operation management, and retail administration among other vital elements of this constantly changing field.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe fundamental retailing concepts.
2. Develop a retail venture, incorporating retail planning, market selection and analysis, retail operation management, promotions, and visual merchandising strategies.
3. Respond to concepts and strategies to explore retailing career opportunities.

MK208 INTERNATIONAL MARKETING

Credits: 3 Course Offering: As needed
Prerequisites: MK123 Corequisites: None
International Marketing is ideal for students wishing to work for multi-national corporations, particularly those operating in Asia, or students interested in taking advantage of import/export opportunities in the Pacific Region. Students will be able to analyze the global marketing environment, formulate multinational marketing strategies, and understand how goods and services move between countries.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain how the different market conditions, political, ethical, and legal environments impact the operations of international companies.
2. Describe import and export operations.
3. Develop promotional and distribution strategies for multinational companies.
4. Discuss the role of international agreements and organizations.

MK224 ADVERTISING

Credits: 3 Course Offering: As needed
Prerequisites: MK123 Corequisites: None
This course takes a comprehensive view of the advertising industry. It provides an introduction to fundamentals of advertising with emphasis on the importance of Integrated Marketing Communications (IMC). Students will learn application of conceptual advertising principles and design.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe career opportunities available in advertising.
2. Develop a comprehensive and effective Advertising Plan.
3. Assess advertisements to ensure achievement of marketing communications goals/objectives.

MK292 MARKETING PRACTICUM

Credits: 3 Course Offering: As needed
Prerequisites: Second year standing
Corequisites: None
This course provides students a supervised work experience where they apply the skills necessary to be successful in a marketing career.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Apply theory learned in the classroom to the work environment.
2. Practice effective interpersonal skills in the workplace.
3. Document the synthesis of knowledge and skills gained through work experience in an electronic presentation.

Medical Assisting (MS)

MS101 INTRODUCTION TO MEDICAL ASSISTING

Credits: 3 Course Offering: As needed
Prerequisites: None Corequisites: None
This course provides an introduction to the Medical Assisting program. The roles of the Medical Assistant in the patient care facilities are defined as well as fundamental administrative and clinical concepts and skills. Introduction to ethical and legal considerations is also provided. Course offering:

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Demonstrate basic knowledge of administration and clinical skills in the medical assisting field.
2. Discuss ethical legal considerations and theoretical concepts regarding patient care.
3. Classify patient coping mechanisms and communication methods.

MS120 CLINICAL MEDICAL ASSISTING: THEORY

Credits: 2 Course Offering: As needed
Prerequisites: MS160 Corequisites: MS121
This course will provide basic ambulatory care concepts and principles necessary for the performance of back office duties. Students are provided with the knowledge of routine patient care and diagnostic procedures used to assess the health status of patients including vision testing, hearing testing, electrocardiography, and the knowledge to prepare the back office, equipment and supplies necessary to facilitate patient flow through the clinic and/or physician's office.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Assess a potentially infectious situation to select the appropriate barrier/personal protective equipment (PPE).
2. Describe the proper use of medical equipment.
3. Infer proper patient preparation using the patient's chief complaint.

MS121 CLINICAL MEDICAL ASSISTANT: LABORATORY

Credits: 2 Course Offering: As needed
Prerequisites: MS141 Corequisites: MS120
This course will provide the student with hands-on practice on basic ambulatory care concepts and principles necessary for the performance of back office duties. The student will practice and perform routine patient care and diagnostic procedures used to assess the health status of patients including vision testing, hearing testing, electrocardiography, and the knowledge to prepare the back office, equipment, and supplies necessary to facilitate patient flow through the clinic and/or physician's office.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Generate a new patient record using the electronic medical record/practice management system (EMR/PM) system.
2. Analyze an electrocardiogram (EKG) tracing for common artifacts.
3. Compare patient vital signs with current normal values.

MS125 CLINICAL MEDICAL ASSISTING: CLINICAL

Credits: 1 Course Offering: As needed
Prerequisites: MS120 Corequisites: MS121
In this course the student will perform clinical Medical Assisting tasks in a designated medical clinic in the community under the supervision of the instructor. The student will demonstrate the necessary traits acceptable to the health care profession, including communication skills necessary for interacting with medical and allied health personnel. Students will perform routine patient care procedures to assist the physician in the examining room, obtain and record medical data from the patients, assist the physician with exams and/or treatments with minor surgery, prepare exam and treatment rooms, prepare patients for exams and/or treatments, measure and record vital signs, height and weight, and perform hearing vision screening and ECG tracings.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Record the patient's chief complaint.
2. Measure and record the patient's vital or cardinal signs. Apply the principles of aseptic technique and infection control in the clinical setting.

MS140 ADMINISTRATIVE MEDICAL ASSISTING: THEORY

Credits: 2 Course Offering: As needed
Prerequisites: MS101 Corequisites: MS141, MS145
This course provides students with basic concepts and principles of administrative medical office practices and procedures. The student will learn the basics of patient scheduling, billing, coding, and human resource management. This course prepares the student for the administrative front office.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe filing indexing rules in keeping with billing and coding standards.
2. Develop a current list of community resources in the medical office setting.
3. Compose professional correspondence.

MS141 ADMINISTRATIVE MEDICAL ASSISTING: LABORATORY

Credits: 2 Course Offering: As needed
Prerequisites: HL190 Corequisites: MS140, MS145
This course provides students with the laboratory setting to practice performing administrative office procedures that includes administrative planning functions for an ambulatory care facility, demonstration of various routine office reception and oral communication techniques. Role-playing to help create awareness of common administrative medical assistant and patient interactions, exercises in written communication, dictation and transcription, and completion of various forms related to patient records and office management of medical clinic or physician's office are also explored in this course.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe the role of the medical assistant as a patient navigator.
2. Identify different types of appointment scheduling methods.
3. Define medical necessity as it applies to diagnostic and procedural coding.

MS145 ADMINISTRATIVE MEDICAL ASSISTING: CLINICAL

Credits: 1 Course Offering: As needed
Prerequisites: None Corequisites: MS140, MS141
This course will provide the Medical Assisting Program students with an instructor-supervised experience as part of a health care team in the delivery of quality patient care. In the medical clinic the student will practice all aspects of administrative medical office procedures.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. File patient medical records.
2. Apply professional telephone techniques.
3. Perform diagnostic and procedural coding.

MS160 INTRODUCTION TO PHARMACOLOGY

Credits: 1 Course Offering: As needed
Prerequisites: MS140 Corequisites: MS160
This course provides the students with the principles of pharmacology that includes identification and classifications of medications including the indications for use, desired effects, side effects, and adverse reactions. This course also includes interpretation of abbreviations and symbols, familiarization of local and federal standards and legislation as they relate to medications and their administration. The usage of appropriate references for obtaining drug information, and the demonstration of pharmacology related mathematics to include measurement conversions, and proper dosage calculations will also be key course content.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify the classifications of medications.
2. Apply mathematical computations to solve equations.
3. Calculate proper dosages of medication for administration.

MS161 ADMINISTRATION OF MEDICATIONS: LABORATORY

Credits: 1 Course Offering: As needed
Prerequisites: MS140 Corequisites: MS160
This course is an application of basic concepts and techniques required for medication administration. This will include patient care, documentation, and general competencies including the rationale for the equipment used for medication administration and the techniques for oral and parenteral medication administration. The student will satisfactorily demonstrate proper techniques during the performance of intramuscular, subcutaneous, intradermal injections, oral medication, and immunizations. Formerly HL162

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. List the six rights or rules of medication administration.
2. Choose the proper sites for administering parenteral medications.
3. Give examples of post injections reactions and injuries.

MS180 INTRODUCTION TO CLINICAL LABORATORY

Credits: 2 Course Offering: Spring
Prerequisites: MS101, HL120, HL131, MS140, MS141, MS145 MS201, MS160, MS161, MS120, MS121, MS125
Corequisites: MS210, MS292
This course introduces the field of clinical laboratory science to include basic laboratory skills and phlebotomy. The students will demonstrate knowledge of clinical and laboratory procedures identify roles of various laboratory personnel within the health care community. Perform CLIA waived to moderate laboratory tests, using basic to moderate laboratory instrumentation and equipment. Demonstrate competence in obtaining blood and other body fluid specimens, demonstrate the ability to effectively interact with patients, hospital personnel, reference laboratory, and describe quality control in the clinical laboratory. Formerly HL140. Course Offering: Spring only.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Interpret the results of a urine human chorionic gonadotropin (HCG) quantitative test.
2. Infer a patient's possible diagnosis after performing a differential smear.
3. Demonstrate proper technique when performing phlebotomy.

MS201 MEDICAL LAW AND ETHICS

Credits: 2 Course Offering: Summer
Prerequisites: None Corequisites: None
This course provides students with the basic knowledge of legal and ethical responsibilities in patient care and management, which includes laws that affect medical practice and the practice of medical assisting and the application of medical ethics in performance of duties.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. List the current patients' rights according to the American Hospital Association (AHA).
2. Describe the difference between legal and ethical responsibilities in patient care and management.
3. Analyze the consequences of Medical Law and ethics as related to the Clinical Medical Office.

MS210 MEDICAL ASSISTING CRITIQUE

Credits: 1 Course Offering: Spring
Prerequisites: MS120, MS121, MS125, MS140, MS141, MS145
Corequisites: MS292
This course is an analytical approach to correlate the basic patient care concepts and principles with the practical experience in the delivery of quality patient care. With the basic ambulatory patient care concepts and principles, students will analyze, synthesize and evaluate patient care management. Students will also review and prepare for examination as certified medical assistants. Course offering:

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Analyze, synthesize, and evaluate patient care management.
2. Review and prepare for examination as certified Medical Assistants.

MS220 MEDICAL ASSISTING SPECIALTIES

Credits: 2 Course Offering: Fall
Prerequisites: MS120, MS121, MS125, and SI130A or SI130B
Corequisites: MS221, MS225
This course provides students with the principles of advanced medical assisting techniques and procedures in an ambulatory care facility. Students will learn the principles of assisting the physician in the appraisal of the health status of patients with prescribed medical office diagnostic tests and follow-up care. Course offering: Fall only.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Process patient for specialty examination to include pre-authorization.
2. Compare and contrast the room set up for specialty examination versus routine exams.
3. Create directory for specialty clinics.

