

Undergraduate

HERZING[®]

UNIVERSITY

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(AA) AERONAUTICS—AKRON

AA 101 Federal Regulations FAR/AIM

This course provides the student with an understanding of the rules designed to promote safe aviation and protect pilots, passengers, and the general public from unnecessary risk with the intention of protecting the national security of the United States. Students will examine basic flight information and air traffic control (ATC) procedures. The AIM contains the basic knowledge required to fly in the United States national airspace system. It also contains items of interest to pilots concerning health and medical facts, factors affecting flight safety, a pilot/controller glossary of terms used in the ATC system, and information on safety, accident, and hazard reporting. 3.00 credit hours. Prerequisite: None.

AA 102 Aircraft Identification

This course provides the student with a comprehensive overview of aircraft recognition and generally depends on learning the external appearance of the aircraft, both friendly and hostile, most likely to be encountered. 2.00 credit hours. Prerequisite: AA 101 Federal Regulations FAR/AIM.

AA 103 Advanced Aviation Weather

This course provides the student with an understanding of the fundamental thermodynamic, heat and mass transfer, fluid mechanic, and molecular interactions law of the air mixture and how they affect pressure, temperature, density, and other physical parameters of the atmosphere. Students will study the fundamental process in the earth's atmosphere, heat transport by radiation and convection, and associated global and local weather phenomena to furnish them with an understanding of the technical information disseminated to the flying community. Students will use this information and understand its impact on flight operations and, in particular, to recognize and make sound judgment and decisions regarding weather hazards. 3.00 credit hours. Prerequisite: AA 102 Aircraft Identification.

AA 104 Crew Resource Management

This course provides the student with an in-depth study of the common principles of aviation crew resource management (CRM) and human factors, as utilized by air transport flight crews. This course will investigate and simulate numerous real-world scenarios dealt with by air crews. 3.00 credit hours. Prerequisite: AA 103 Advanced Aviation Weather.

AA 105 Advanced Aerodynamics

This course will provide the student with the fundamentals of atmospheric and airspeed measurement and its relationship to aircraft performance. Topics studied include: design characteristics of airfoils and aerodynamic forces; the production and measurement of lift and drag forces and how they affect performance; jet aircraft basics and applied performance; and propeller-driven aircraft performance. Students will examine the differences between slow- and high-speed flight aerodynamics and take an in-depth look at take-off, landing, and maneuvering aircraft performance. At the conclusion of this course, students will use the knowledge gained in the course and apply it to a small aircraft design project, which will require an understanding of all of the course's subject material. 3.00 credit hours. Prerequisite: AA 104 Crew Resource Management.

AA 106 Advanced Aircraft Systems

This course provides the student with an understanding of the basic theory and principles of electricity and applies that understanding to aircraft electrical systems from a pilot's perspective. Students will examine aircraft hydraulic and pneumatic systems related to various sizes of light aircraft and explore aircraft fuel and propeller systems used on aircraft varying in size (up to light turboprop twins). In addition, students will gain an understanding of numerous aircraft auxiliary systems and their application and use. 3.00 credit hours. Prerequisite: AA 105 Advanced Aerodynamics.

AA 110 Private Pilot Ground School

This course provides the student with the knowledge, skill, and aeronautical experience necessary to meet the requirements for a private pilot certification with an airplane category rating and a single-engine land class rating. Instruction includes: aerodynamics and the principles of flight; aircraft systems; meteorology and weather data services; airspace; air traffic control; radio communications; federal aviation regulations; aeromedical factors; aeronautical charts and associated publications; aircraft performance and limitations; basic and radio navigation; night flying procedures; flight planning; flight maneuvers; and ground operations. 3.00 credit hours. Prerequisite: AA 106 Advanced Aircraft Systems. Corequisite: AA 110L Private Pilot Single Engine.

AA 110L Private Pilot Single Engine

This course provides the student with the skills necessary for preflight procedures, airport operations, takeoffs and landings, performance maneuvers, ground-reference maneuvers, navigation and cross-country operations, basic instrument maneuvers, stalls, emergency operations, night operations, and pre- and post-flight briefings. 2.00 credit hours. Prerequisite: AA 106 Advanced Aircraft Systems. Corequisite: AA 110 Private Pilot Ground School.

AA 220 Instrument Pilot Ground School

This course provides the student with an understanding of: the use of IFR navigation and approaches by use of navigation systems; maintaining flight by reference to instruments; understanding and becoming proficient in the use of navigation systems; procuring and using aviation weather reports and forecasts; and maintaining good crew resource management, including communication and coordination. 3.00 credit hours. Prerequisites: AA 110 Private Pilot Ground School and AA 110L Private Pilot Single Engine. Corequisite: AA 220L Instrument Pilot Single Engine.

AA 220L Instrument Pilot Single Engine

This course provides the student with the skills to: utilize IFR navigation and navigation systems; maintain flight by reference to instruments; utilize navigation systems; utilize weather reports and forecasts; and coordinate and communicate with crew. 2.00 credit hours. Prerequisites: AA 110 Private Pilot Ground School and AA 110L Private Pilot Single Engine. Corequisite: AA 220 Instrument Pilot Ground School.

AA 230 Commercial Pilot Ground School

This course provides the student with the knowledge, skill, and aeronautical experience necessary to meet the requirements of the FAA commercial pilot with an airplane category rating and a single-engine land. Topics covered include: preparation for preflight preparation and procedures; complex aircraft procedures; complex aircraft systems; advanced aerodynamics principles; airplane performance limitations; federal aviation regulations; stall/spin awareness; aeronautical charts and publications; radio aids to VFR navigation; meteorology and weather data services; national airspace systems; radio communications; air traffic control; aeromedical factors; commercial operations; passenger and freight loading; night maneuvers; and ground operations. 2.00 credit hours. Prerequisites: AA 220 Instrument Pilot Ground School and AA 220L Instrument Pilot Single Engine. Corequisite: AA 231L Commercial Pilot Single Engine I.

AA 231L Commercial Pilot Single Engine I

This course is the first of a two-part course. It provides the student with the skills necessary to conduct the following: preflight procedures; airport operations; maximum performance takeoffs and landings; maximum performance flight maneuvers; navigation and cross-country flying; slow flight and stalls; complex aircraft operation; commercial flight maneuvers; emergency procedures; night operations; and post-flight briefing. 3.00 credit hours. Prerequisites: AA 220 Instrument Pilot Ground School and AA 220L Instrument Pilot Single Engine. Corequisite: AA 230 Commercial Pilot Ground School.

AA 232L Commercial Pilot Single Engine II

This course is the second of a two-part course. It provides the student with the skills necessary to conduct the following: preflight procedures; airport operations; maximum performance takeoffs and landings; maximum performance flight maneuvers; navigation and cross-country flying; slow flight and stalls; complex aircraft operation; commercial flight maneuvers; emergency procedures; night operations; and post-flight briefing. 2.00 credit hours. Prerequisite: AA 231L Commercial Pilot Single Engine I.

AA 240 Multi-Engine Pilot Ground School

This course provides the student with the knowledge, skill, and aeronautical experience necessary to meet the requirements of the FAA commercial pilot with an airplane category rating and a multi-engine land. Topics covered include: preparation for preflight preparation and procedures; complex aircraft procedures; complex aircraft systems; advanced aerodynamics principles; airplane performance limitations; federal aviation regulations; stall/spin awareness; aeronautical charts and publications; radio aids to VFR navigation; meteorology and weather data services; national airspace systems; radio communications; air traffic control; aeromedical factors; commercial operations; passenger and freight loading; night maneuvers; and ground operations. 2.00 credit hours. Prerequisites: AA 230 Commercial Pilot Ground School and AA 232L Commercial Pilot Single Engine II. Corequisite: AA 240L Multi-Engine Pilot.

AA 240L Multi-Engine Pilot

This course provides the student with the skills necessary to conduct the following: preflight procedures; airport operations; maximum performance takeoffs and landings; maximum performance flight maneuvers; navigation and cross-country flying; slow flight and stalls; complex aircraft operation; commercial flight maneuvers; emergency procedures; night operations; and post-flight briefing. 1.00 credit hour. Prerequisites: AA 230 Commercial Pilot Ground School and AA 232L Commercial Pilot Single Engine II. Corequisite: AA 240 Multi-Engine Pilot Ground School.

(AC) ACCOUNTING

AC 107 Accounting I

This introductory course in accounting provides the practical application of the principles of financial accounting for the service and merchandising business structure. Topics include: an introduction to accounting; analyzing and recoding transactions using the double-entry framework; working through the accounting cycle from journalizing and preparation of the financial statements to post-closing trial balance; and introduction to subsidiary ledgers and special journals. The class also provides an overview of technology accounting software practices. 3.00 credit hours. Prerequisite: IS 102 Computers and Application Software.

AC 110 Payroll Accounting

This is a comprehensive payroll accounting course providing a practical application of the concepts and principles of payroll accounting. Payroll law topics include the Fair Labor Standards Act, FUTA and SUTA tax, and FICA, SECA, and the Civil Rights Act of 1964. Payroll accounting transaction topics include: payroll recordkeeping; computing payroll; computing payroll taxes, social security taxes, self-employment, FUTA, and SUTA taxes; completing government forms (941); income tax withholding (employer and employee); and analyzing and journalizing payroll transactions. This course includes a comprehensive hands-on project to reinforce practical application of these concepts. It also provides a tutorial in industry software. 3.00 credit hours. Prerequisite: AC 107 Accounting I.

AC 212 Taxation I

This course introduces income taxation as it applies to small business and individual taxpayers. Topics include an overview of the political, economic, and social forces influencing federal income taxation and the role of taxation in personal decisions. The course also examines individual income tax topics, including business and investment income, business and personal deductions, property transactions, and tax issues of employees. 3.00 credit hours. Prerequisite: AC 216 Accounting II.

AC 216 Accounting II

This next course in financial accounting provides concepts and principles used in the manufacturing business, with an emphasis on partnerships and corporations. Topics include: accounting for uncollectable accounts; accounting for notes receivable and payable; accounting for investing in long-term assets; preparation and analyzing the statement of cash flows; and analyzing and interpreting financial statements. 3.00 credit hours. Prerequisite: AC 107 Accounting I.

AC 220 Finance

This course introduces corporate financial management and analysis. Topics include evaluating financial performance, measuring cash flow, and capital budgeting and the cost of capital. 3.00 credit hours. Prerequisite: AC 107 Accounting I.

AC 221 Taxation II

This course analyzes the federal tax system as applied to entities other than individuals. It examines the tax aspects of formation, reorganization, and liquidation of non-individual tax entities. It also covers advanced business taxation topics such as corporate taxation (including accounting for income taxes), partnership taxation, and multi-jurisdictional taxation. Additional topics include S-corporations, corporations focusing on income inclusions and exclusions, reporting expenses (including depreciation), accounting for inventory, and basic tax planning and research. 3.00 credit hours. Prerequisite: AC 212 Taxation I.

AC 306 Managerial Cost Accounting

This course is designed to introduce the principles and concepts of a cost-based management accounting system. Topics include: cost accounting principles; identifying drivers and cost behavior; accounting for materials, labor, and factory overhead; job order cost-accounting practices; process cost-accounting procedures; standard cost-accounting methods; and cost analysis for management decision-making. 3.00 credit hours. Prerequisite: AC 216 Accounting II.

AC 313 Intermediate Accounting I

This accounting course provides instruction in practical application within the conceptual framework of financial accounting. Instruction in this course provides the theoretical supports as well as technical skills needed for decision-making and problem-solving within the financial reporting environment, including discussion and application of accounting systems. It also covers changes of stockholders' equity, cost measurement and flow assumptions, revenue recognition, special valuation issues, acquisition and disposition of fixed assets, measuring and reporting intangible assets, and valuation of depreciation and depletion methods. 3.00 credit hours. Prerequisite: AC 216 Accounting II.

AC 330 Intermediate Accounting II

Intermediate Accounting II continues the analysis from Intermediate Accounting I and extends it to the discussion and application of financial reporting issues for liabilities and contingencies, long-term liabilities and receivables, investments, income taxes, accounting for capital and operating leases, issuance of capital stock and bonds, the statement of cash flow, changes in equity, and reporting accounting changes in estimates. 3.00 credit hours. Prerequisite: AC 313 Intermediate Accounting I.

AC 335 Computerized Accounting

This course provides step-by-step instruction in computerized accounting using spreadsheets, with an emphasis on principles of accounting, financial accounting, and managerial accounting. Learning activities will focus on using spreadsheets to support the accounting function. 3.00 credit hours. Prerequisite: AC 216 Accounting II.

AC 340 Investments

This course focuses on the valuation of individual securities and the application of portfolio theory. The topics discussed in this course include equity security valuation, fixed-income security valuation, risk measures, and portfolio theory. 3.00 credit hours. Prerequisite: AC 220 Finance.

AC 413 Advanced Financial Accounting I

This course provides instruction in accounting for business combinations and consolidations including topics related to pooling of interests, recording investments, treatment of goodwill, and the proper recording of intercompany transactions. This course will focus on applying various techniques for solving some of the more complex problems found in the business environment and interpretation of FASB, SEC, and AICPA pronouncements related to the above topics. 3.00 credit hours. Prerequisite: AC 330 Intermediate Accounting II.

AC 416 Governmental and Non-Profit Accounting

This course examines accounting for public health, nonprofit, and governmental entities. Topics include fund accounting, budget and control issues, and revenue and expense recognition for governmental agencies. It identifies the fundamental principles of financial management for non-profit and governmental organizations. This course outlines the framework for students to access and apply financial and managerial decision-making effectively. 3.00 credit hours. Prerequisite: AC 330 Intermediate Accounting II.

AC 418 Auditing

This course develops an understanding of auditing concepts and provides instruction in how to perform an audit of company financial statements. Topics related to responsibilities, independency, reporting, audit process, and internal controls are covered. This course will focus on providing an introduction to auditing and other assurance services, standards, materiality and risk, how to write an audit report, professional ethics and code of conduct, legal liability, audit evidence, audit process, detection of fraud, and internal controls. 3.00 credit hours. Prerequisite: AC 330 Intermediate Accounting II.

AC 426 Advanced Financial Accounting II

This course is a continuance of Advanced Financial Accounting I and provides instruction on accounting for branches, business combinations, and consolidations. It also covers various techniques for solving some of the more complex problems found in the business environment. Topics include FASB, SEC, and AICPA pronouncements, multinational accounting, estates, trusts, governmental and not-for-profit organizations, and bankruptcy. 3.00 credit hours. Prerequisite: AC 413 Advanced Financial Accounting I.

AC 435 Advanced Auditing

This course provides instruction on how to perform an audit of company financial statements. Audit sampling, reviewing of balances and transactions, completion of the audit, and other assurance and attestation services are covered. This course will focus on providing the basis on audit sampling, how to perform an audit of sales, cash receipts, accounts receivables, accounts payables, prepaid assets, accrued liabilities, payroll, inventory, and fixed assets. 3.00 credit hours. Prerequisite: AC 418 Auditing.

AC 436 Forensic Accounting

This course provides an overview of forensic accounting. Topics include: fraud investigations; litigation support; valuation and economic damage determination; detection and prevention of financial fraud and white-collar crimes; internal control policies and procedures; and the role of the forensic accountant in the courtroom. 3.00 credit hours. Prerequisite: AC 418 Auditing.

(AN) AERONAUTICS—NEW ORLEANS

AN 101 Federal Regulations FAR/AIM

This course provides the student with an understanding of the rules designed to promote safe aviation and protect pilots, passengers, and the general public from unnecessary risk with the intention of protecting the national security of the United States. Students will examine basic flight information and air traffic control (ATC) procedures. The AIM contains the basic knowledge required to fly in the United States national airspace system. It also contains items of interest to pilots concerning health and medical facts, factors affecting flight safety, a pilot/controller glossary of terms used in the ATC system, and information on safety, accident, and hazard reporting. 3.00 credit hours. Prerequisite: None.

AN 102 Aircraft Identification

This course provides the student with a comprehensive overview of aircraft recognition and generally depends on learning the external appearance of the aircraft, both friendly and hostile, most likely to be encountered. 2.00 credit hours. Prerequisite: AN 101 Federal Regulations FAR/AIM.

AN 103 Advanced Aviation Weather

This course provides the student with an understanding of the fundamental thermodynamic, heat and mass transfer, fluid mechanic, and molecular interactions law of the air mixture and how they affect pressure, temperature, density, and other physical parameters of the atmosphere. Students will study the fundamental process in the earth's atmosphere, heat transport by radiation and convection, and associated global and local weather phenomena to furnish them with an understanding of the technical information disseminated to the flying community. Students will use this information and understand its impact on flight operations and, in particular, to recognize and make sound judgment and decisions regarding weather hazards. 3.00 credit hours. Prerequisite: AN 102 Aircraft Identification.

AN 104 Crew Resource Management

This course provides the student with an in-depth study of the common principles of aviation crew resource management (CRM) and human factors, as utilized by air transport flight crews. This course will investigate and simulate numerous real-world scenarios dealt with by air crews. 3.00 credit hours. Prerequisite: AN 103 Advanced Aviation Weather.

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This course will provide the student with the fundamentals of atmospheric and airspeed measurement and its relationship to aircraft performance. Topics studied include: design characteristics of airfoils and aerodynamic forces; the production and measurement of lift and drag forces and how they affect performance; jet aircraft basics and applied performance; and propeller-driven aircraft performance. Students will examine the differences between slow- and high-speed flight aerodynamics and take an in-depth look at take-off, landing, and maneuvering aircraft performance. At the conclusion of this course, students will use the knowledge gained in the course and apply it to a small aircraft design project, which will require an understanding of all of the course's subject material. 3.00 credit hours. Prerequisite: AN 104 Crew Resource Management.

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AN 110 Private Pilot Ground School

This course provides the student with the knowledge, skill, and aeronautical experience necessary to meet the requirements for a private pilot certification with an airplane category rating and a single-engine land class rating. Instruction includes: aerodynamics and the principles of flight; aircraft systems; meteorology and weather data services; airspace; air traffic control; radio communications; federal aviation regulations; aeromedical factors; aeronautical charts and associated publications; aircraft performance and limitations; basic and radio navigation; night flying procedures; flight planning; flight maneuvers; and ground operations. 3.00 credit hours. Corequisite: AN 110L Private Pilot Single Engine.

AN 110L Private Pilot Single Engine

This course provides the student with the skills necessary for preflight procedures, airport operations, takeoffs and landings, performance maneuvers, ground-reference maneuvers, navigation and cross-country operations, basic instrument maneuvers, stalls, emergency operations, night operations, and pre- and post-flight briefings. 2.00 credit hours. Corequisite: AN 110 Private Pilot Ground School.

AN 220 Instrument Pilot Ground School

This course provides the student with an understanding of: the use of IFR navigation and approaches by use of navigation systems; maintaining flight by reference to instruments; understanding and becoming proficient in the use of navigation systems; procuring and using aviation weather reports and forecasts; and maintaining good crew resource management, including communication and coordination. 3.00 credit hours. Prerequisites: AN 110 Private Pilot Ground School and AN 110L Private Pilot Single Engine. Corequisite: AN 220L Instrument Pilot Single Engine.

AN 220L Instrument Pilot Single Engine

This course provides the student with the skills to: utilize IFR navigation and navigation systems; maintain flight by reference to instruments; utilize navigation systems; utilize weather reports and forecasts; and coordinate and communicate with crew. 2.00 credit hours. Prerequisites: AN 110 Private Pilot Ground School and AN 110L Private Pilot Single Engine. Corequisite: AN 220 Instrument Pilot Ground School.

AN 230 Commercial Pilot Ground School

This course provides the student with the knowledge, skill, and aeronautical experience necessary to meet the requirements of the FAA commercial pilot with an airplane category rating and a single-engine land. Topics covered include: preparation for preflight preparation and procedures; complex aircraft procedures; complex aircraft systems; advanced aerodynamics principles; airplane performance limitations; federal aviation regulations; stall/spin awareness; aeronautical charts and publications; radio aids to VFR navigation; meteorology and weather data services; national airspace systems; radio communications; air traffic control; aeromedical factors; commercial operations; passenger and freight loading; night maneuvers; and ground operations. 2.00 credit hours. Prerequisites: AN 106 Advanced Aircraft Systems, AN 220 Instrument Pilot Ground School and AN 220L Instrument Pilot Single Engine. Corequisite: AN 231L Commercial Pilot Single Engine.

AN 231L Commercial Pilot Single Engine

This course provides the student with the skills necessary to conduct the following: preflight procedures; airport operations; maximum performance takeoffs and landings; maximum performance flight maneuvers; navigation and cross-country flying; slow flight and stalls; complex aircraft operation; commercial flight maneuvers; emergency procedures; night operations; and post-flight briefing. 3.00 credit

hours. Prerequisites: AN 106 Advanced Aircraft Systems, AN 220 Instrument Pilot Ground School and AN 220L Instrument Pilot Single Engine. Corequisite: AN 230 Commercial Pilot Ground School.