MS221 MEDICAL ASSISTING SPECIALTIES LABORATORY

Credits: 1 Course Offering: Fall
Prerequisites: MS120, MS121, MS125, and SI130A or SI130B
Corequisites: MS221, MS225
This course provides students with a laboratory setting to practice advanced skills in clinical care

procedures to assist the physician in an ambulatory care facility. Course Offering:

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate the ability to practice advanced medical techniques in a lab setting.
2. Demonstrate the ability to act as liaison between the patient and physician.

MS225 MEDICAL ASSISTING SPECIALTIES CLINICAL

Credits: 1 Course Offering: Fall

Prerequisites: MS120, MS121, MS125, and SI130A or SI130B

Corequisites: MS220, MS221

This course is an application in an ambulatory care setting of knowledge and specialty procedures gained in MS220 and MS221, which includes demonstrating professional characteristics expected of a beginning practicing medical assistant.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Process patient for specialty examination to include pre-authorization.
2. Set up room for specialty examinations.
3. Demonstrate use of interpersonal and communication skills in the clinical setting.

MS292 MEDICAL ASSISTING PRACTICUM

Credits: 5 Course Offering: Spring

Prerequisites: Completion of all Medical Assisting technical and related technical requirements

Corequisites: MS210

This course provides settings for the application of knowledge and skills gained in the major courses of the Medical Assisting program. Students will apply basic ambulatory patient care concepts and principles with entry-level proficiency in the performance of their duties in the administrative and clinical areas.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Prepare patients for examination or procedures, and assist the physician with the examination or procedure.
2. Communicate effectively, both orally and in writing, with professional and non-professional individuals.
3. Perform medical assisting clinical procedures competently and safely within their state's scope of practice.

Nursing (NU)

NU101 NURSING ASSISTANT

Credits: 4 Course Offering: As needed

Prerequisites: HL131 or concurrently

Corequisites: None

This course provides students with hands-on training necessary to administer safe high-quality care to patients. This course prepares students to function professionally and competently as Nursing Assistants working under the supervision of the LPN, RN, or MD in such clinical areas as hospitals, home health, community health, and mental health facilities. Graduates will be able to generate the knowledge and demonstrate skills that provide safe, competent care as required to pass the National Nurse Aide Assessment Program Examination which leads to becoming a Certified Nursing Assistant.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate competence with all skills required for certification by the Guam Board of Nurse Examiners.
2. Apply the Nursing Assistant principals and skills learned in the classroom/lab to the clinical setting.
3. Demonstrate proficiency and knowledge of common elements required for preparation of the NNAAP (National Nurse Aide Assessment Program) written and practical examination.

NU110 NURSING FOUNDATIONS & BASIC SKILLS

Credits: 6 Course Offering: As needed

Prerequisites: SI150, SI150L

Corequisites: NU160

This course covers introductory concepts related to the nursing profession to include the use of essential medical terminology. The course will apply concepts related to the nursing process, assessment, critical-thinking, therapeutic communication, ethical issues, and nursing standards. Students will have the opportunity to practice and demonstrate basic therapeutic nursing interventions that are required of a practical nurse in a laboratory simulation setting and clinical practicum environment. The nursing student will embody the role of the practical nurse

as a health care provider. Furthermore, this course will provide students with the fundamentals of medical terminology. This will include the study and practice of the origin, basic structure and combinations for medical terms. All experiences of students in the clinical setting shall be under the direct supervision of a faculty member.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Utilize basic nursing skills to include: handwashing, PPEs, bathing, toileting, bed making, vital signs, client ambulation, feeding, range of motion, grooming, turning, and positioning the client.
2. Analyze the components of the most widely used medical vocabulary in health care.
3. Prepare documentation to safely provide patient care using the nursing process to include nursing care plans and medication administration records.

NU160 PATHOPHYSIOLOGY AND PHARMACOLOGY FOR PRACTICAL NURSES

Credits: 5 Course Offering: As needed
Prerequisites: SI150, SI150L
Corequisites: NU110

This course is a comprehensive study of human pathophysiology and pharmacology appropriate to the professional practical nurse role. The course will apply processes to the care and promotion of wellness across the lifespan. Major drug classes and drugs are presented with specific application to nursing care within the nursing process. Special attention will be placed on identifying goals and general principles of treatment for the selected disease processes; therapeutic range and toxic range of drugs; and understanding the bodily implications of improper dosing to the client.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain the impact of illness and medications on the physiological, psychological, sociocultural, and developmental variables.
2. Apply standards of professional practice responsibility and accountability in pharmacologic intervention.
3. Analyze the basic principles of pharmacology and the nursing process to selected drugs and their therapeutic use across the lifespan.
4. Integrate knowledge from the physical, biological, and social sciences to understand human physiology, genetics, pathophysiology, and pharmacology.

NU220 ADULT MEDICAL-SURGICAL NURSING

Credits: 8 Course Offering: As needed
Prerequisites: NU110, NU160, SI106
Corequisites: NU230, NU240

Utilizing current evidenced based practice, this course focuses on health management; maintenance and prevention of illness; and care of the individual as a whole and deviations from the normal state of health. The administration of patient care includes using the nursing process, body systems disorders, diagnostic methods, surgical, non-surgical treatments, performing focused assessments, using critical thinking, and assisting with patient education. There will be an emphasis on the physical, cognitive, and psychosocial needs of the patient. The systems included are integumentary, musculoskeletal, respiratory, cardiac, vascular and hematology. Content is presented from a patient-centered approach based on Maslow's Hierarchy of Needs. Consideration is also given to the impact of health issues; the potential physical and mental adjustments as well as diversional and rehabilitative activities. Other concepts covered include therapeutic communication, medication administration and intermediate nursing skills that will be evaluated by instructors in lab and clinical settings. All experiences of students in the clinical setting shall be under the direct supervision of a faculty member.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Illustrate intermediate therapeutic nursing skills in a simulated lab and clinical setting as it relates to medical-surgical procedures and patient care.
2. Apply nursing concepts and theories to identify interventions appropriate for planning, providing and evaluating patient care.
3. Utilize concepts of problem-solving, critical thinking, interpersonal and therapeutic communication skills in care of the medical-surgical patient.
4. Analyze the physical, cognitive, and psychosocial development and changes which occurs during young adult, middle-aged, and older adult years.

NU230 MATERNAL/NEWBORN CONCEPTS & SKILLS

Credits: 3 Course Offering: As needed
Prerequisites: NU110, NU160, SI106
Corequisites: NU220, NU240
This course provides students with the scope of obstetrics including care and assessment of newborns. This course covers theories of maternal health, the birthing process, physiology of pregnancy, maternal-infant bonding, and family dynamics including cultural considerations, ethics, and stress adaptation of newborns and their families. The focus is on promotion, disease intervention and detection of high risk factors with childbearing families. There is a special emphasis placed on the human growth and development related to the physical, cognitive, and psychosocial development from birth to 12 months of age. All experiences of students in the clinical setting shall be under the direct supervision of a faculty member.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:

1. Exercise safe, competent, patient-centered care of the obstetric and newborn client.
2. Complete the nursing process inclusive of assessment, planning, implementation, and evaluation in the care of the obstetric and newborn client, within the Practical Nurse scope of practice.
3. Apply problem-solving, critical-thinking, interpersonal, and therapeutic communication skills in the care of the obstetric and newborn client.
4. Integrate the concepts of the physical, cognitive, and psychosocial development which occur from birth to 12 months.

NU240 PEDIATRIC NURSING CONCEPTS & SKILLS

Credits: 3 Course Offering: As needed
Prerequisites: NU110, NU160, SI106
Corequisites: NU220, NU230
This course builds on child growth and development from infancy to adolescence. Health problems of each age group are explored in more detail. The role of the practical nurse in meeting the health needs of children in a variety of settings is included. This course focuses on promoting, maintaining, and restoring the health of children and their families. All experiences of students in the clinical setting shall be under the direct supervision of a faculty member.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:

1. Utilize safe, competent, patient-centered care of the pediatric client and family.
2. Complete the nursing process inclusive of assessment, planning, implementation, and evaluation in the care of the pediatric client, within the Practical Nurse scope of practice.
3. Apply problem-solving, critical-thinking, interpersonal, and therapeutic communication skills in the care of the pediatric clients and their families.
4. Analyze the physical, cognitive, and psychosocial development which occurs during toddler, preschool, school-age, and adolescent years.

NU250 MENTAL HEALTH NURSING

Credits: 2 Course Offering: As needed
Prerequisites: NU220, NU230, NU240
Corequisites: NU280, NU281, NU292
This course explores basic concepts, key principles, and the psychosocial needs of clients in behavioral and mental health care settings. The assessment of the client's physical and behavioral responses to stress and mental illness throughout the life cycle is explored. Students will demonstrate therapeutic techniques that promote client's mental health wellness in acute and community health care settings. All experiences of students in the clinical setting shall be under the direct supervision of a faculty member. Formerly NU140.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:

1. Identify four anxiety-reducing strategies students can implement in behavioral and mental health settings.
2. Utilize therapeutic communication skills and interact with clients appropriately in behavioral and mental health settings.
3. Apply concepts of the nursing process as it relates to mental health illness and stress.

NU280 NURSING TRENDS

Credits: 1 Course Offering: As needed
Prerequisites: NU 220, NU 230, NU 240
Corequisites: NU 250, NU 292, NU 281
This course is designed for students to study the trends and issues which affect current practice. The major focus includes the evolution of nursing,

professional opportunities for the practice of nursing, the legal and ethical relationships in nursing, the economics of health care, the interpersonal relationship with patients and in the workforce among healthcare professionals and current issues in nursing.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Relate nursing care to the sociological and economic trends of health care, examining current issues that impact nursing.
2. Formulate a plan for the process of employment and analyze leadership styles.
3. Analyze the evolution of nursing and differentiate the roles of the professional nurse.

NU292 PRACTICAL NURSING PRACTICUM

Credits: 6 Course Offering: As needed
Prerequisites: NU220, NU230, NU240
Corequisites: NU250, NU280, NU281

This course provides students with a clinical setting to practice basic and advanced therapeutic nursing interventions within the scope of an LPN. Selected clinical skills will involve clients/patients/residents of all ages with simple, well-defined problems. Communication, critical thinking, interpersonal, management, and leadership skills and the nursing process will be practiced as students assess and meet the duties of a practical nurse. Students will also lead educational activities that involve adult clients/patients/residents of all ages.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Utilize safe and competent advanced therapeutic nursing skills in a simulated lab and clinical setting as it relates to medical-surgical procedures and patient care.
2. Apply the steps of the nursing process when interacting with clients to determine their health needs in the delivery of nursing care.
3. Design an educational activity that involves clients of all ages.