AN 240 Multi-Engine Pilot Ground School

This course provides the student with the knowledge, skill, and aeronautical experience necessary to meet the requirements of the FAA commercial pilot with an airplane category rating and a multi-engine land. Topics covered include: preparation for preflight preparation and procedures; complex aircraft procedures; complex aircraft systems; advanced aerodynamics principles; airplane performance limitations; federal aviation regulations; stall/spin awareness; aeronautical charts and publications; radio aids to VFR navigation; meteorology and weather data services; national airspace systems; radio communications; air traffic control; aeromedical factors; commercial operations; passenger and freight loading; night maneuvers; and ground operations. 2.00 credit hours. Prerequisites: AN 230 Commercial Pilot Ground School and AN 231L Commercial Pilot Single Engine. Corequisite: AN 241L Multi-Engine Pilot.

AN 241L Multi-Engine Pilot

This course provides the student with the skills necessary to conduct the following: preflight procedures; airport operations; maximum performance takeoffs and landings; maximum performance flight maneuvers; navigation and cross-country flying; slow flight and stalls; complex aircraft operation; commercial flight maneuvers; emergency procedures; night operations; and post-flight briefing. 2.00 credit hours. Prerequisites: AN 230 Commercial Pilot Ground School and AN 231L Commercial Pilot Single Engine. Corequisite: AN 240 Multi-Engine Pilot Ground School.

(BU) BUSINESS MANAGEMENT

BU 106 Introduction to Management

This course introduces the environment of American business with an overview of various topics that serve as a foundation for further study of business. Topics include the environments in which businesses operate, the organizational structures of businesses, management functions in an enterprise, and the challenges of managing marketing, operations, information technology, finance, and human resources. 3.00 credit hours. Prerequisite: None.

BU 195 E-Business Concepts

This course introduces the concepts and principles of electronic commerce in business. Topics include: the foundations of electronic commerce; retailing in e-commerce; Internet consumers and market research; advertising in e-commerce; e-commerce for service industries; business-to-business e-commerce; intranet and extranet structures and applications; electronic payment systems; e-commerce strategy and implementation; public policy regarding legal, privacy, and consumer protection issues; infrastructure requirements for e-commerce; and economic and global issues in e-commerce. 3.00 credit hours. Prerequisite: None.

BU 204 The Digital Firm and Business Communications

This course presents an overview of technology-based issues within a business environment. Topics include the concept of digital firms and ERP systems in the areas of marketing, operations, human resources, manufacturing, finance, social networking, and supply-chain management. Additional areas to be discussed are privacy issues, government regulations, and technology on a global scale. 3.00 credit hours. Prerequisite: BU 106 Introduction to Management.

BU 206 Business Law I

This course provides a study of the American legal system and its effect on business and business organizations. Topics include an overview of the ethical issues that businesses encounter, the foundation of the American legal system, business ethics, torts, intellectual property, criminal law, cyber crimes, contracts, and sales and leases. 3.00 credit hours. Prerequisite: None.

BU 209 Leadership and Team Dynamics

This course provides students with a foundation of knowledge regarding leadership practices and theories. The student should develop an operational understanding of leadership concepts and theories to engage and reflect on leadership topics. Course topics include leadership models, collaboration, management styles, handling conflict, and ethical issues involved in leadership. 3.00 credit hours. Prerequisite: BU 106 Introduction to Management.

BU 210 Organizational Communication

The focus of this course is to introduce students to the principles of communication in the context of modern complex organizations. Topics include communication distortion, conflict, power, managerial leadership style, roles, interviewing, and information overload and underload. Emphasis will be placed on the practical application of communication tools. 3.00 credit hours. Prerequisite: BU 106 Introduction to Management.

BU 215 Marketing on the Internet

This course is an overview of Internet marketing strategies. Topics include: Internet user characteristics and behavior; online research methods; Internet marketing strategies such as: pricing; distribution channels; communications on the Internet; relationship marketing; the components of the Internet marketing plan; and Internet ethical and legal issues. 3.00 credit hours. Prerequisite: BU 220 Principles of Marketing.

BU 216 Social Media

This course presents an overview of technology-based communication tools currently used in the marketplace as well as emerging trends based on technological advancement. Topics include the history of social networking, a definition of the social media, and the number of tools being used by business as part of the enterprise. The course will offer students the basic body of information about social media as well as application in regards to strategy within the organization. 3.00 credit hours. Prerequisite: None.

BU 220 Principles of Marketing

This course provides an overview of the principles and applications of marketing in organizations. Topics include: the marketing process and strategic planning; the global marketing environment; developing marketing opportunities and strategies; developing the marketing mix through product development, pricing strategies, distribution channels, and promotion techniques; and managing marketing through customer relationships, social responsibility, and marketing ethics. 3.00 credit hours. Prerequisite: BU 106 Introduction to Management.

BU 226 Export Management and International Business Strategy

This course focuses on the marketing decisions and management processes involved in developing export operations. Students will evaluate the key procedural activities required in exporting, define financial components of exporting, and analyze political/legal constraints needed for successful market entry. 3.00 credit hours. Prerequisite: BU 106 Introduction to Management.

BU 228 Sales and Promotional Management

This course is designed to develop an understanding regarding the role of sales and promotions in the organization. The course covers different types of promotional tools, media, and methodologies of the integrated marketing communication process. Students will learn an analytical approach to the study of sales and promotional tools, including how to integrate all of the marketing communication elements and how this is critical to an organization's success. 3.00 credit hours. Prerequisite: BU 220 Principles of Marketing.

BU 229 Conventions and Large Meetings

This course will prepare students for entry-level employment in events planning or meeting management. The content includes the principles and practices of sound public relations and planning and organizing events, meetings, conferences, and conventions. It prepares students for employment opportunities with trade and professional associations, consulting firms, non-profit organizations, and corporations. Integrated throughout this course are career-preparation standards including basic academic skills, communication, interpersonal skills, problem-solving, workplace safety, technology, and employment literacy. 3.00 credit hours. Prerequisite: BU 220 Principles of Marketing.

BU 230 Customer Relationship Management

The focus of this course is to explore the role of customer relationship management (CRM) in today's business environment. Topics will include CRM theory, data management, and the impact of CRM on the firm, ethics, and global relationships. The course will also explore how CRM affects different functional units of a firm. 3.00 credit hours. Prerequisite: BU 220 Principles of Marketing.

BU 234 Special Events Marketing

This course will provide students with sufficient conceptual, theoretical, and practical knowledge of special events marketing, underpinning casino marketing in the context of the fast-evolving subfield of service marketing. Services in most developed economies provide a substantial contribution to state and local government revenue coffers. Tourism and leisure activities (which include gaming and, in particular, casino activities) contribute a significant proportion of the value added in the service subsector. Through projects and case analysis, students will obtain a working knowledge of special event planning. 3.00 credit hours. Prerequisite: BU 220 Principles of Marketing.

BU 235 Entrepreneurship

This course provides instruction in the theory, tools, and techniques for launching and managing entrepreneurial businesses. Topics include: exploring entrepreneurial opportunities and the related ethical, legal, and regulatory environments; determining competitive advantage strategies; and developing business plans. Additional topics include: analyzing sources of funding; developing marketing strategies; managing human resources; managing risk, insurance and other operations processes; and evaluating financial performance. 3.00 credit hours. Prerequisite: BU 106 Introduction to Management.

BU 236 Introduction to Green and Sustainable Management

This course provides an overview of the concept of sustainability and sustainable development models used to operate a sustainable organization. Topics include: triple-bottom-line concepts; environmental and ecological challenges facing businesses; sustainable management framework; the impact of sustainability on marketing; economics, human resources, and finance; and the role of ethics and social responsibility in developing sustainable businesses. 3.00 credit hours. Prerequisite: BU 106 Introduction to Management.

BU 245 Business Communication

This course introduces communication theories and strategies for a variety of business situations including memos, letters, meetings, presentations, proposals, reports, and technology-based communications. Using a developmental approach to business communication, the course examines methods for organizing ideas, analyzing data, addressing diverse concerns, presenting information, developing a professional communication style, and developing negotiation skills. 3.00 credit hours. Prerequisite: EN 104 English Composition I.

BU 247 Advertising and Public Relations

This course encompasses advertising and public relations techniques and concepts. Students will explore the role of advertising, with a focus on the structure, environment, and strategy of advertising, and the role of public relations, with a focus on profit and nonprofit public relations programs. Topics include: the advertising environment; ethical issues and social responsibility; advertising background, planning, and strategy; advertising media; copywriting; design and production; and public relations and promotions. 3.00 credit hours. Prerequisite: BU 220 Principles of Marketing.

BU 251 Contracts and Procurements

This course examines the fundamental approaches to contracting and procurement processes. Topics include: planning, solicitation, source selection, contract administration and completion contract law types; bid invitation; bid evaluation contract and procurement strategies; legal issues; contract pricing alternatives; RFP development; and source selection. 3.00 credit hours. Prerequisite: BU 206 Business Law I.

BU 255 Sustainability Marketing

This course explores the role of the new sustainability-oriented marketing in building value-based relationships with consumers and sustainable businesses. Topics include: the key elements of sustainability marketing, conventional and sustainable consumptions; sustainability market segmentation; integration of social, ethical, and environmental values; sustainability marketing standards and strategies; and sustainability marketing communications and transformations leading to a more sustainable society. 3.00 credit hours. Prerequisite: BU 220 Principles of Marketing.

BU 265 Internship (Associate's Degrees)

This course will cover the real-work experience, along with classroom instruction, for entering the workplace. Topics will cover interviewing, networking, résumé preparation, workplace etiquette, and learning on the job. Additional topics are employment communications and management issues. 3.00 credit hours. Prerequisites: Final semester and PD 214 AS/AAS/BS/Diploma Internship Preparation.

BU 270 Research Project

Students select a topic or project, with instructor approval. This course prepares students to understand the research project in the business environment. Students will be required to complete a professional white paper and give an oral presentation. 3.00 credit hours. Prerequisite: Final semester.

BU 275 Consumer Behavior

The focus of this course is on the internal and external factors influencing consumer behavior. Topics will cover: consumer motivations; personality and consumer behavior; consumer perception, consumer learning; consumer attitude formation and changes; group influences on individual consumer behavior; family influences on consumer behavior; cultural and sub-cultural influences on consumer behavior; and the consumer decision-making process. 3.00 credit hours. Prerequisite: BU 220 Principles of Marketing.

BU 296 Managing Project Risks

This course provides an in-depth coverage of the skills that identify and measure risks in project development. Topics include: identifying and ranking risk; analyzing the impact of risk to a project; and managing risk in a project to achieve positive project outcomes while minimizing the negative effects of risk. The student will use different quantitative and qualitative tools to determine and monitor the impact of risk to a project. 3.00 credit hours. Prerequisite: BU 345 Project Management.

BU 301 Organizational Behavior and Human Relations

This course examines the nature of organizational behavior through the study of individuals, groups and intergroup relationships. Topics include: interpersonal relations; organizational design; the structure and factors affecting organizational design; the impact of technology, power and politics; organization culture change and development; cultural diversity; ethical decision-making; and motivational theory and programs. 3.00 credit hours. Prerequisite: BU 106 Introduction to Management.