Office Technology (OA)

OA101 KEYBOARDING AND DOCUMENT PROCESSING

Credits: 3 Course Offering: As needed
Prerequisites: None Corequisites: None

This is an introductory course in keyboarding that focuses on the mastery of the keyboard and using correct typing techniques. Basic word processing concepts and applications will be taught including an introduction to proper formatting of memorandums, business letters, reports, and tables.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate the ability to key memorandums, letters, reports, tables, and other related items.
2. Demonstrate good work habits, acceptable, typing techniques and skill in using the microcomputer and printer.
3. Demonstrate keyboard knowledge by completing a 3-minute timed-writing keying at least 40 words per minute with no more than 5 errors.

OA103 FILING SYSTEMS

Credits: 3 Course Offering: As needed
Prerequisites: EN100 placement or equivalent
Corequisites: None

This course introduces the basic principles of a records and information management program. Four filing systems (alphabetic, numeric, subject, and geographic) will be emphasized using both manual and electronic methods for storage and retrieval of records.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Index, code, cross-reference, and arrange personal names, business names, and organization names in correct filing order.
2. Store and retrieve records using alphabetic, subject, numeric, and/or geographic methods of filing.
3. Create, maintain, and access a computerized records management database.
4. Demonstrate the procedures for records control and retention, including charge-out systems, electronic files control, and transfer methods.

OA109 BUSINESS MATH USING EXCEL

Credits: 3 Course Offering: As needed
Prerequisites: None Corequisites: None
This course provides students with basic business math skills and the use of Excel software needed in today's workforce. Topics to be discussed are basic math functions, fractions, percent, bank services, payroll, purchasing merchandise, markup and markdown, interest, credit and mortgages, and depreciation.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Prepare bank statement reconciliations.
2. Calculate the components of payroll.
3. Solve simple and compound interest problems.
4. Use Excel to solve business problems.

OA130 INFORMATION PROCESSING

Credits: 3 Course Offering: As needed
Prerequisites: None Corequisites: None
This course provides students with basic skills and advanced concepts using word processing software for preparing business letters, memos, tables, reports, and forms (including meeting minutes, agendas, itineraries, articles). Speed and accuracy in the preparation of a mailable copy is emphasized.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate proper techniques for keying correspondence, including letters, memorandums, reports, tables, and forms.
2. Apply skills in completing projects.
3. Demonstrate proper work attitudes for business.
4. Demonstrate keyboarding knowledge by completing a 5-minute timed-writing keying at least 50 words a minute with no more than 5 errors.

OA210 DATABASE MANAGEMENT SYSTEMS

Credits: 3 Course Offering: As needed
Prerequisites: CS151 Corequisites: None
This course introduces the basic concepts of a database management system. Topics include designing, creating, and using a database; querying a database; maintaining a database; sharing data among applications; and creating forms and reports.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Design, create, and modify database.
2. Design, generate, and modify queries, forms, and/or reports for the input and/or extraction of data.
3. Integrate with other office applications and collaborate and secure data.

OA211 BUSINESS COMMUNICATION

Credits: 3 Course Offering: As needed
Prerequisites: CS151, EN110
Corequisites: None
Students learn the basics of business communication and are provided practice in applying them using many real-world writing forms of communication, to include composing letters, memorandums, emails, reports, proposals, employment communications, and oral presentations. This course teaches students how and when to be concise, in addition to communicating effectively. It prepares students for the job-interview process, writing resumes and application letters, and exposes them to business communication in social media. **Student Learning Outcomes (SLOs)**

Upon successful completion of this course, students will be able to:

1. Write effective business memos, letters, and reports.
2. Prepare and deliver effective oral presentations.
3. Utilize effective interpersonal communications skills.
4. Develop a practical job search strategy, including writing successful resumes.
5. Determine the best uses of emerging social media technologies in business communication.

OA220 SPREADSHEET SYSTEMS

Credits: 3 Course Offering: As needed
Prerequisites: CS151 Corequisites: None
Spreadsheets, their roles, advantages, and limitations will be covered in this course. Microcomputer usage and standard spreadsheet software will be utilized to provide hands-on applications experience with creating, designing, setting up, utilizing, and integrating spreadsheets. The course is designed to be taught in a traditional setting or as a hybrid or online course.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Create, save, retrieve, edit, format, and print an electronic worksheet using formulas, built-in functions, and charts.
2. Create and manipulate electronic spreadsheet databases, templates, and macros.
3. Integrate spreadsheets with other office applications and secure the data.

OA230 ADVANCED INFORMATION PROCESSING

Credits: 3 Course Offering: Spring
Prerequisites: OA130 Corequisites: None
This course provides the student with a review of basic word processing concepts and skills and introduces advanced word processing functions to prepare documents that integrate files from various application programs (word processing, spreadsheets, database, and presentation graphics), the Internet, and other emerging technologies.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Create compound documents by integrating word processing, spreadsheet, database, and/or presentation applications.
2. Apply proper document formats when keying business correspondence--memorandums, letters, reports, tables, and forms.
3. Create and manage documents using teamwork.

OA240 MACHINE TRANSCRIPTION

Credits: 3 Course Offering: As needed
Prerequisites: EN110, OA130
Corequisites: None
This course provides students with basic transcription techniques, the formatting of documents, written communications, listening, and decision making skills, which are necessary to work in an office environment. **Student Learning Outcomes (SLOs)**
Upon successful completion of this course, students will be able to:
1. Apply correct spelling, grammar usage, and style to documents.
2. Transcribe and key professional correspondence.
3. Examine and use appropriate reference materials.

OA250 OFFICE PROCEDURES

Credits: 3 Course Offering: Spring
Prerequisites: OA211 Corequisites: None
This is a finishing course for students in the Office Technology Program. It prepares students for work in today's modern office. Topics include: the work environment, workplace technologies, written communication, records, and presentations, customer and employee satisfaction, mail, travel, meetings and conferences, and career.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Demonstrate professional image, appropriate job attitudes, and interpersonal relationships of the administrative assistant.
2. Work independently and as a member of an internal team.
3. Display skills in obtaining, organizing, evaluating, and managing information.

OA292 OFFICE TECHNOLOGY PRACTICUM

Credits: 3 Course Offering: As needed
Prerequisites: Department Chair or Advisor approval
Corequisites: None
This course provides students with the opportunity to apply their knowledge and skills while working in an office environment.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Demonstrate appropriate worksite behavior.
2. Demonstrate competence using business office technology, electronic communication skills, software application, and organizational and time management skills.
3. Demonstrate appropriate professionalism, ethical conduct, disposition and communication in an office environment.

Engineering Technology (OR)

OR101 INTRODUCTION TO ENGINEERING TECHNOLOGY

Credits: 3 Course Offering: As needed
Prerequisites: None Corequisites: None
The primary intent of this course is to investigate the entire realm of engineering, its history, professional requirements, ethics, educational requirements, branches, functions and the roles of the engineering

technician. This course will prepare students through the integration of technical problem solving, engineering design, ethical issues, teamwork, and communicating to diverse audiences.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Gain an awareness of the connections between engineering and the impact of engineering solutions in a societal and global context.
2. Demonstrate basic knowledge of the techniques, skills, and modern engineering tools necessary in the current civil and mechanical engineering industry.
3. Describe various engineering careers to include skills needed, required educational background, and experience with a focus on architectural engineering.

Philosophy (PI)

PI101 INTRODUCTION TO PHILOSOPHY

Credits: 3 Course Offering: As needed
Prerequisites: EN110 Corequisites: None

This course will review the great philosophical traditions surrounding the eternal questions concerning nature and the human condition. Students will analyze the great philosophies from Asia and the West in efforts to understand knowledge, reason, and faith. Introduction to Philosophy will challenge students to become more active and engaged ethical citizens by working with the community.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Compare and contrast philosophical schools of thought.
2. Explain why a philosophical problem is significant.
3. Formulate primary philosophical text addressing a philosophical problem.

Political Science (PS)

PS140 AMERICAN GOVERNMENT

Credits: 3 Course Offering: As needed
Prerequisites: EN110 placement or equivalent
Corequisites: None

This course provides students with fundamental knowledge about the history and principles of American government. Topics of study include citizenship, political parties, the creation of law and policy, and the functions of the three branches of government. This course also provides essential working knowledge for those seeking a career in government service. It is also appropriate for anyone seeking broader understanding of the relationships among the local, state, and federal governments.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate an understanding of the basic framework and concepts which define the American system/style of democracy.
2. Explain the historical roots of American government and the events which have affected the development and course of American government.
3. Explain the three branches of government, their basic structure and functions, and how they are expected to change and interrelate with each other.
4. Develop an awareness of the factors and circumstances which may impact the direction and changes to the American system of government.
5. Demonstrate an understanding of Guam's system of government.

Psychology (PY)

PY100 PERSONAL ADJUSTMENT

Credits: 3 Course Offering: As needed
Prerequisites: None Corequisites: None

Personal Adjustment invites students to engage in self-discovery and self-improvement in a supportive environment. Students should be willing to examine various personal and interpersonal issues such as self-concept, anger and violence, depression, happiness, love and intimacy, sexuality, moral and ethical development, gender roles, diversity, stress and other problems encountered throughout life. This course encourages students to think about their lives in a deeper and more meaningful way and to choose to live a deliberate life. "The unexamined life is not worth living."--Socrates

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain and evaluate the importance of personal adjustment and the benefits of self-awareness.

2. Evaluate emotions and the significance of their emotions on self-development.
3. Identify and demonstrate the skills necessary for healthy communication and relationships.
4. Demonstrate and understand the impact of societal expectations on human behavior.
5. Recognize and evaluate the factors affecting individual choices and their effects on one's self and adjustment within society.

PY120 GENERAL PSYCHOLOGY

Credits: 3 Course Offering: As needed
Prerequisites: EN110 Corequisites: None
General Psychology provides an overview of the scientific study of human behavior and experience. Topics include history, methodology, neuroscience, perception, learning, motivation, abnormal behavior, personality theory and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has a service learning component and has been approved as a general education social science elective.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. State the general principles, theory, ethical considerations and contemporary approaches to psychology.
2. Apply psychology to daily experiences.
3. Achieve the relevant general education course goals.