BU 302 Leadership and Organizational Behavior

The focus of this course is to introduce students to the basic principles of human behavior that effective managers use when managing individuals and groups in organizations. The overall goal of this course is to develop an understanding of the key issues managers need to master in order to manage the interface between people and organizations. Topics include: theories relating to individual differences in abilities and attitudes; attribution; motivation; group dynamics; power and politics; leadership; conflict resolution; organizational culture; and organizational structure and design. 3.00 credit hours. Prerequisite: BU 106 Introduction to Management.

BU 303 Leadership in Competencies for Global Managers

The focus of this course is to examine a student's competency in evaluating the concepts of organizational design on a global level. Students must demonstrate their knowledge of the societal differences between countries and how each value business practices, both individually and on a team-work base. The student must be able to demonstrate how to practice management across cultural boundaries and interact with different styles of global leadership styles. 3.00 credit hours. Prerequisite: BU 106 Introduction to Management.

BU 305 Administrative Law

This course examines the form, organization, and function of administrative agencies in the context of a democratic constitutional system. The course looks at agency rule-making, enforcement, and adjudication, and also examines the legislative, executive, and judicial control of those functions. 3.00 credit hours. Prerequisite: BU 206 Business Law I.

BU 306 Organizational Learning and Knowledge Management

The focus of this course is to introduce students to the complexity and fluidity of organizational learning. Topics covered in this course are systems thinking, mental models, personal mastery, characteristics of an adaptive organization, system dynamics, and reinforcing and balancing organizational processes. 3.00 credit hours. Prerequisite: BU 106 Introduction to Management.

BU 307 Organizational Change

This course analyzes how change affects an organization and how that change can be managed. The principle objective is to provide a discussion of change in relation to the complexities of organizational life. The course is comprehensive in its coverage of the significant ideas and issues associated with change at all levels of organizational activity. Topics include: organization structure, design and change; organizational politics, management and leadership; and organizational culture and change. 3.00 credit hours. Prerequisite: BU 106 Introduction to Management.

BU 310 Business Law II

This course provides a study of the American legal system and its effect on both national and international business and business organizations as well as an overview of the ethical issues that businesses encounter. Topics include: banking in the digital age; creditor rights; agency and employment issues; the regulation of business organizations; investor protection and insider trading; analyzing risk-bearing devices; real property issues; commercial contracts in an international setting; and payment methods for international transactions. 3.00 credit hours. Prerequisite: BU 206 Business Law I.

BU 327 Business Ethics

The focus of this course is to explore the role and importance of business ethics in the workplace. The student will develop an understanding of the concepts and principles of business ethics as they relate to employees and employers, business to business, and on a corporate level. Students will examine business ethics, employee relations, and managerial decision-making processes through discussion and analysis of cases involving ethical issues. Topics will include ethical and moral issues in the workplace, distinguishing between the law, morals, and ethics, the relationship between ethics and social responsibility, and consequences of unethical/ethical decisions. 3.00 credit hours. Prerequisite: BU 206 Business Law I.

BU 328 Product Development and Innovation

This course explores the importance of new product development. Innovation is examined from the following perspectives: product development, internal process improvements, and strategic shifts. At the end of this course, students will demonstrate knowledge of how to successfully develop and promote a new product. 3.00 credit hours. Prerequisite: BU 220 Principles of Marketing.

BU 329 Managing Project Teams

This course provides an in-depth coverage of the project manager's role and responsibility in managing a project team. The course focuses on coordinating the human factors and resources necessary for a project's success. Topics include effective team building and management, the human resource role and responsibility of the project manager, interfacing with stakeholders, organizational structure, communication planning, leadership, performance reporting, and resolving conflict. 3.00 credit hours. Prerequisite: BU 302 Leadership and Organizational Behavior.

BU 331 Managing Information Systems

This course will present a multidisciplinary approach to integrating the behavioral, organizational, operational, and technical aspects of information systems concepts and structures. Emphasis is on the internal management of information resources and the management of information technology. Coverage of the subject matter will be through case studies, lectures, class discussion, projects, independent readings, and research. 3.00 credit hours. Prerequisite: IS 102 Computers and Application Software.

BU 332 Small Business Development and Planning

This course focuses on developing and crafting of a business plan. Students will be asked to evaluate the advantages and disadvantages of various small business ownership forms. Students will also be required to review the business environment for market entry. 3.00 credit hours. Prerequisite: BU 220 Principles of Marketing.

BU 336 The Art of Negotiation

This course develops the techniques and skills necessary for successful negotiations with various business entities. This course will cover the strategies and tactics used to create win-win contracts and agreements. Students will engage in negotiation simulations that will provide a greater understanding and appreciation for negotiating. 3.00 credit hours. Prerequisite: BU 220 Principles of Marketing.

BU 337 International Banking and Finance

This course focuses on the theory of domestic and international banking and the evaluation of monetary values. Students will examine growth of international trade and capital flows, evaluate the foreign exchange market, and predict the risks involved in the foreign exchange market. Topics covered include: investment capital, balance of payments, exchange rates, and mergers and acquisitions. 3.00 credit hours. Prerequisite: AC 220 Finance.

BU 339 Sustainable Event Planning

This course explores new approaches to building sustainable business practices and strategies. Students will learn how event planners use sustainability models to enable an organization to use event planning over a period of time. New theories and concepts will be discussed in this overview of using “green” in event planning. 3.00 credit hours. Prerequisite: BU 228 Sales and Promotional Management.

BU 341 Sustainable Business Strategies

The course explores new approaches to building sustainable business strategies. Students will learn how companies integrate sustainability into their operations and decision-making to improve their chances of success. Topics include sustainable operating systems and standards, leadership, sustainability metrics, sustainability and the front line, transparent sustainability reporting, and the role of stakeholders in maintaining sustainable businesses. 3.00 credit hours. Prerequisite: BU 236 Introduction to Green and Sustainable Management.

BU 342 Quality Management

This course provides a comprehensive overview of the specific tools and fundamental principles of total quality and continuous improvement in the project environment and explores methods to implement a management-improvement program effectively. Topics include principles of quality management, quality planning, quality assurance, and statistical quality control tools including Six Sigma. 3.00 credit hours. Prerequisite: BU 106 Introduction to Management.

BU 343 Design in Event Planning

Students will examine the critical role of event planners, production managers, designers, and decorators within traditional event-management practices. In addition, the course will survey the impact of collaborative planning, effective research, and communication skills on event planning. 3.00 credit hours. Prerequisite: BU 228 Sales and Promotional Management.

BU 345 Project Management

This course provides instruction in the principles and concepts of project management. Topics include: project management concepts; needs identification techniques; proposed solutions preparation; the project life cycle; the project manager's responsibilities and skills; the composition of an effective project team; types of project organizations; project communication and documentation; project planning, scheduling, and control; resource planning; and cost planning and performance evaluation. 3.00 credit hours. Prerequisite: None.

BU 346 Fraud and the Law

This course explores the legal issues associated with occupational fraud investigation with an emphasis on proper preparation of a fraud report. It will examine a variety of investigative techniques, accounting, valuation, damage assessment, and litigation support services. Students will be provided the necessary tools to prove, disprove, or least confidently speculate about allegations related to information and to report those findings objectively. Topics include: AICAP SAS 99; the Sarbanes-Oxley Act; white-collar crime; laws related to fraud; and criminology as related to fraud. 3.00 credit hours. Prerequisite: BU 206 Business Law I.

BU 350 Psychometrics

This course analyzes classical and modern psychometric theory and application. Topics include basic formulations, composite tests, validity and reliability, test length, criterion-referencing applications, norm-referencing applications, factors affecting precision, estimation, production, item parameters, test construction, and test equating. 3.00 credit hours. Prerequisite: BU 220 Principles of Marketing.

BU 353 The Legal Aspects of Sustainability

This course provides an introduction to the broad field of environmental law and covers the tools needed to address problems of environmental disruption. Topics include the source of environmental law, the impact of the administrative law on the environment, evolution of environmental policy, air and water quality control, regulation of toxic substances, waste management and hazardous waste pollution, energy policy, regulation of natural resources, and international environmental law. 3.00 credit hours. Prerequisites: BU 206 Business Law I and BU 236 Introduction to Green and Sustainable Management.

BU 361 Cross-Cultural Management Dimensions

This course focuses on the development of communication skills needed by managers who engage in business across cultures. Students will examine cultural aspects of verbal and nonverbal communication, learn how to minimize cultural bias, demonstrate effective problem-solving, and discuss how to staff, train, and compensate employees in an international setting. 3.00 credit hours. Prerequisites: BU 106 Introduction to Management and SS 310 Cultural Diversity.

BU 375 Professional Selling and Sales Management

This course combines the topics of personal selling and sales force management. Topics include: the planning and implementation of personal selling activities; the sales process from initial contact to post-closing follow up; and the management of the sales force. 3.00 credit hours. Prerequisite: BU 220 Principles of Marketing.

BU 403 Constitutional Law

This course is designed to give the student a basic knowledge of constitutional law as well as the structure of the federal government (executive, legislative, and judicial) with emphasis on the judicial branch and the workings of the Supreme Court of the United States. 3.00 credit hours. Prerequisite: None.

BU 406 International Business

This course offers a comparative analysis of business practices in the global economy with emphasis on international economic factors and institutions. Topics include: the national environments of international business; the role of culture, trade and exchange rates; financial issues; marketing strategies and business development; international management; and the impact of government policies. 3.00 credit hours. Prerequisite: BU 106 Introduction to Management.

BU 407 Quantitative Decision-Making

This course presents an overview of problem modeling and decision-making. The class will introduce students to several quantitative models applicable to problems in a variety of functional areas of business. Students will be able to apply quantitative analysis to real-world management problems. 3.00 credit hours. Prerequisite: MA 204 Trigonometry, or MA 225 Trigonometry and Pre-Calculus, or MA 320 Statistics.

BU 408 Learning and Transformation in Sustainable Organizations

The focus of this course is to examine a student's competency in the analysis of sustainable design, practices and implementation. Students will become familiar with the complexity of long-term organization goals that are aligned with the vision, mission, and values of an organization and how they impact the environment, customers, and community in becoming a more social, friendly organization. The students must demonstrate, through effective modeling, how an organization is impacted through long-term change and how goals can best be met with aligning structure with intended outcomes. 3.00 credit hours. Prerequisite: BU 106 Introduction to Management.

BU 409 Procurement and Budgeting in Event Planning

The focus of this course is to provide students with in-depth, hands-on experience that manages all aspects of a major event by applying project management tools and teamwork skills and increases their knowledge of, and contacts in, the event management profession. 3.00 credit hours. Prerequisite: BU 339 Sustainable Event Planning.