PY125 INTERPERSONAL RELATIONS

Credits: 3 Course Offering: As needed
Prerequisites: None Corequisites: None
Success in people's lives depends on the interpersonal skills with which they manage their personal and professional relationships. Employers require that people cooperate as a team, work with diverse cultures, embrace change and communicate effectively to get the job done.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Develop interpersonal and critical thinking skills necessary to become productive members of the workforce in society.
2. Demonstrate the use of appropriate written and oral skills necessary for effective communication.
3. Demonstrate ethical, social, and environmental responsibility.

Renewable Energy (RE)

RE100 INTRODUCTION TO RENEWABLE ENERGY

Credits: 3 Course Offering: As needed
Prerequisites: None Corequisites: None
This module provides an outline and brief description, including fundamentals, of the different renewable energy technologies: wind, solar, bioenergy, and geothermal energy. It provides a general overview of the technologies and their applications. While these technologies are not fully proven yet, promising research and development is being conducted. The module also discusses common technical and non-technical barriers and issues limiting the wide spread use/dissemination of renewable energy in developing countries. The information in this module is of general interest to explain the basics of renewable energy technologies, to understand their strengths and weaknesses and hence to have a better grasp of the benefits available from, and the barriers faced by, these technologies.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Define the different key renewable energy technologies.
2. Discuss the potential applications for renewable energy technologies.
3. Describe the strengths and weaknesses of the different renewable energy technologies.

Foodservice Management (RES)

RES130 PROFESSIONAL BAR AND BEVERAGE MANAGEMENT

Credits: 4 Course Offering: As Needed
Prerequisites: None Corequisites: None
The Professional Bar and Alcohol Management is a two-part course that introduces students to the concepts of beverage management and alcohol service. In part I, course topics include bar management, controlling beverage costs, legal aspects of professional alcohol service, and marketing of alcohol beverage products. In part II, students will use the ServSafe Alcohol training modules to learn best practices for providing responsible alcohol service. Students will acquire an

understanding of the criminal and civil liability relating to sale and service of alcohol. Through role play simulation, students will learn how to assess signs of intoxication, prevent guest intoxication, and deal with difficult situations while maintaining effective guest relations. Students knowledge will be assessed using the National Restaurant Association ServSafe® Alcohol Certification Exam. Course offering: As needed

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain the importance of providing responsible alcohol service.
2. Implement proper procedures for dealing with non-compliant customers and intoxicated guests while maintaining effective guest relations.
3. List beverage control procedures for receiving, storing, and issuing products.

RES269A LEADERSHIP IN RESTAURANT AND FOODSERVICE OPERATION

Credits: 3 Course Offering: As Needed
Prerequisites: EN110 Corequisites: None

This course aims at developing the student's leadership skills and values essential in becoming an effective manager and a leader in the restaurant and foodservice industry. Using the DiSC online personality test, students will learn to analyze their own strengths and weaknesses and create an action plan to improve leadership skills. The coursework includes field research work designed to engage students with foodservice professionals. Successful course completers will obtain the National Restaurant Association ManageFirst® course certificate, which signifies student achievement of course competencies.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Analyze leadership strengths and weakness using the DiSC online personality test.
2. Appraise ethical principles presented in course case studies.
3. Create an action plan to improve leadership skills.

RES269B LEADERSHIP SEMINAR PART 1

Credits: 4 Course Offering: As Needed
Prerequisites: RES296A Corequisites: None

This course is a continuation of Leadership in Restaurant and Foodservice Operations designed to provide awareness of individual leadership styles. Through research, case studies, and guest speakers, students will learn the pros and cons of, examine behaviors associated with, and compare world leaders who exemplify each leadership style i.e. Transformational, Transactional, Servant, Commanding, Distributive, and Situational. Through this course, students will explore their own leadership style and identify leadership qualities they want to develop. Course offering: As needed

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify behaviors associated with different leadership styles.
2. Identify leadership qualities students want to develop.
3. Evaluate style(s) of leadership using an online leadership assessment tool.

RES269C LEADERSHIP SEMINAR PART II

Credits: 1 Course Offering: As Needed
Prerequisites: RES296B Corequisites: None

Through participation in an experiential learning at an on- or off-campus organization, students apply leadership knowledge and skills learned and acquired in RES269A and RES269B. In collaboration with an organization advisor or supervisor, students will develop a project goal to which leadership skills, i.e. goal setting, decision making, motivating others, and delegating tasks will be applied and evaluate project and performance in collaboration with an organization advisor.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Develop project goals in collaboration with an organization advisor.
2. Apply leadership skills, i.e. goal setting, decision making, motivating others, and delegating tasks, in the execution of a project.
3. Evaluate project and performance in collaboration with an organization advisor.

RES270 RESTAURANT HUMAN RESOURCES MANAGEMENT

Credits: 3 Course Offering: As Needed
Prerequisites: EN110 Corequisites: None

This course introduces students to key functions of human resource management, which includes recruitment and selection of best employees; orientation and training to optimize performance;

building effective teams; facilitating performance appraisal; developing productivity standards, professional development programs, benefits, and compensation structure; managing a safe workplace; and effective labor relations. Human resource management concepts and practices are learned through case studies, application exercises, and field project exercises. Successful course completers will obtain the National Restaurant Association ManageFirst® course certificate, which signifies student achievement of competencies.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Create a human resource management handbook.
2. Evaluate good human resource management strategies.
3. List key functions of human resource management.

RES 292 RESTAURANT OR FOODSERVICE PRACTICUM (MID-LEVEL POSITION)

Credits: 6 Course Offering: As Needed
Prerequisites: CUL120, RES130, HFB215, HS140, HS152, HS154, RES296A/B, HS155, HS222
Corequisites: None

A capstone course, RES292 Restaurant or Foodservice Practicum (Mid-Level) will give students the opportunity to apply restaurant management principles acquired from the program. Students will assess restaurant operations policy and procedures for managing guest experience, cost, human resources, marketing, and make recommendations for improvement. Throughout the semester, students are required to meet regularly with the faculty mentor and maintain an electronic portfolio to document learning and complete the required Practicum evaluation forms.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Apply customer service principles in the execution of work.
2. Assess restaurant operations policy and procedures for managing cost or human resource and make recommendations for improvement.
3. Create a portfolio following the NRA course portfolio development standards.

Science (SI)

SI051 EARTH SCIENCE

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

This course will focus on knowledge and understanding of life and physical science. Earth Science provides students with an understanding of how the different parts of the system works through the study of the Earth's cycles and spheres; the earth's place in the universe as well its internal structure, tectonic plates, atmospheric processes, and hydrosphere are explored to help understand how Earth science interacts with society. Students will be active learners; they will observe, inquire, question, formulate and test hypotheses, analyze data, report, and evaluate findings. Students will have hands-on and active experiences throughout this course.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Discuss specific textual evidence that support analysis of the development of the universe and the solar system.
2. Analyze the earth's internal structure and the dynamic nature of the tectonic plates that form its surface.
3. Explain the atmospheric processes that support life and cause weather and climate change.

SI061 BIOLOGY

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

An introduction to cells, reproduction, Mendelian genetics, anatomy and physiology, Protista, plant and animal kingdoms, laboratory skills and ecology

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe the general composition of living organisms, their cellular structures and functions.
2. Explain the energy transformations that enable cellular activity.
3. Describe the role of DNA and how it provides information for inheritable characteristics and genetic variation.
4. Demonstrate their ability to use technology to make biological observations, collect data, and conduct analysis from the data.

SI101 INTRODUCTION TO CHEMISTRY

Credits: 3 Course Offering: As Needed
Prerequisites: MA110A placement or equivalent
Corequisites: SI101L
Designed as a broad introduction to chemistry, topics include atomic structure, bonding, gas laws, interpreting the Periodic Table of Elements, stoichiometry, problem-solving, and concludes with an introduction to organic chemistry. This course satisfies the natural and physical sciences requirement for general education.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Interpret the Periodic Table of Elements.
2. Identify types of chemical reactions.
3. Solve quantitative problems including unit conversions and balance chemical reactions.

SI101L INTRODUCTION TO CHEMISTRY LABORATORY

Credits: 1 Course Offering: As Needed
Prerequisites: MA110A or equivalent
Corequisites: SI101
This course is the laboratory co-requisite for SI101 Introduction to Chemistry. Laboratory sessions provide hands-on experiences with chemicals, equipment and instruments, that reinforce and extend concepts presented in lecture. 3 hours of lab per week; 1 credit hr. **Student Learning Outcomes (SLOs)**

Upon successful completion of this course, students will be able to:

1. Demonstrate proper conduct in accordance with safety procedures in the lab and use basic chemistry lab equipment.
2. Apply concepts of chemical reactions and equations to experiments and perform qualitative and quantitative problem-solving.
3. Demonstrate ability to write proper lab reports.

SI102 GENERAL CHEMISTRY WITH LABORATORY

Credits: 4 Course Offering: As Needed
Prerequisites: MA161A Corequisites: None
This course is designed to be a general chemistry course for students. Topics covered include the theories, laws, and principles of chemistry including atomic structure, nature of the chemical bond, and stoichiometric considerations of all aspects of inorganic chemistry. This course has a 30-hour laboratory component.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate familiarity and basic use of the Periodic Table of the Elements.
2. Apply the scientific method through lab experiments and write lab reports.
3. Apply critical thinking skills to solve quantitative and qualitative chemistry problems.
4. Calculate conversions and balance chemical equations.
5. Identify various types of chemical reactions.

SI103 INTRODUCTION TO MARINE BIOLOGY

Credits: 3 Course Offering: As Needed
Prerequisites: EN110 placement or equivalent
Corequisites: SI103L
This course provides students with an understanding of the general principles of marine ecology. Basic skills in gathering ecological data and identification of marine organisms will be acquired. This is the lecture portion of the course and students are required to register for the lab portion, SI103L Introduction to Marine Biology Lab. (If a student takes the course in a previous semester and fails lecture, but passes lab with a C or better, then co-requisite is waived.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe key chemical, biological, geological, and ecological processes.
2. Identify and classify common marine organisms.
3. Explain anthropogenic factors that affect the marine environment and organisms therein.

SI103L INTRODUCTION TO MARINE BIOLOGY LAB

Credits: 1 Course Offering: As Needed
Prerequisites: EN110 placement or equivalent
Corequisites: SI103
This course is the laboratory co-requisite for SI103 Introduction to Marine Biology. Laboratory sessions and field trips reinforce and extend basic marine biology concepts, identification of marine organisms, and anthropogenic effects on the marine environment. (If a student takes SI103L in a previous semester and fails, but passes SI103 with a C or better, then the student will be allowed to repeat just the lab).