BU 413 Project Planning

This course will provide an in-depth review of the tools of project planning as well as the communication and human resource issues within the enterprise. 3.00 credit hours. Prerequisite: BU 345 Project Management.

BU 417 Designing Winning Organizations

The focus of this course is to examine a student's competency in evaluating the concepts of organizational design. Students will become familiar with the complexity of organization-environment relationships, the value of matching structures and strategies, the international environment, the importance of information technology to winning organizations, and the implementation of practical approaches in creating reciprocal relationships. 3.00 credit hours. Prerequisite: BU 106 Introduction to Management.

BU 421 Operations Management

This course provides students with the tools they need to analyze processes in order to create value across a network of customers, enterprises, and supply chain partners. This course will explore the role of management and how communication tools are used to efficiently manage operations across a global supply chain. 3.00 credit hours. Prerequisite: AC 216 Accounting II.

BU 422 Environmental Economics

This course provides a comprehensive overview of the role of economics in environmental management. The course centers on economic analytical tools used to assess environmental problems, evaluate policy solutions, and determine the practical implications of environmental planning and decision-making. Topics include: modeling environmental problems and solutions; analytical tools for environmental planning and decision-making; international environmental agreements and international trade; environmental efficiency; and industrial ecology and pollution management. 3.00 credit hours. Prerequisites: EC 111 Principles of Microeconomics and EC 121 Principles of Macroeconomics.

BU 423 Fraud Investigation Techniques

This course will provide an overview of the investigative techniques utilized by forensic accountants. It focuses on the best practices for discovering, collecting, preserving and managing information related to financial fraud and financial crimes. Topics include: ethical principles;

professional conduct; preparation of interview materials; obtaining and preparing legally admissible admission statements; interpreting verbal and nonverbal cues; common fraud schemes; fraud prediction; fraud prevention and deterrence; detection and investigation; and occupational fraud and abuse. 3.00 credit hours. Prerequisite: AC 436 Forensic Accounting.

BU 440 International Marketing

The focus of this course is on marketing theory and methods as they apply to world markets. Among the topics included are: the importance of linking international marketing with the overall strategy of the business; examining the influence of culture; discussing political and legal issues; and examining the economic issue in global strategies. 3.00 credit hours. Prerequisite: BU 220 Principles of Marketing.

BU 441 Sustainable Enterprise Planning

This course combines the fundamentals of planning and environmental sustainability in creating sustainable plans and reports. Topics include sustainability framework, communication and training plans, mission and vision for sustainable businesses, assessment and analysis, sustainability metrics and reports, environmental management systems, sustainability plans, ISO 14001 requirements, and the relationship between suitability and total quality control. 3.00 credit hours. Prerequisites: BU 353 The Legal Aspect of Sustainability and BU 422 Environmental Economics.

BU 442 Cost and Time Management

This course encompasses cost and time management techniques and concepts. Students will explore the techniques used in cost and time management as part of the decision-making process and apply project cost and time concepts to the final project. Topics include cost and benefit estimating, cost budgeting, cost control, managing resource allocation, monitoring project costs, and integrating project costs and schedules. 3.00 credit hours. Prerequisite: BU 407 Quantitative Decision-Making.

BU 447 Marketing Research

This course is designed to provide students with an overview of marketing research methods and analysis of the marketing data using SPSS. Topics include: the different methods of marketing research; the issues that arise at each stage of the marketing research process; problem definition; research objectives; questionnaire design; sampling and data collection; data analysis; and communicating research findings and their implications to various constituencies. 3.00 credit hours. Prerequisites: BU 220 Principles of Marketing and MA 320 Statistics.

BU 450 Marketing Strategy

This course builds on the marketing and sales course and provides a strategy perspective that extends beyond the traditional management focus of the marketing mix. Topics include: an overview of a market-driven strategy; target market strategies; marketing program development; a marketing organization; and the implementation and control of a marketing strategy. 3.00 credit hours. Prerequisite: BU 220 Principles of Marketing.

BU 453 Fraud Examination

This course provides an overview of the research associated with occupational fraud and the methodology of fraud examination. Topics include obtaining documentary evidence, interviewing witnesses and potential suspects, writing investigative reports, testifying to findings, and forensic document examinations. The course will focus on the most common types of occupational fraud, determining how each type of fraud is committed, and implementing prevention strategies. 3.00 credit hours. Prerequisite: AC 436 Forensic Accounting.

BU 461 Human Resource Management

This course focuses on the role of management in the staffing of a business and development of human resources. Topics include: planning, organizing, and staffing issues; how to develop and direct staff; and controlling human resources in businesses. 3.00 credit hours. Prerequisite: BU 106 Introduction to Management.

BU 470 International Human Resource Management

This course explores international human resource activities, policies, issues, and trends relating to managing people in a multinational context. Topics include recruitment, staffing, training, compensation, performance management, international industrial relations, and international human resource trends. 3.00 credit hours. Prerequisites: BU 461 Human Resource Management and SS 310 Cultural Diversity.

BU 471 Legal Issues in Event Planning

This course will provide a survey of the legal and ethical implications of event planning. The course will cover topics such as liability, copyrights, trade, patents, due diligence, and the application of the law and regulations in the event-planning field. Regulatory law application will be covered as well as proactive risk management. 3.00 credit hours. Prerequisite: BU 409 Procurement and Budgeting in Event Planning.

BU 482 Strategic Management

This course provides an opportunity to develop strategic management knowledge and skills used in a business environment. Topics include: strategic management principles; assessing the external and internal environments of businesses; and developing and implementing strategies. Students will discuss how to adapt to changing environments using the principles of strategy, execution, and evaluation. 3.00 credit hours. Prerequisite: BU 220 Principles of Marketing.

BU 491 Capstone Project

This is an integrative course that allows students to identify a real-world problem and provide a recommended solution. Each student selects a topic or project with instructor approval and completes a paper which documents the process including the use of industry-standard research methods. Students are required to make a professional oral presentation of their project analysis and recommendations. 3.00 credit hours. Prerequisite: Final semester.

BU 495 Internship (Bachelor's degrees)

The course is the final class in the undergraduate experience. The students will participate in an eight-week "on-the-job" experience, where they will participate as a full-time employee within an organization. Classroom topics will cover communication within the organization, organizational missions and cultures, employee etiquette, and current issues that occur in the workplace. The students will be evaluated by both faculty and the supervisor from the sponsor organization. 3.00 credit hours. Prerequisites: Final semester and PD 214 AA/AAS/BS/ Diploma Internship Preparation.

(CA) CLINICAL MEDICAL ASSISTING

CA 100 Introduction to the Professional Medical Assistant

This course introduces the student to the profession of medical assisting. Topics will include credentialing, continuing education, communication, and professionalism essential to the medical assisting field. 1.00 credit hour. Prerequisite: None.

CA 102 Healthcare Law and Ethics

This course introduces the student to legal and ethical issues in healthcare. Students will learn about federal and state regulations, professional liability and medical malpractice, medical documentation, bioethical issues, and the Health Information Portability and Accountability Act (HIPAA). 2.00 credit hours. Prerequisites: MO 150/MO 150L Pathophysiology and Pharmacology/Lab, and SC 245/SC 245L Anatomy and Physiology II/Lab.

CA 109 Computer Concepts for the Medical Assistant

Students will acquire the computer skills necessary to properly utilize office machines and computerized systems, including the Microsoft Office Suite, as well as medical software used for scheduling, insurance processing, and billing. 2.00 credit hours. Prerequisite: None.

CA 110 Medical Administrative Procedures

This course is designed to provide students with an understanding of the administrative duties performed in the medical office. Topics include appointment scheduling, mail processing, filing, billing, banking, reception management, coding, and insurance claim processing. 3.00 credit hours. Prerequisites: CA 109 Computer Concepts for the Medical Assistant and HC 115 Medical Terminology for Healthcare Professionals.

CA 125 X-Ray Technologies for the Medical Assistant I

This course introduces the student to the basic science and physics of x-ray technology. Human anatomy and pathology of the skeletal system is reviewed. Students are instructed on the legal, ethical, and safety considerations related to the practice of radiography. 2.00 credit hours. Prerequisites: MO 150/MO 150L Pathophysiology and Pharmacology/Lab, and SC 245/SC 245L Anatomy and Physiology II/Lab.

CA 135 X-Ray Technologies for the Medical Assistant II

This course builds on concepts learned in X-Ray Technologies for the Medical Assistant I. Positioning and film processing techniques and quality assessment are covered. 2.00 credit hours. Prerequisite: CA 125 X-Ray Technologies for the Medical Assistant I.

CA 150 Clinical Skills I

This course introduces the student to basic concepts of outpatient care. Topics include OSHA standards and regulations, universal precautions, patient relations, clinical charting and documentation, vital signs, patient rooming, instrument identification, assessment of hearing and vision, application of ambulatory aids, and assisting in physical examinations. 3.00 credit hours. Prerequisites: HC 115 Medical Terminology for Healthcare Professionals, MO 150/MO 150L Pathophysiology and Pharmacology/Lab, and SC 245/SC 245L Anatomy and Physiology II/Lab.

CA 200 Clinical Skills II

This course continues the instruction of clinical skills learned in Clinical Skills I, including sterilization techniques, medication administration, injections, respiratory testing, electrocardiograms, CPR and first aid. 3.00 credit hours. Prerequisite: CA 150 Clinical Skills I. Corequisites: CA 225/CA 225L Medical Laboratory Procedures/Lab.

CA 225 Medical Laboratory Procedures

This course educates the student on the purpose, techniques and recording of diagnostic laboratory procedures commonly performed in the medical office. Subjects covered include phlebotomy, specimen collection, handling and processing, and performing hematology, chemistry, microbiology, urinalysis and immunology testing. 2.00 credit hours. Prerequisite: CA 150 Clinical Skills I. Corequisites: CA 200 Clinical Skills II and CA 225L Medical Laboratory Procedures Lab.

CA 225L Medical Laboratory Procedures Lab

This is the lab portion of Medical Laboratory Procedures. Students will demonstrate hands-on competency in the areas of phlebotomy, specimen collection/handling and processing, and performing hematology, chemistry, microbiology, urinalysis and immunology testing. 1.00 credit hour. Prerequisite: CA 150 Clinical Skills I. Corequisites: CA 200 Clinical Skills II and CA 225 Medical Laboratory Procedures.

CA 255 Clinical Medical Assistant Review Seminar

This is a summary course that reviews the skills, knowledge, and medical assisting abilities acquired throughout the program. This course assists the student in preparation for the national certification examination offered by the American Association of Medical Assistants (AAMA) with practice examinations and review of critical clinical skills. 1.00 credit hour. Prerequisites: CA 200 Clinical Skills II, and CA 225/CA 225L Medical Laboratory Procedures/Lab. Corequisite: CA 294 Clinical Medical Assisting Externship.

CA 294 Clinical Medical Assisting Externship

Students will engage in a 270-hour on-the-job training experience in a physician's office/clinic. The externship will provide the student with the opportunity to experience and participate in the duties typical to a real workplace setting, including administrative, clinical, and laboratory procedures. Instruction centers on observing experienced personnel as well as participating in actual procedures under close supervision of trained professionals. 6.00 credit hours. Prerequisites: CA 200 Clinical Skills II, CA 225/CA 225L Medical Laboratory Procedures/Lab, CA 135 X-Ray Technologies for the Medical Assistant II, and PD 211 Medical Assisting Externship Preparation. Corequisite: CA 255 Clinical Medical Assistant Review Seminar.

(CJ) CRIMINAL JUSTICE

CJ 105 Introduction to Criminal Justice

This course provides instruction on the components of the American criminal justice system: courts, police and corrections. Students will utilize critical thinking skills to discern the balance between individual rights and public order as it pertains to the criminal justice process. Students must demonstrate knowledge of the criminal justice system and processes through examinations, assigned papers, and reports. Additionally, students will participate in field and classroom experiences created to explore the various career opportunities within the criminal justice system. 3.00 credit hours. Prerequisite: None.

CJ 115 Criminal Law

This course covers the key components of criminal law and its enforcement. While the primary focus is substantive criminal law, other topics include an overview of the criminal law process, defenses, and jurisdiction of the courts. The primary emphasis is on substantive criminal law including its statutory codification. The course will examine crimes against persons, property, and peace and order in detail and analyze the essential elements and burdens of proof required for a conviction. 3.00 credit hours. Prerequisite: None.

CJ 120 Introduction to Criminology

The course is a theoretical study of crime and its causes and prevention and control. The student will examine the field of criminology and obtain an appreciation for how research models are used to better understand and explain criminal behavior and society's response to it. 3.00 credit hours. Prerequisite: None.

CJ 130 Introduction to Law and Judicial Process

This course covers the major structures, basic legal concepts, and legal procedures that regulate the criminal court system. The course also examines the roles of key participants and the effect of Appellant and Supreme Court decisions on the criminal law process. 3.00 credit hours. Prerequisite: None.

CJ 140 Report Writing and Communication

This course is designed to introduce the student to law enforcement verbal and written communication. The course provides knowledge, skills, and practice in the areas of interviewing, interrogation, and report writing. 3.00 credit hours. Prerequisite: CJ 105 Introduction to Criminal Justice.

CJ 200 Introduction to Corrections

This course covers the basics of corrections, including historical events and social issues which have shaped our current systems. This course also covers functions of corrections today including contemporary prison populations, custodial structure, prisoner rights and legal issues, capital punishment, community corrections programs, and developing issues. 3.00 credit hours. Prerequisite: None.

CJ 205 Multicultural Issues in Criminal Justice Management

This course teaches students about law enforcement's challenge of respecting and acknowledging cultural differences while fulfilling the responsibility of channeling the strengths of this diversity. This course effectively covers a variety of populations: gangs, immigrants, the mentally ill, the homeless, and many more. 3.00 credit hours. Prerequisite: CJ 105 Introduction to Criminal Justice.

CJ 210 Law Enforcement Security

This course provides a comprehensive overview of private security including its increasing role in the criminal justice system and homeland security. 3.00 credit hours. Prerequisite: CJ 130 Introduction to Law and Judicial Process.

CJ 211 Introduction to Criminal Intelligence

This course is an introduction to the use of criminal intelligence as a managerial philosophy where data analysis and crime intelligence are used for decision-making to address the problems of crime reduction, disruption and prevention through both strategic management and effective enforcement strategies. 3.00 credit hours. Prerequisite: None.

CJ 220 Ethics in Law Enforcement

This course covers the basics of public administration and the ethical issues of public service. 3.00 credit hours. Prerequisite: CJ 105 Introduction to Criminal Justice.

CJ 221 Criminal Data Analysis

This course is an introduction to criminal data analysis and will teach students how to analyze crime scenes, predict or forecast future occurrences, infer conclusions, and help law enforcement agencies deploy resources in an effective manner. 3.00 credit hours. Prerequisite: IS 124 Database Applications.

CJ 230 Evidence Forensics

This course covers the law model and types and current rules of evidence acquisition. 4.00 credit hours. Prerequisite: CJ 130 Introduction to Law and Judicial Process.

CJ 240 Patrol Procedures

In this course, the student will learn "the mindset of a prepared officer." The student will learn the importance of the following: patrol; objectives and preparation for patrol; skills of observation, memory, and details; procedures for stopping vehicles and dealing with pedestrians; and responding to requests for emergency service. The student will also learn how officers are trained to be objective in observation techniques and advanced patrol procedures that are conducive to officer survival. Students will learn memory skills, observation techniques, and procedures for simple traffic and felony stops as well as emergency driving skills. 3.00 credit hours. Prerequisite: CJ 105 Introduction to Criminal Justice.

CJ 250 Juvenile Justice

This course will bring the student with an interest in public safety and criminal justice into the American juvenile justice system. The student will learn about the laws and procedures that govern the way juveniles are handled by the police and the court, the reasons for them, and how to apply them in the everyday discharge of the law enforcement officer's duty. This course covers the basics of juvenile justice, from entry into the system by way of law enforcement to prosecution, rehabilitation, and corrections. 3.00 credit hours. Prerequisite: None.

CJ 294 Career Internship

This is an open elective course in associate's degree programs that students take in their final semester. The career internship course is designed for students interested in pursuing a career in criminal justice. The outcome of the internship is an informed student fully apprised of the opportunities his/her degree program offers for professional growth. During the internship phase of training, the student will experience various aspects of working in the actual field in which the student has been educated. The internship is designed to provide the student with the opportunity to experience and participate in duties typical of a contemporary workplace setting. Student learning will center on observing experienced personnel as well as participating in actual hands-on procedures under close supervision of trained professionals. 4.00 credit hours. Prerequisites: Final Semester, program GPA of 2.50, and PD 214 AS/AAS/BS/Diploma Internship Preparation.

CJ 300 Criminalistics

This course covers the nature of physical evidence with a study of the current technologies available to crime laboratory personnel. 3.00 credit hours. Prerequisite: CJ 230 Evidence Forensics.

CJ 305 Supervising and Managing Criminal Justice Personnel

This course is a survey of timely, emerging, and important personnel supervision and management issues inherent to criminal justice organizations. Problem-solving, team-building, procedures, and policies for common personnel issues will be explored. 4.00 credit hours. Prerequisite: BU 209 Leadership and Team Dynamics.

CJ 310 Criminal Investigation

This course is an introduction to criminal investigation and the investigative process. Current issues in criminal investigations will be studied along with true case studies. 4.00 credit hours. Prerequisite: CJ 105 Introduction to Criminal Justice.

CJ 320 Civil Liability in Public Safety

This course provides a study of all aspects of civil liability in the performance of public safety functions. It examines sources of civil liability exposure for public safety officers and their agencies. The course examines tort theory, vicarious liabilities, immunities, and damages as they apply to public safety entities and their personnel. The course will also examine similarities and differences between state and federal forums. 3.00 credit hours. Prerequisite: CJ 115 Criminal Law.

CJ 325 Criminal Mapping Analysis

This course covers the study and practice of crime mapping, stressing the need for law enforcement to keep current in the ever-changing area of technology and resources. 3.00 credit hours. Prerequisite: CJ 310 Criminal Investigation.

CJ 330 Crime Analysis Applications

This crime analysis application course is specifically aimed at providing students with a strong skill set in crime analysis. The course covers many of the topics that will arise in the day-to-day workload of crime analysts as well as more advanced forms of analysis. The major objective of this course is to provide students with the appropriate skills to conduct analytical research. 4.00 credit hours. Prerequisite: CJ 221 Criminal Data Analysis.

CJ 400 Criminal Psychology

The psychology of crime is a subdivision of the general field of forensic psychology. This course introduces and explores the concept of criminal behavior using an interdisciplinary approach, with a primary focus on the psychological perspective. This study will include human nature theories as well as psychological criminology and criminal profiling. 3.00 credit hours. Prerequisite: PS 101 Psychology.

CJ 405 Contemporary Issues in Criminal Justice Management and Supervision

This course is an assessment of problems confronting administrators of criminal justice and law enforcement agencies and recent efforts to enhance the capability of agencies to control criminal activity while guarding individual liberties. 3.00 credit hours. Prerequisite: CJ 105 Introduction to Criminal Justice.

CJ 410 Fiscal Budgeting in Criminal Justice Agencies

This course covers the logic and process of budgeting for the public official and administration including methods and practices, capital budgeting, public infrastructure investment, and project evaluation through revenue sources and administration. 4.00 credit hours. Prerequisite: MA 107 College Algebra.

CJ 420 Narcotics and Drug Abuse

This course evaluates conservative and liberal views on crime control proposals, guns and crimes, drug policies, the war on drugs, and the legalization of drugs. This course communicates complex ideas about how the criminal justice system operates and is affected by politics. The basics of current drugs and their effects are studied and evaluated. 3.00 credit hours. Prerequisite: None.

CJ 430 Financial Crimes

This course explores financial crimes and their impact on society. The course will include topics such as types of fraud, identity theft, counterfeit documents, and internet crimes. The course will explore how these crimes have evolved and the use of financial crimes to fund terrorism and the drug trade. The course will give the student an overview of each type of financial crime and the methodology for investigation and prosecution. 3.00 credit hours. Prerequisite: CJ 310 Criminal Investigation.

(CO) CO-OPERATIVE EDUCATION

CO 301 Co-Op I

This course is one of two co-operative education (co-op) courses that are available for students as an elective in the sophomore or junior years of their bachelor's degree. The co-op experience is similar to an externship taken at the end of a program but is experienced earlier in the degree program. The intent is to give the student a taste of the professional world earlier in their degree work. Like an externship, the students will participate in an eight-week "on-the-job" experience, where they will participate as a temporary employee within an organization. Classroom topics will cover communication within the organization, organizational missions and cultures, employee etiquette, and current issues that occur in the workplace. Students will be evaluated by both faculty and the supervisor from the sponsor organization. The co-operative education courses may be taken singularly, in series, or concurrently in the same academic period, depending on whether a student wishes a part-time or full-time experience. 3.00 credit hours. Prerequisite: PD 214 AS/AAS/BS/Diploma Internship Preparation.

CO 302 Co-Op II

This course is second of two co-operative education (co-op) courses that are available for students as an elective in the sophomore or junior years of their bachelor's degree. The co-op experience is similar to an externship taken at the end of a program but is experienced earlier in the degree program. The intent is to give a student a taste of the professional world earlier in their degree work. Like an externship, students

will participate in an eight-week "on-the-job" experience, where they will participate as a temporary employee within an organization. Classroom topics will cover communication within the organization, organizational missions and cultures, employee etiquette, and current issues that occur in the workplace. Students will be evaluated by both faculty and the supervisor from the sponsor organization. The co-operative education courses may be taken singularly, in series, or concurrently in the same academic period, depending on whether a student wishes a part-time or full-time experience. 3.00 credit hours. Prerequisite: PD 214 AS/AAS/BS/Diploma Internship Preparation.