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:
1. Describe key chemical, biological, geological, and ecological processes.
2. Identify and classify common marine organisms.
3. Explain anthropogenic factors that affect the marine environment and organisms therein.

SI105 INTRODUCTION TO PHYSICAL GEOLOGY

Credits: 3 Course Offering: As Needed
Prerequisites: EN110 placement or equivalent
Corequisites: SI105L
Introduction to Physical Geology is the science of the earth, the materials that make up the earth and the forces and processes that shape the earth. Topics for this course will include minerals, rocks, earth's internal structure, plate tectonics, geologic structures, the rock cycle, and surface/subsurface processes. This course is to be taken concurrently with a laboratory/field course, SI105L, where students will conduct laboratory and field investigation that will reinforce the course topics and expose students to Guam's complex geologic history.

Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Explain how geologic processes shape the earth.
2. Identify basic rock and mineral samples.
3. Explain how geologic processes affect human activities and social economic welfare.

SI105L INTRODUCTION TO PHYSICAL GEOLOGY LABORATORY

Credits: 1 Course Offering: As Needed
Prerequisites: EN110 placement or equivalent
Corequisites: SI105
This course is the laboratory portion to the course SI105, Introduction to Physical Geology. Topics for this course will include minerals, rocks, earth's internal structure, plate tectonics, geologic structures, the rock cycle, and surface/subsurface processes. This course is to be taken concurrently with the lecture course SI105. In this course students will conduct laboratory and field investigation that will reinforce the lecture course topics and expose students to Guam's complex geologic history.

Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Explain how geologic processes shape the earth.
2. Identify basic rock and mineral samples.
3. Explain how geologic processes affect human activities and social economic welfare.

SI106 DRUG CALCULATIONS FOR PRACTICAL NURSING

Credits: 1 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course covers dosage calculation emphasizing critical thinking techniques to effectively, accurately, and safely calculate dosages of medications. It includes reading, interpreting and solving calculation problems encountered in the preparation of medication. This course involves measurements with the apothecary, avoirdupois, and metric systems. Students will review basic math skills and learn systems of measurement. They will also learn Dimensional Analysis for calculating dosages of oral, powdered, and parenteral medications, pediatric, and adult weight-based medication and intravenous medications.

Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Use basic arithmetic function and dimensional analysis to calculate accurate dosages.
2. Utilize the metric, apothecary, and avoirdupois systems for dosage calculations.
3. Calculate dosages based on body weight of pediatric and adult clients.
4. Resolve calculation problems in the preparation of medication.

SI110 ENVIRONMENTAL BIOLOGY

Credits: 3 Course Offering: As Needed
Prerequisites: EN110 placement or equivalent
Corequisites: SI110L
This is a comprehensive survey course which focuses on environmental issues and concepts. The main focus of this course deals with tropical ecosystems that are unique to Pacific island regions. This course is the lecture portion of Environmental Biology. Students taking this course are required to register for the lab portion of the course as a co-requisite.

Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Describe key chemical, biological, ecological, and atmospheric processes that affect organisms, with an emphasis on tropical island environments.

2. Explain the ecological, social and/or economic implications of climate change, conservation and sustainable use of resources, overpopulation, waste management and recycling, as well as reflect on their personal roles in these issues.
3. Demonstrate and integrate knowledge and observations obtained from lectures, labs and field trips in written reports, quizzes and exams.
4. Demonstrate the ability to gather and analyze data, present results graphically, interpret results and form conclusions.

SI110L ENVIRONMENTAL BIOLOGY LABORATORY

Credits: 1 Course Offering: As Needed
Prerequisites: EN110 placement or equivalent
Corequisites: SI110
This is the laboratory portion of the SI110 Environmental Biology lecture course. The course applies hands-on laboratory exercises and experiments to illustrate and complement concepts discussed in the SI110 lecture course. Students will also be conducting class field trips to several selected environmental habitats around the island. The fieldtrips are designed to provide firsthand experience and connectivity between environmental issues learned in the classroom and real world events. Students taking this course are required to register for the lecture portion of the course as a co-requisite.

Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:

1. Describe key chemical, biological, ecological and atmospheric processes that affect organisms, with an emphasis on tropical island environments.
2. Explain the ecological, social, and/or economic implications of climate change, conservation and sustainable use of resources, overpopulations, waste management and recycling, as well as reflect on individual roles in these issues.
3. Demonstrate the ability to gather and analyze data, present results graphically, interpret results and form conclusions.

SI120 INTRODUCTION TO ISLAND ECOLOGY AND RESOURCE MANAGEMENT

Credits: 3 Course Offering: As Needed
Prerequisites: EN110 placement or equivalent
Corequisites: None
This course is designed for natural resource managers, field technicians and law enforcement personnel working in natural resource conservation. The course covers fundamental concepts of island terrestrial and marine ecology, resource management and conservation. Course offering: As needed.

Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:

1. Describe key chemical, atmospheric, biological, and ecological processes that affect organisms in terrestrial and marine environments with an emphasis on tropical island ecosystems that the student can apply as part of their job field.
2. Explain the ecological, social, and economic implications of conservation, policy and regulations, management and sustainable use of natural resources, overpopulation, and impact of climate change, as well as reflect on their roles in these issues.
3. Explain the effects of anthropogenic factors that affect the environment and organisms therein.

SI122 INTRODUCTION TO FORENSIC SCIENCE

See CJ122 INTRODUCTION TO FORENSIC SCIENCE

SI125 SCIENTIFIC METHODS AND DATA ANALYSIS

Credits: 3 Course Offering: As Needed
Prerequisites: EN 110, MA110A placement or equivalent, and SI 101 (or equivalent or higher), SI 110 or SI103.
Corequisites: None
This class is an introduction to the practice of science, with a particular emphasis on Environmental Science. This course provides Environmental Technician students with an overview of the scientific methods and process, particularly within the context of observation-driven investigations. Students will examine the steps of crafting scientific questions and hypotheses, research design, experimentation and data collection, data analysis, interpretation and presentation. The course will include an introduction

to the technology and methods used data collection and environmental testing. The course will also include an introduction to the tools and methods used in science writing and data collection, the presentation and statistical analysis of scientific data, and search and review of the scientific literature. Finally, students will consider the nature of the theories that arise from, and provide a framework for, the practice of science. Students with one (1) year experience in the workforce relative to data collection and report analysis can be evaluated by the Department Chair for waiving of prerequisites.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain in detail the steps of observation-driven investigations, including crafting of scientific questions and hypotheses, research design, experimentation and data collection, data analysis, interpretation and presentation.
2. Demonstrate a basic understanding of the goals, structure, creation process, and types of scientific literature documentation in the environmental sciences.
3. Identify the use of technology and equipment for data collection and analysis, including but not limited to environmental science.

SI129 ANATOMY AND PHYSIOLOGY FOR PRACTICAL NURSING: THEORY

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

This course provides an accelerated study of the anatomy and physiology of the human body. It is a comprehensive one-semester course that briefly covers the structure and function of cells and tissues as it relates to the organs systems. Concepts of anatomy and physiology related to homeostasis, human disease and their interrelationships are discussed for each organ system. Upon completion, students should be able to recollect the anatomy of each organ system and to understand the importance of physiology as it relates to the allied health field. A laboratory component (SI129L) is required to supplement the theoretical aspect of lecture and will include microscopy, dissection, physiological experiments, computer simulations. This course is required for those majoring in the allied health and nursing certificate program.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify the anatomical structures associated with each organ system and their functions.
2. Explain physiological processes that maintain homeostasis of the organ systems.
3. Match the metabolic reactions, electrolyte and acid-base balance, and electrochemical gradients to organ system diseases.
4. Evaluate the interactions of each organ system to formulate possible reasons for diseases.

SI129L ANATOMY AND PHYSIOLOGY FOR PRACTICAL NURSING: LABORATORY

Credits: 1 Course Offering: As Needed
Prerequisites: None Corequisites: None

This course is the laboratory component of SI129. The lab course will use lab-based systems approach, which an emphasis on integrated structure-function relationships at the tissue, organ, and organ system level. Laboratory exercises are designed to reinforce didactic material by providing hands-on experience with the subject matter. Students actively participate in simple chemical analysis, microscopic observations, perform dissections of specimen, and studies anatomical models. Students taking this course are required to register for the lecture portion of the course or have passed an equivalent to the lecture portion. This course is required for those majoring in the Certificate in Licensed Practical Nursing.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify all the major components of the organ systems.
2. Describe the functional relationships within all organ systems, necessary for maintaining homeostasis for patient care.
3. Explain the importance of maintaining fluid, electrolyte balance and acid-base concepts in relation to blood chemistry.

SI130A HUMAN ANATOMY & PHYSIOLOGY I WITH A&P I LABORATORY

Credits: 3 Course Offering: Fall
Prerequisites: EN110 placement or equivalent
Corequisites: None

This course provides students with an understanding of the function and regulation of the human body and the physiological integration of the organ systems to maintain homeostasis. This course will

consist of blood and its components, cardiovascular system, lymphatic system, fluid and electrolytes, respiratory system, digestive system, urinary system, and reproductive system.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe the relationship between tissues, organs, and organ systems from a structural and functional perspective.
2. Identify and correlate how each organ in the human body works together as a system to maintain homeostasis.
3. Describe the cellular process and transport mechanisms at a chemical level (fluid and electrolyte balance).

SI130B HUMAN ANATOMY & PHYSIOLOGY II WITH A&P II LABORATORY

Credits: 3 Course Offering: Spring

Prerequisites: EN110 placement or equivalent

Corequisites: HL120

This course follows a systemic approach that combines microscopic tissue studies, photomicrographs, anatomical models, charts, and gross/visual anatomical studies of the human body. Providing students with the in-depth knowledge and understanding of the structures of the human body. This will include chemistry, the cell, tissues, integumentary system, musculoskeletal system, and nervous system. This course is recommended for those majoring in the allied health and nursing programs.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate the use of anatomical and directional terms used in the health care when referring to the human body structures.
2. Identify anatomical features of the body on a microscopic and/or gross level and indicate proper location of each.
3. Identify and list 206 human adult skeletal bones.