(DH) DENTAL HYGIENE

DH 105 Dental and Medical Terminology

This course introduces the foundations of the language of medicine and dentistry. Students will develop medical and dental Vocabulary through the study of the structures, functions, diagnostic procedures, pathology, and treatment procedures of the body systems. The course explains the composition of medical and dental terms by exploring prefix, root combination, and suffix divisions along with word composition. Common medical and dental procedures and practices are discussed along with disease processes. 1.00 credit hour. Prerequisites: SC 150 Principles of Nutrition, SC 165/SC 165L Microbiology/Lab, SC 185/SC 185L General Chemistry/Lab and SC 229 Fundamentals of Anatomy and Physiology II.

DH 111 Medical Emergencies in Dentistry

This course provides a study of the most common medical emergencies in the dental setting and appropriate treatment measures. It includes identifying and managing medically compromised dental clients in the dental hygiene clinic and provides for BLS/CPR certification. 2.00 credit hours. Prerequisites: SC 150 Principles of Nutrition, SC 165/SC 165L Microbiology/Lab, SC 185/SC 185L General Chemistry/Lab and SC 229 Fundamentals of Anatomy and Physiology II.

DH 119 Orofacial Structures

This course provides information on the nomenclature, morphology, anatomy, physiology, and histology of the oral cavity. Special emphasis is placed on characteristics of the primary and permanent dentition, including crown and root formation. Components of the tooth structure, characteristics of the supporting tissues, eruption and exfoliation patterns, and related dental terminology will also be discussed. Students will be introduced to the anatomical structures involved with the head and neck. Bones of the face and skull, muscles of the oral cavity and surrounding tissues, and nerve and blood supply avenues will be covered. Students will become familiar with anatomical landmarks related to dentistry. Human development of the skeletal, muscular, circulatory, and nervous systems will be stressed, with an emphasis on their relation to the oral cavity. 3.00 credit hours. Prerequisites: SC 150 Principles of Nutrition, SC 165/SC 165L Microbiology/Lab, SC 185/SC 185L General Chemistry/Lab and SC 229 Fundamentals of Anatomy and Physiology II.

DH 122 General and Oral Pathology

This course is designed to provide information on developmental disturbances, disease and their microbiological origin and/or manifestations associated with various diseases and disorders. Topics include cause of disease, process of information and repair, autoimmune diseases, characteristics of neoplasms, nature of diseases and anomalies of the teeth, oral cavity, and supporting tissues. Common pathology, such as dental caries, neoplasias, oral lesions, benign and malignant conditions, oral cancer, temporomandibular disorders and various cysts and tumors, will be identified and discussed. Emphasis will be placed on clinical recognition of pathological conditions as well as contributing factors. 3.00 credit hours. Prerequisites: SC 150 Principles of Nutrition, SC 165/SC 165L Microbiology/Lab, SC 185/SC 185L General Chemistry/Lab and SC 229 Fundamentals of Anatomy and Physiology II.

DH 123 Dental Hygiene Seminar I

The course contains didactic instruction that correlates to subjects and procedures in the Pre-Clinical Lab course. Students will receive in-depth information pertaining to introductory dental hygiene techniques and clinical practice. Topics include sterilization, infection control protocols, managing emergencies, and recording patient medical histories. Students will gain the knowledge necessary to provide dental hygiene assessments, perform a dental hygiene diagnosis, and prepare a care plan. Students will understand the implementation and evaluation phases of assessment. Topics covered will be studied in detail. Students will study and practice effective communication techniques. 2.00 credit hours. Prerequisites: SC 150 Principles of Nutrition, SC 165/SC 165L Microbiology/Lab, SC 185/SC 185L General Chemistry/Lab and SC 229 Fundamentals of Anatomy and Physiology II.

DH 125 Pre-Clinical Lecture

This course prepares the student with the introductory knowledge and skills to properly and safely handle material and equipment in the dental clinic. It will prepare the students to provide clinical dental hygiene services. Students will also be learning the techniques for sterilization, infection control protocols, managing medical emergencies, and taking and recording medical histories, including vital signs. Students will be introduced to the instruments utilized by the dental hygienist and will also perform basic dental hygiene procedures. Topics include oral prophylaxis, including scaling and root planning, instrumentation techniques, oral hygiene, and health education. 1.00 credit hour. Prerequisites: SC 150 Principles of Nutrition, SC 165/SC 165L Microbiology/Lab, SC 185/SC 185L General Chemistry/Lab and SC 229 Fundamentals of Anatomy and Physiology II. Corequisite: DH 125C Pre-Clinical Lab.

DH 125C Pre-Clinical Lab

This course prepares the student with the introductory knowledge and skills to properly and safely handle material and equipment in the dental clinic. This laboratory course will prepare the students to provide clinical dental hygiene services. Students will learn the techniques for sterilization, infection-control protocols, managing medical emergencies, and taking and recording medical histories, including vital signs. Students will be introduced to the instruments utilized by the dental hygienist and will also perform basic dental hygiene procedures. Topics include oral prophylaxis, including scaling and root planning, instrumentation techniques, oral hygiene, and health education. In addition to laboratory skills performed on manikins, students will participate in dental hygiene observation sessions and begin treatment on classmates. 2.00 credit hours. Prerequisites: SC 150 Principles of Nutrition, SC 165/SC 165L Microbiology/Lab, SC 185/SC 185L General Chemistry/Lab and SC 229 Fundamentals of Anatomy and Physiology II. Corequisite: DH 125 Pre-Clinical Lecture.

DH 130 Pharmacology for the Dental Hygienist

This course introduces the student to a variety of drug categories with emphasis placed on commonly prescribed medications and drugs utilized in the dental office. The physical and chemical characteristics of drugs, routes of administration, therapeutic and side effects, precautions, drug interactions, and contraindications to dental treatment will be covered. Identifying and managing medical emergencies in the dental office will also be discussed. 2.00 credit hours. Prerequisites: SC 150 Principles of Nutrition, SC 165/SC 165L Microbiology/Lab, SC 185/SC 185L General Chemistry/Lab and SC 229 Fundamentals of Anatomy and Physiology II.

DH 135 Periodontology

The etiology of periodontal disease, as well as the assessment, diagnosis, and treatment options, will be discussed including clinical procedures and associated surgical interventions. The clinical, histopathological, and pathogenesis of gingivitis and periodontitis is included, and emphasis will be placed on the progression of periodontal disease and the role of the dental hygienist in the management and treatment of disease. Evaluation of periodontal treatment, maintenance phase of periodontal treatment, and the relationship between periodontics and other disciplines in dentistry will be discussed. Roles of clinical research in the treatment of periodontal disease will also be discussed. 3.00 credit hours. Prerequisites: DH 105 Dental and Medical Terminology, DH 111 Medical Emergencies in Dentistry, DH 119 Orofacial Structures, DH 123 Dental Hygiene Seminar I, DH 125 Pre-Clinical Lecture, DH 125C Pre-Clinical Lab, DH 136 Radiography Interpretation, DH 141 Oral Histology and Embryology, DH 142 Principles of Dental Radiography and DH 142C Principles of Dental Radiography Clinical.

DH 136 Radiography Interpretation

This course covers the concepts of radiographic interpretation as required for the dental hygienist. The importance of high-quality dental radiographs will be stressed. Students will be able to identify normal and abnormal anatomy and conditions. Radiographic appearance of caries, periodontal disease, periapical lesions, restorative materials, and the interpretation of the classification of periodontal disease will be covered as well as the differences of radiopaque and radiolucent structures. 1.00 credit hour. Prerequisites: SC 150 Principles of Nutrition, SC 165/SC 165L Microbiology/Lab, SC 185/SC 185L General Chemistry/Lab and SC 229 Fundamentals of Anatomy and Physiology II.

DH 139 Concepts in Community Dental Health

This course introduces the student to current issues related to community dental health. Community dental health practices will be compared to clinical private dental facilities. Epidemiological methods, analysis of research findings, problem and study selection and evaluation, as well as research, planning and design for community based dental programs, will be discussed. Students will gain an understanding of the role of community dental health opportunities as they relate to the entire community. The effectiveness and accessibility of community dental healthcare will be evaluated. 3.00 credit hours. Prerequisites: DH 122 General and oral Pathology, DH 130 Pharmacology for the Dental Hygienist, DH 135 Periodontology, DH 140 Dental Hygiene Seminar II, DH 140L Dental Hygiene Seminar II Lab and DH 143C Dental Hygiene Clinical Practice I.

DH 140 Dental Hygiene Seminar II

This course is designed to provide students with the scientific basis for dental hygiene care. Emphasis will be placed on the areas of oral health education, preventative care, and nutritional counseling. Topics include the SOAP method of documentation, diet and caries, techniques for nutritional counseling, and care for special-needs patients. Students will learn the format and requirements to accurately document the subjective, objective, assessment, and planning findings for their patients. Care of instruments and instrument sharpening will be discussed. Protocol and procedural methods for the use and care of ultrasonic instrumentation will be discussed. Students will apply the knowledge gained in this course to practical situations in the lab component as well as in the clinic. 2.00 credit hours. Prerequisites: DH 105 Dental and Medical Terminology, DH 111 Medical Emergencies in Dentistry, DH 119 Orofacial Structures, DH 123 Dental Hygiene Seminar I, DH 125 Pre-Clinical Lecture, DH 125C Pre-Clinical Lab, DH 136 Radiography Interpretation, DH 141 Oral Histology and Embryology, DH 142 Principles of Dental Radiography and DH 142C Principles of Dental Radiography Clinical. Corequisite: DH 140L Dental Hygiene Seminar II Lab.

DH 140L Dental Hygiene Seminar II Lab

This course is a continuation of the Pre-Clinical Lab. Emphasis will be placed on instrument sharpening, cleaning dental prostheses, the use and care of ultrasonic instruments, advanced instrumentation and probing techniques, clinical attachment levels, root morphology and root planning,

scaling furcations, the care of dental implants, and advanced fulcruming techniques. Students will apply the knowledge gained in the corequisite course to practical situations in the lab as well as in the clinic. 1.00 credit hour. Prerequisites: DH 105 Dental and Medical Terminology, DH 111 Medical Emergencies in Dentistry, DH 119 Orofacial Structures, DH 123 Dental Hygiene Seminar I, DH 125 Pre-Clinical Lecture, DH 125C Pre-Clinical Lab, DH 136 Radiography Interpretation, DH 141 Oral Histology and Embryology, DH 142 Principles of Dental Radiography and DH 142C Principles of Dental Radiography Clinical. Corequisite: DH 140 Dental Hygiene Seminar II.