SI141 APPLIED PHYSICS I

Credits: 4 Course Offering: As Needed

Prerequisites: MA161A Corequisites: None

An Algebra-based course covering measurement, motion, forces in one (1) dimension, vectors, trigonometry, concurrent forces, work and energy, simple machines, rotational motion, no concurring forces, matter and fluids. The course emphasizes physical concepts as applied to an industrial technical field.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Define key terminology used in the physics field.
2. Identify and classify common physical phenomena such as forces, friction, and center of gravity.
3. Summarize common laws and rules of physics from Newton and Kepler and their application to everyday circumstances.
4. Employ basic methods and observations to identify given data graphically or numerically and implement proper procedures to solve problems applying physical rules and formulas correctly.

SI142 APPLIED PHYSICS II

Credits: 4 Course Offering: As Needed

Prerequisites: SI141, MA161A

Corequisites: None

A continuation of SI 141 covering temperature and heat, the gas laws, wave motion and sound, static electricity, direct current, DC sources, magnetism, alternating-current, light, and reflection and refraction.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Calculate the momentum, impulse, force, and time of contact within a system.
2. Apply and analyze between rotational and translational quantities and equations.
3. Relate and apply density, specific gravity, mass and volume, pressure, area, pressure density, and depth concepts.
4. Identify, relate and apply amplitude, frequency, angular frequency, period, displacement, velocity and acceleration associated with oscillating system.

SI150 INTRODUCTION TO MICROBIOLOGY: THEORY

Credits: 3 Course Offering: As Needed

Prerequisites: None Corequisites: None

This course presents basic principles of microbiology, including the role of microbes in the transmission of disease, the environment and useful applications. Topics include an overview of microbiology and aspects of medical microbiology, identification and

control of pathogens, disease transmission, host resistance and immunity, microbial systems, flow of genetics in microbes and impacts microorganisms have on the environment. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process. A laboratory component (SI150L) is required to supplement the theoretical aspect of lecture and will include microscopy, microbiology techniques and laboratory skills practical. Students taking this course are required to register for the laboratory portion of the course as a co-requisite or have passed an equivalent to the laboratory portion. This course is recommended for those majoring in the allied health and nursing programs and forensic science certificate.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Differentiate between the structure and function of microbial cells.
2. Explain how microbial cells metabolize.
3. Identify beneficial and detrimental host/microbe interactions in allied health and industrial setting.
4. Assess human health and environmental conditions using microbiology fundamentals.
5. Analyze the relationship of diseases and the microbial sources found in the different organ systems.

SI150LINTRODUCTION TO MICROBIOLOGY: LABORATORY

Credits: 1 Course Offering: As Needed

Prerequisites: None Corequisites: None

This course is the laboratory component of SI 150 Introduction to Microbiology: Theory. This course will use a lab-based systems approach, with an emphasis on integrated relationships with microbes, the environment and current technologies. Laboratory exercises are designed to reinforce didactic material by providing hands-on experience with the subject matter. Students actively participate in foundational and current microbiology techniques that show the importance of microbes in our daily lives and their central role in nature. Microscopic observations, investigative experiments to evaluate and identify microbes involved in the allied health field will be performed. A strong emphasis on laboratory safety is expected as part of their professional behavior in this class. Students taking this course are required to register for the lecture portion of the course as a co-requisite or have passed an equivalent to the lecture portion. This course is recommended for those majoring in the allied health and nursing programs.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Use common microbiology instrumentation at a proficient level.
2. Interpret experimental results to include the identification of each microorganism
3. Identify possible treatments for pathogens.
4. Apply proper aseptic techniques while performing microbiology procedures
5. Apply standard operating procedures in the disposal of biological hazards.

SI155 WASTE SITE WORKER SAFETY HAZWOPER

Credits: 3 Course Offering: As Needed

Prerequisites: EN110, MA110 placement or equivalent, SI101 (or equivalent or higher), SI110 or SI103, SI125.

Corequisites: None

This course provides 45 hours of training in the protection, health and safety of workers involved in storage, disposal, or treatment of hazardous substances, cleanup of hazardous waste sites, and emergency response operations for threats or releases of hazardous substances. The curriculum meets requirements of OSHA 29 CFR 1910.120. Note: Entrance to this course requires that students be physically capable of wearing and working in the different levels of Personal Protective Equipment (PPE), as well as wearing and using respiratory protective devices. This involves obtaining a physician's statement that the student is cleared to wear and work in PPE and respiratory equipment. For students currently employed in a workplace engaged in HAZWOPER work, and who have the necessary experience and skills of their trade, a waiver may be granted by the Department Chairperson.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate understanding of employees' rights and responsibilities, and an employer's responsibility for a safety and health program with respect to OSHA 29 CFR 1910.120, and other related regulations.

2. Demonstrate understanding of a Job Hazard Analysis, Health and Safety Plan (HASP), and emergency response plan.
3. Demonstrate skills in completing hands-on activities including, but not limited to, the use of respirators, levels of Personal Protective Equipment (PPE), and identification and verification of unknown substances.

Supervision & Management (SM)

SM108 INTRODUCTION TO BUSINESS

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course provides foundational knowledge for students in supervision and management as well as students studying related disciplines in business and computer science. Students will study resume preparations, ethics and social responsibility, the private enterprise system, economic challenges in a global market, entrepreneurship, goods and services distribution, e-commerce transactions, basic management concepts A-Z, technology management, financial statements, federal reserve system, and career opportunities.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Evaluate the private enterprise system and determine the roles of business, competitors, and entrepreneurs.
2. Construct the stages in the development of management ethical standards.
3. Discuss the forms of business ownership and organization.

SM205 PURCHASING

Credits: 3 Course Offering: Fall
Prerequisites: SM108 Corequisites: None
This course provides an insight for students to a career in purchasing, such as a retail buyer or a procurement officer for an organization. It focuses on the broad spectrum of retailers, both large and small, selling either merchandise or services and making key management decisions to provide value to their customers and developing a long-term advantage over their competitors. Key strategic issues are examined in developing a retail strategy with an emphasis on the financial considerations and store management issues. The procurement cycle is studied with emphasis on vendor partnerships, negotiations, pricing analysis, and policy considerations.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Describe the impact of purchasing and supply chain management on the competitive success and profitability of modern organizations.
2. Identify the ethical, contractual, and legal issues faced by purchasing and supply chain professionals.
3. Explain the purchasing cycle, various types of purchasing documents, and types of purchases.

SM208 PERSONNEL SUPERVISION

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course prepares students to be supervisors in a challenging modern workplace. It is based on the premise that organizational variables including diversity in the workforce, computer and communication technology, and the design of organization structures are constantly changing. Overall, this course focuses on discussing important supervision concepts and providing fundamental skills necessary for applying these concepts. Students will learn the critical role of a supervisor in an organization and the abilities needed to be successful. **Student Learning Outcomes (SLOs)**
Upon successful completion of this course, students will be able to:
1. Explain the role, characteristics and skills of a supervisor and the principles of planning, leading, controlling, staffing, and organizing at the supervisory level.
2. Identify and discuss the human skills necessary for supervision.
3. Describe employee needs and apply motivational skills to address them.
4. Articulate applied supervision concepts.

SM211 E-COMMERCE MANAGEMENT

Credits: 3 Course Offering: As Needed
Prerequisites: SM108 Corequisites: None
E-commerce has paved the way for companies to sell their products and services to consumers and businesses throughout the world. Most companies now utilize ecommerce to market and sell their products and services, as well as conduct financial transactions. This course will provide the basic knowledge necessary in managing an online business.

Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Explain the basic requirements of a business web site.
2. Differentiate the four Internet business models.
3. Describe the importance of e-commerce in today's business management.

SM215 INTERNATIONAL MANAGEMENT

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course teaches students the managerial process in a global context and illustrates how culture affects the managerial process. Students will study international strategic planning, organizing global structures, effective directing, leading, international human resources management, cross-cultural business practices, negotiations, leadership, decision making, motivation, communication process sensitive to verbal and non-verbal languages, and controlling operation results against international cross-cultural performance standards. **Student Learning Outcomes (SLOs)**
Upon successful completion of this course, students will be able to:
1. Develop strategies for sustaining international business competition in a global setting.
2. Discuss cross-cultural business ethics and corporate social responsibility in subsidiary assignments.
3. Describe the challenges of international management.

SM220 MANAGEMENT SKILL DEVELOPMENT

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This is a course in the development and application of fundamental skills needed for the successful practice of management. The focus of the course is on the goals and objectives formulated from the firm's mission statement. The student will concentrate on the Planning and Organizing functions. In addition, the student will apply the control function on the firm's performance against its strategic plan. Policy considerations drive the theme of this course.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Explain the traditional four functions of management: planning, organizing, leading, and controlling.
2. Discuss the eight-steps used in structured decision making process.
3. Describe the needs for technology in management operations

SM225 LEADERSHIP

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course uses a unique three-prong approach of theory, application, and skill development. Traditional theories along with cutting-edge leadership topics will be covered. Leadership study allows students to expand and focus their supervision and management skills by concentrating and emphasizing the importance of leadership. Critical thinking about concepts in leadership will be one of the learning outcomes. Students will experience proven skill-building exercises that foster leadership skills in which they can use in their professional and personal lives.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Explain traditional and cutting-edge leadership theories and leadership concepts.
2. Apply theory through skill-development exercises.
3. Develop leadership skills applicable in today's business environment.
4. Make clear distinctions between coverage of theory concepts and their applications.
5. Apply leadership skills by doing self-assessment exercises rather than just by reading.
6. Discuss behavior models: how-to steps for handling day-to-day leadership functions.
7. Analyze four models to determine the appropriate leadership styles for team development.
8. Assess manager personality profile.
9. Examine the application of manager profile to leadership potential.

SM230 BUSINESS LAW APPLICATIONS

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course is an introduction to the substantive law that governs American commerce, state and federal statutes and traditional Common Law principles. Uniform Commercial Code (UCC), and the Restatements of the Laws form the foundation upon

which the following legal principles are presented: contract law, agency law, partnership and corporate law, real and personal property law, negotiable instruments, and secured transactions. Special emphasis, however, is placed on Cyber law (laws governing Internet transactions) as it applies to e-commerce transactions such as e-contracts; intellectual property rights; online issues relating to copyrights, trademarks, patents, and trade secrets; privacy rights in the online world; cyber law court jurisdictional issues; and cybercrimes (cyber theft, cyber identity theft, cyber stalking, cyber hacking, and cyber terrorism). This course is for anyone contemplating a career in business and anyone interested in the legal requirements governing business decisions and activities.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Discuss the law of contracts as it relates to offers/acceptances, consideration, and competency.
2. Identify the key elements of intentional, negligence, and strict liability torts.
3. Summarize in writing ideas and feelings about applied business law concepts.

SM240 EMPLOYMENT & LABOR LAW

Credits: 3 Course Offering: Fall
Prerequisites: None Corequisites: None

This course introduces Employment and Labor Law for the non-legal professional in management and labor relations. The course emphasizes employment, labor, and social issues in the work environment as they cover federal and state law governing employer/union and employee/employer relationships. The student will learn how daily supervisory and management decisions made within the context of employment and labor law can have far-reaching consequences in their firm's legal liabilities. This course provides the knowledge and tools for SM graduates to make management decisions that eliminate or minimize their firm's liability.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Discuss the history of American labor unions and its impact on the enactment of federal labor laws.
2. Explain how Title VII of the Civil Rights Act protects covered employees prohibiting any discrimination based on race, color, religion, sex or national origin.
3. Summarize in writing ideas and feelings about applied labor and employment law concepts.

SM245 ETHICS & STAKEHOLDERS MANAGEMENT

Credits: 3 Course Offering: Spring
Prerequisites: None Corequisites: None

This course uses cutting-edge research along with case histories to help students understand the relationships between business and society stakeholders. The managerial perspective of this course emphasizes the twin themes of stakeholders and ethics. Students are shown how to integrate ethical consideration into the entire decision-making process. The course employs a stakeholder management framework that emphasizes the firm's social and ethical responsibilities to both internal and external stakeholders.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe and explain actions or strategies that management may take to improve a firm's ethical climate.
2. Describe ethical standards in management and identify its role in contemporary business practices.
3. Differentiate between management of internal and external stakeholders.

SM292 SUPERVISION AND MANAGEMENT PRACTICUM

Credits: 1-6 Course Offering: As Needed
Prerequisites: SM108, SM208, SM220
Corequisites: None

The Cooperative Education program provides an opportunity to qualified associate degree seeking students to receive credit and paid work experience related to Supervision and Management.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Obtain supervised work experience to develop skills necessary to succeed in supervision/management positions.
2. Develop and reinforce the knowledge of supervisory theory and management principles as applied to the challenges of a business position.

3. Train subordinates in supervision/management theory and practices.
4. Apply the practice of professional business ethics related to the moral and social responsibilities of a supervisory/management position.
5. Demonstrate effective human relations skills with co-workers and subordinates according to the expectations of a business supervisor/manager.
6. Demonstrate planning, organizing, directing, and controlling skills needed for success supervising/managing within a business environment.

Sociology (SO)

SO099 STUDENT SUCCESS WORKSHOP

Credits: 3 Course Offering: As Needed
Prerequisites: Individuals who score 236 in reading and in math.
Corequisites: None
This course integrates a balance of motivational, study, and life skills; student will understand themselves as individuals who appreciate their own strengths, identify their challenges, and work to strengthen current skills and create new ones. Students will work on their non-cognitive skills such as, attitudes, behaviors, and skills such as critical thinking, self-efficacy, resilience, and interpersonal relations. Students will utilize the Academic and Career Excellence System (ACES) to help identify their strengths and challenges and create a Personal Success Plan (PSP). The course will enable students' explorations of workforce and college opportunities using their information from ACES and their PSP.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Develop skills to locate, evaluate, and interpret career information.
2. Identify career cluster and related pathways that match career and education goals.
3. Describe and apply elements of team-building, problem-solving, and decision-making as they relate to workplace and postsecondary education opportunities.

SO130 INTRODUCTION TO SOCIOLOGY

Credits: 3 Course Offering: As Needed
Prerequisites: EN100 placement or equivalent
Corequisites: None
Sociology is the scientific study of how people behave in groups and the rules that guide group behavior. Everyone is a member of societal groups and people experience different kinds of relationships and play multiple roles in groups. This course examines those groups, people's individual roles, interpersonal relationships, cultures, and families. This knowledge is helpful to everyone including managers and professionals in any field. This course is a required general education core course for all associate degree programs.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Identify how societies instill values in individuals, families and groups.
2. Demonstrate familiarity with other societies objectively utilizing the sociological imagination.
3. Contrast the four primary theoretical sociological perspectives.
4. Explain various degrees of poverty and inequality to include why these patterns continue to exist generation after generation.

Social Sciences (SS)

SS063 AMERICAN GOVERNMENT

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course focuses on the foundations of democracy in America, examining the operation of the legislative, executive, and judicial branches of government at the federal, state, and local levels. Topics covered include rights and responsibilities of citizenship, voting, political parties, interest groups, the US Constitution (including the Bill of Rights), bureaucracy, national policies relating to foreign policy, taxation, spending priorities, government regulations, and entitlement.
This course incorporates the College and Career Readiness Standards (CCRS) for Adult Education. The standards sharpen the focus on the close connection between comprehension of the text and attainment of knowledge. Relevant individualized instruction provides reading, writing, language, and speaking and listening activities to enable students to become empowered, competent, critical, and reflective in their assignments.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:

1. Make logical inferences about the importance of American Government and Politics.
2. Analyze the series of events which led to the creation of the United States Constitution and Bill of Rights.
3. Analyze U.S. documents of historical and literary significance for their themes, purposes, and rhetorical features.

SS081 US HISTORY I

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course focuses on the reconstruction of United States of America after the Civil War through World War II. The objective is to examine and evaluate the political, social and economic development of the United States during this era.
This course incorporates the College and Career Readiness Standards (CCRS) for Adult Education. The standards sharpen the focus on the close connection between comprehension of the text and attainment of knowledge. Relevant individualized instruction provides reading, writing, language, and speaking and listening activities to enable students to become empowered, competent, critical, and reflective in their assignments.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Make logical inferences about central issues during the Reconstruction Era to World War II.
2. Cite specific evidence from literary and informational texts that explains the importance of the various events during the Reconstruction Era to World War II.
3. Analyze the sequence of events and explain how specific events interacted and developed during the Reconstruction Era to World War II.
4. Write a narrative about the major economic developments and specific events during the Reconstruction Era to World War II.

SS082 U.S. HISTORY II

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course focuses on the economic and political changes during the Cold and Vietnam War, including the Civil Rights movement, and the recent events and trends that have shaped present-day America.
This course incorporates the College and Career Readiness Standards (CCRS) for Adult Education. The standards sharpen the focus on the close connection between comprehension of the text and attainment of knowledge. Relevant individualized instruction provides reading, writing, language, and speaking and listening activities to enable students to become empowered, competent, critical, and reflective in their assignments.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Make logical inferences about central issues during the Cold and Vietnam War to present day America.
1. Cite specific evidence from literary and informational texts that explains the importance of the various events during the Cold and Vietnam War to present-day America.
2. Analyze the sequence of events and explain how specific events interacted and developed during the Cold and Vietnam War to present-day America.
3. Write a narrative about the major economic developments and specific events during the Cold and Vietnam War to present-day America.

Surveying (SU)

SU100 SURVEYING DRAFTING

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course deals with typical job responsibilities of an office draftsperson or survey party chief in completing a graphic description of survey fieldwork. These descriptions/plans result from a great variety of engineering fieldwork requiring diverse methods of graphic resolution.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Discuss the roles of office draft persons or survey party chiefs.
2. Define common terminology in the surveying drafting career.
3. Explain the diverse engineering fieldwork and methods of graphic resolution used.

SU101 SURVEYING PROBLEMS I

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This is a mathematics course designed to give the student an understanding of the fundamentals of basic survey computation. Emphasis is placed on basic arithmetic, trigonometric and geometric

operations pertaining to traverse, triangulation and general survey calculation.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate an understanding of basic mathematics needed for survey computations.
2. Apply basic arithmetic, trigonometry and geometric operations to given surveying problems.
3. Discuss and identify solutions to various surveying problems encountered in the work setting.

SU230 ADVANCED SURVEYING

Credits: 3 Course Offering: As Needed
Prerequisites: CE222 Corequisites: None

This course will cover advanced topics in surveying including highway and construction surveying, property and legal issues in boundary surveying, concepts of elementary geodetic surveying, and an overview of Global Positioning Systems (GPS) as applied to surveying for centimeter accuracy measurement.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate proficiency in the mathematical computations of horizontal and vertical surveys including the process of laying out horizontal and vertical curves.
2. Apply proper survey processes in construction surveys and layouts.
3. Demonstrate an understanding of boundary surveying and the legal aspects of property surveying.
4. Analyze boundary and property survey problems using applicable survey methods.
5. Demonstrate understanding of concepts of geodetic and GPS surveying.

SU240 BOUNDARY LAW I

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

This course introduces the concepts of boundary control and legal principles. Topics covered include proportionate measurement, rights in land, junior/senior title rights, retracement of original surveys, deed first/survey first, common and case law, ranking/prioritizing evidence, controlling monuments and corners, error in legal descriptions, and plats and case studies.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate an understanding of boundary control and legal principles to include identification of error in legal descriptions.
2. Discuss legal principles such as deed/first/survey first, common and case law.
3. Define the basic elements of a boundary survey and the proper sequence of events/actions.
4. Evaluate boundary evidence and make decisions based on this ranking.
5. Identify controlling corners and boundaries.

SU241 BOUNDARY LAW II

Credits: 3 Course Offering: As Needed
Prerequisites: SU240 Corequisites: None

This course is a continuation of Boundary Law I and covers the subjects of evidence and procedures for determining real property boundaries. Statutes and case law, conflicting evidence, proper methods and procedures for collecting evidence, riparian rights, surface and subsurface rights and eminent domain are studied in detail. Boundary agreements and legal instruments prepared by the land surveyor are introduced. The role of the land surveyor as an expert witness is presented

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain in detail the subjects of evidence and procedures used for determining real property boundaries.
2. Demonstrate proficiency of reading legal instruments prepared by land surveyors.
3. Describe the surveyor's role in court cases.
4. Write a legal and technical description and prepare a surveyor's report.

SU250 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

This course will provide students with basic knowledge of Geographic Information Systems (GIS) (e.g., sources of GIS data, various data models). Special emphasis will be given to the manipulation of digital spatial vector data with application to cadastral surveys. One of the objectives of the course is to provide students with hands-on experience with GIS software and hardware

components. The course emphasizes practical GIS skills.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Describe the fundamental concepts of GIS and the major functionality contained within the ArcGIS software.
2. Explain the GIS analytical process and be proficient with a variety of ArcGIS tools to solve realistic problems.
3. Demonstrate an understanding of the basics of geodatabase and the more advanced functionality that makes the geodatabase such a powerful data model.
4. Design presentation-quality maps and create a person geodatabase.

SU251 ADVANCED GEOGRAPHIC INFORMATION SYSTEMS

Credits: 3 Course Offering: As Needed
Prerequisites: SU250 Corequisites: None

This course is a more advanced study of Geographic Information Systems (GIS) with particular emphasis on manipulation and analysis of raster data. This course will also provide introduction to ArcGIS Spatial Analyst and 3D Analyst.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Produce and control raster data using ArcGIS Spatial Analyst.
2. Work within the new ArcGIS geoprocessing environment to create, execute, and automate spatial analysis work-flows.
3. Analyze three-dimensional modeling using ArcGIS 3D Analyst software.
4. Create realistic models by draping aerial photographs over surfaces and displaying two-dimensional features in three dimensions.

SU280 SPECIAL TOPICS IN GEOGRAPHIC INFORMATION SYSTEMS

Credits: 3 Course Offering: As Needed
Prerequisites: SU250 Corequisites: None

This course will introduce students to the applications of Geographic Information Systems (GIS) in cadastral and land information systems and in land use planning. Geographic data is increasingly important in understanding society and the environment. Using advanced tools and software, students will have an opportunity to focus on local and global planning problems.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Produce and manipulate cadastral data and create parcel data using the Survey Analyst Extension and the Cadastral Editor tools in the ArcGIS software.
2. Apply Survey Analyst GIS tools on cadastral datasets and perform analysis of these datasets to ensure survey accuracy.
3. Use ArcGIS tools to address real-world social, economic, and environmental planning problems.

SU292 SURVEYING PRACTICUM

Credits: 1 Course Offering: As Needed
Prerequisites: CE222 Corequisites: None

This course covers the application of field and office techniques related to the lessons covered in the surveying and drafting courses. Students will do actual field and office survey work to learn proper use of surveying and related instruments including computers and data collectors.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Demonstrate proficiency in the operations of typical survey instruments including electronic total stations, levels, and data collectors.
2. Apply proper field operations in traversing, leveling, and topographic surveying.
3. Demonstrate proficiency in the preparation of survey drawings using computer aided surveying software.
4. Transfer data to and from survey instruments, data collectors, and computers.
5. Demonstrate an understanding of errors and error propagation field work.

Introduction to Theater (TH)

TH101 INTRODUCTION TO THE THEATER

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None

This course is designed to provide a basic introduction to the study of theatre. It explores theatre as a fine art and how theatre practitioners work. Course lectures include theatre history and production practices. Attendance at a local theatre

production is recommended. Students will collaborate in the making of a short, fully-realized production.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Analyze the elements of a play to appreciate theatre as an art.
2. Develop a clear understanding of theatre history and recent developments.
3. Implement production practices.

Visual Communications (VC)

VC101 INTRODUCTION TO VISUAL COMMUNICATIONS

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course introduces graphic media principles and concepts. The course emphasizes the historical development and current uses and applications of the various visual and audio processes in digital media production.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Identify the six typeface families and demonstrate how each one expresses a mood.
2. Analyze the use of injurious imaging, prejudicial thinking, and stereotyping in visual media.
3. Explain the ethical and legal standards regarding the use of visual media theatre history and recent developments.

VC125 DIGITAL GRAPHICS: RASTER

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course is designed to provide students with the fundamental knowledge and skills needed to produce raster graphics for print and interactive media using industry recognized raster tools such as Photoshop, GIMP, and Corel Photopaint. Formerly Digital Graphics: Photoshop.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain the common vocabulary of raster-based programs.
2. Employ basic photo editing including cloning, healing and patching.
3. Produce graphic images using layers, masks, paths and channels.

VC126 DIGITAL GRAPHICS: VECTOR

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course is designed to provide students with the fundamental knowledge and skills needed to produce vector graphics for print and interactive media using industry recognized vector tools, such as Adobe Illustrator, Sketch Corel Draw, and Inkscape. Formerly Digital Graphics: Illustrator.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain the common vocabulary of vector-based programs.
2. Differentiate between vector and raster (bit-map) graphics.
3. Produce graphic design pieces with type including the creation of type, type masks, formatting, and wrapping text.

VC127 DIGITAL PHOTOGRAPHY

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: None
This course presents concepts and technical processes for effective image capture (taking good photos) using film and digital cameras. Formerly VC172 Imaging Concept & Elements.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Explain common vocabulary of the photography field.
2. Employ the elements of effective aesthetic composition to produce good photographs.
3. Apply studio lighting principles for basic portraiture and small product photography.

VC128 DESIGN PRINCIPLES AND ELEMENTS

Credits: 3 Course Offering: As Needed
Prerequisites: VC126
Corequisites: None
The goal of this course is to provide students with basic knowledge to recognize the elements and principles of graphic design. Students also learn the steps in solving graphics problems. Formerly VC102.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Solve design problems while considering the factors of materials, tools (computer, camera), style, choice and creative license.
2. Apply the elements of graphic design including space, line, shape, value, texture, color, space, balance, contrast and variation.
3. Select effective typography and text composition in graphic design.

VC211 DESIGN I

Credits: 3 Course Offering: As needed
Prerequisites: VC101, VC125, VC126, VC127, VC128
Corequisites: VC212
Students will learn to use powerful desktop publishing tools such as Adobe InDesign, which can be used with other professional graphics applications to produce professional quality, full color output on high volume color printing presses or a wide range of output devices and formats, such as desktop printers, PDF files, HTML files. Formerly VC135.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Design and complete page lay-outs for a variety of professional publishing purposes.
2. Utilize professional graphic design, layout, and typography techniques.
3. Import existing files from word processing and raster and vector graphics programs into the publishing program.

VC212 DESIGN STUDIO II

Credits: 3 Course Offering: As Needed
Prerequisites: VC128 Corequisites: None
This course provides students with knowledge and skills of basic computer desktop publishing. Additionally, students will gain effective workplace procedures and the elements of good customer relations. Formerly VC131 Desktop Publishing.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Explain the standard vocabulary of desktop and print publishing.
2. Apply application tools common to desktop publishing and page layout software.
3. Design documents using forms, rules and tables.

VC221 INTERACTIVE STUDIO I

Credits: 3 Course Offering: As Needed
Prerequisites: None Corequisites: VC222
This course is designed to provide students with the knowledge and skills to design and create an effective website; and learn the basics of planning, constructing, testing, publishing, marketing and maintaining a website. Formerly VC141 Web Design.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Construct a multi-page web site.
2. Prepare graphics for web sites.
3. Configure FTP/STP to upload website to webserver.

VC222 INTERACTIVE STUDIO II

Credits: 3 Course Offering: As Needed
Prerequisites: VC128 Corequisites: VC221
This course introduces user experience (UE) and user interface (UI) design and advanced animations and interactive actions for web sites. Formerly VC145 Macromedia.
Student Learning Outcomes (SLOs):
1. Develop multipage interactive web sites
2. Create motion graphics appropriate for web sites
3. Integrate various types of media into websites and applications.

VC231 VIDEO PRODUCTION I

Credits: 3 Course Offering: As Needed
Prerequisites: VC127 Corequisites: None
This course introduces the basic video production process including conceptualization, storyboarding, shooting and editing. Formerly VC161 Video I.
Student Learning Outcomes (SLOs)
Upon successful completion of this course, students will be able to:
1. Produce simple video production from planning through editing.
2. Create storyboards for video production and record video according to plans.
3. Employ a variety of microphones and audio mixers used in audio recording.

VC232 VIDEO PRODUCTION II

Credits: 3 Course Offering: As Needed
Prerequisites: VC127 Corequisites: None
This course presents video editing using a powerful and well-accepted editing application. Students will

be taught advanced editing. Formerly VC165 Digital Editing: Final Cut Pro.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Import video into the computer to establish the content for editing process.
2. Apply animation to incorporate motion to still images.
3. Explain common vocabulary of digital video editing.

VC 291 PROJECT MANAGEMENT AND MARKETING SOLUTIONS

Credits: 2 Course Offering: As Needed

Prerequisites: VC211, VC212, VC221, VC222, VC231, VC232 MK224

Corequisites: None

This course integrates all the skills and concepts acquired in the required 100 level courses. Students conceptualize, plan, and produce visual graphics projects according to client based criteria. Student use the knowledge and skills developed in the prerequisite classes. Student develop production schedules and learn to manage their tasks within a deadline. Students develop interpersonal relationship skills working with clients and team members. Emphasis is placed on developing solutions, remaining focused, being flexible, and cooperating with team members to complete visual communications projects in a variable, pressured environment. Formerly VC201.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Use cooperative teamwork for visual communications problem solving.
2. Research potential products identifying customers to be targeted.
3. Conceptualize and create visual messages for clients and customers using print, video and web media.

VC292 VISUAL COMMUNICATION PRACTICUM

Credits: 3 Course Offering: As Needed

Prerequisites: None Corequisites: None

The Visual Communications Practicum course provides an opportunity for qualified students to receive credit and work experience in the Visual Communications field. Students serve under qualified professionals to practice skills and gain insights in the industry.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Apply theory learned in the classroom to the work environment.
2. Practice effective interpersonal skills in the workplace.
3. Document the synthesis of knowledge and skills gained through work experience in a reflection paper.

Welding (WE)

WE115 METAL FABRICATION

Credits: 3 Course Offering: As Needed

Prerequisites: None Corequisites: CT196A, CT197A

Students develop fabrication knowledge and skills in cutting and assembling projects from given specifications using various hands tools, power tools and machines.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Accurately cut a variety of metal structural shapes.
2. Accurately bend select types of metal.
3. Accurately fit select angles as determined by particular projects.

WE220 EQUIPMENT MAINTENANCE

Credits: 2 Course Offering: As Needed

Prerequisites: None Corequisites: None

Training is given in equipment component nomenclature, cleaning and refurbishing of electrical and mechanical parts and safety procedures in maintaining equipment functions.

Student Learning Outcomes (SLOs)

Upon successful completion of this course, students will be able to:

1. Disassemble oxyfuel gages and electric arc welders
2. Determine which components need to be replaced or adjusted within a given unit.
3. Reassemble each electrical and mechanical component to a functioning level.