DH 141 Oral Histology and Embryology

This course is an introduction to general histology, embryological development of the face and oral cavity, development of teeth, eruption, and exfoliation. Tooth structures, including enamel, dentin, cementum, and pulp, will also be covered. Additional topics include periodontal ligament, oral mucosa and salivary glands, and developmental tooth anomalies. 2.00 credit hours. Prerequisites: SC 150 Principles of Nutrition, SC 165/SC 165L Microbiology/Lab, SC 185/SC 185L General Chemistry/Lab and SC 229 Fundamentals of Anatomy and Physiology II.

DH 142 Principles of Dental Radiography

This course includes the history of dental radiography, image and x-ray production, radiation safety, patient protection, and quality assurance. Proper processing techniques and the importance of high-quality dental radiographs will be stressed. Students will be familiar with both the paralleling and bisecting techniques used to expose dental radiographs. Intraoral and extraoral techniques will be discussed. 2.00 credit hours. Prerequisites: SC 150 Principles of Nutrition, SC 165/SC 165L Microbiology/Lab, SC 185/SC 185L General Chemistry/Lab and SC 229 Fundamentals of Anatomy and Physiology II. Corequisite: DH 142C Principles of Dental Radiography Clinical.

DH 142C Principles of Dental Radiography Clinical

This course includes learning the techniques for taking quality films and proper processing. The importance of high-quality dental radiographs will be stressed. Students will become familiar with both the paralleling and bisecting techniques used to expose dental radiographs. Students will expose radiographs on both the Dexters (manikins) and patients. Intraoral techniques are utilized, and extraoral techniques will be demonstrated. Students will expose, mount, and evaluate full-mouth bitewing and periapical radiographs. 1.00 credit hour. Prerequisites: SC 150 Principles of Nutrition, SC 165/SC 165L Microbiology/Lab, SC 185/SC 185L General Chemistry/Lab and SC 229 Fundamentals of Anatomy and Physiology II. Corequisite: DH 142 Principles of Dental Radiography.

DH 143C Dental Hygiene Clinical Practice I

Students will provide direct patient care in a supervised clinical setting in this course. The clinical experiences will include patient assessment, dental hygiene diagnosis, oral prophylaxis, periodontal therapy, oral health education, and radiographs. Students will provide dental hygiene care to class I and II patients. Emphasis will be placed on the students' ability to demonstrate comprehensive treatment planning. Students will be required to use the SOAP method of documentation. 3.00 credit hours. Prerequisites: DH 105 Dental and Medical Terminology, DH 111 Medical Emergencies in Dentistry, DH 119 Orofacial Structures, DH 123 Dental Hygiene Seminar I, DH 125 Pre-Clinical Lecture, DH 125C Pre-Clinical Lab, DH 136 Radiography Interpretation, DH 141 Oral Histology and Embryology, DH 142 Principles of Dental Radiography and DH 142C Principles of Dental Radiography Clinical.

DH 223 Dental Hygiene Seminar III

This course focuses on dental hygiene care for individuals with special needs. Students will be introduced to the basic principles of working with clients with special dental hygiene care needs. Topics include care for patients who have osseointegrated implants. Dental management for the medically compromised patient will be discussed. Dental care for patients with cardiovascular disease, diabetes, mental retardation, HIV infection or AIDS, and cancer will be covered. 2.00 credit hours. Prerequisites: DH 122 General and Oral Pathology, DH 130 Pharmacology for the Dental Hygienist, DH 135 Periodontology, DH 140 Dental Hygiene Seminar II, DH 140L Dental Hygiene Seminar II Lab, and DH 143C Dental Hygiene Clinical Practice I.

DH 226 Dental Hygiene Materials

The course content provides an educational background as well as the knowledge necessary to work with commonly used dental materials and equipment utilized by the dental hygienist to ensure quality patient care. Topics covered include application of pit and fissure sealants, fluoride applications, polishing amalgams, amalgam margination, application and removal of the rubber dam, oral irrigation therapy, dentinal hypersensitivity treatment, chemotherapeutic agents, placement and removal of the periodontal dressing, suture removal, placing temporary restorations, removal of orthodontic cement, impressions/bite registrations, pouring and trimming study models, and custom tray fabrication. 2.00 credit hours. Prerequisites: DH 122 General and Oral Pathology, DH 130 Pharmacology for the Dental Hygienist, DH 135 Periodontology, DH 140 Dental Hygiene Seminar II, DH 140L Dental Hygiene Seminar II Lab, and DH 143C Dental Hygiene Clinical Practice I. Corequisite: DH 226L Dental Hygiene Materials Lab.

DH 226L Dental Hygiene Materials Lab

This course consists of laboratory experiences studied in DH 226 Dental Hygiene Materials and provides the skills necessary for commonly used dental materials and equipment utilized by the dental hygienist to ensure quality patient care. Laboratory exercises include, but are not limited

to, application of pit and fissure sealants, fluoride applications, polishing amalgams, amalgam margination, application and removal of the rubber dam, oral irrigation therapy, dentinal hypersensitivity treatment, chemotherapeutic agents, placement and removal of the periodontal dressing, suture removal, placing temporary restorations, removal of orthodontic cement, impressions/bite registrations, pouring and trimming study models, and custom tray fabrication. 1.00 credit hour. Prerequisites: DH 122 General and Oral Pathology, DH 130 Pharmacology for the Dental Hygienist, DH 135 Periodontology, DH 140 Dental Hygiene Seminar II, DH 140L Dental Hygiene Seminar II Lab, and DH 143C Dental Hygiene Clinical Practice I. Corequisite: DH 226 Dental Hygiene Materials.

DH 227C Dental Hygiene Clinical Practice II

Students will provide direct patient care in a supervised clinical setting in this course. The clinical experiences will include patient assessment, dental hygiene diagnosis, oral prophylaxis, periodontal therapy, oral health education, and radiographs. Students will provide dental hygiene care to class I, II, and III patients. Emphasis will be placed on the students' ability to demonstrate comprehensive periodontal treatment planning. Students will be required to use the SOAP method of documentation. Additional clinical experiences will include the use of ultrasonic instrumentation, margination techniques, amalgam polishing, and application of pit and fissure sealants. 4.00 credit hours. Prerequisites: DH 122 General and Oral Pathology, DH 130 Pharmacology for the Dental Hygienist, DH 135 Periodontology, DH 140 Dental Hygiene Seminar II, DH 140L Dental Hygiene Seminar II Lab, and DH 143C Dental Hygiene Clinical Practice I.

DH 229 Local Anesthesia and Pain Management

This course covers the current concepts of pain management as well as dental anxiety techniques used in the dental office. Students will be prepared to safely administer local anesthesia and nitrous oxide/oxygen inhalation therapy for use in the practice of dental hygiene. Students will study client assessment, anatomy, physiology, emergency management procedures, pharmacology, and indications/contraindications associated with the use of local anesthesia or nitrous oxide/oxygen sedation. Emphasis will be placed on selection and administration of appropriate anesthetic agents and evaluation of proper administration techniques. Legal and ethical issues associated with pain management will also be discussed. Laboratory/clinical sessions in the corequisite course include actual experiences in the administration of local anesthesia and nitrous oxide/oxygen analgesia. 2.00 credit hours. Prerequisites: DH 105 Dental and Medical Terminology, DH 111 Medical Emergencies in Dentistry, DH 119 Orofacial Structures, DH 123 Dental Hygiene Seminar I, DH 125 Pre-Clinical Lecture, DH 125C Pre-Clinical Lab, DH 136 Radiography Interpretation, DH 141 Dental Hygiene Seminar II Lab, DH 142 Principles of Dental Radiology, and DH 142C Principles of Dental Radiography Clinical. Corequisite: DH 229L Local Anesthesia and Pain Management Lab.

DH 229L Local Anesthesia and Pain Management Lab

This course covers the current concepts of pain management and dental anxiety techniques used in the dental office. Students will be prepared to safely administer local anesthesia and nitrous oxide/oxygen inhalation therapy for use in the practice of dental hygiene. Emphasis will be placed on selection and administration of appropriate anesthetic agents and evaluation of proper administration techniques. Laboratory/clinical sessions include actual experiences in the administration of local anesthesia and nitrous oxide/oxygen analgesia, as discussed in theory in the corequisite course. 1.00 credit hour. Prerequisites: DH 105 Dental and Medical Terminology, DH 111 Medical Emergencies in Dentistry, DH 119 Orofacial Structures, DH 123 Dental Hygiene Seminar I, DH 125 Pre-Clinical Lecture, DH 125C Pre-Clinical Lab, DH 136 Radiography Interpretation, DH 141 Dental Hygiene Seminar II Lab, DH 142 Principles of Dental Radiology, and DH 142C Principles of Dental Radiography Clinical. Corequisite: DH 229 Local Anesthesia and Pain Management.

DH 230 Dental Hygiene Ethics and Jurisprudence

This course provides the student with ethical, legal and professional obligations required of a dental hygienist. Content includes legal terminology, laws involving patients, as well as the entire dental health team, practice management, leadership skills and research, and development theories. Professional conduct, including Minnesota rules and statutes as published by the Minnesota Board of Dentistry, will be covered. Students are required to successfully complete the Minnesota Jurisprudence Exam to become licensed as a dental hygienist. 2.00 credit hours. Prerequisites: DH 139 Concepts in Dental Health, DH 223 Dental Hygiene Seminar III, DH 226 Dental Hygiene Materials, DH 226L Dental Hygiene Materials Lab, DH 227C Dental Hygiene Ethics and Jurisprudence, DH 229 Local Anesthesia and Pain Management, and DH 229L Local Anesthesia and Pain Management Lab.

DH 236 Dental Hygiene Board Review

This course will provide the dental hygiene student an opportunity to review the concepts, methods, procedures, and materials studied throughout their dental hygiene education. Topics include, but are not limited to, anatomy, pharmacology, community dental health, and the dental hygiene process of care. An overview of the entire dental hygiene educational curriculum will be provided. 2.00 credit hours. Prerequisites: DH 139 Concepts in Dental Health, DH 223 Dental Hygiene Seminar III, DH 226 Dental Hygiene Materials, DH 226L Dental Hygiene Materials Lab, DH 227C Dental Hygiene Ethics and Jurisprudence, DH 229 Local Anesthesia and Pain Management, and DH 229L Local Anesthesia and Pain Management Lab. Corequisite: DH 236L Dental Hygiene Board Review Practicum.

DH 236L Dental Hygiene Board Review Practicum

This course will provide the dental hygiene student an opportunity to review the concepts, methods, procedures, and materials studied throughout their dental hygiene education and to complete the necessary steps and requirements to register for necessary licensure exams, including the securing of

patients for credits testing. This course is designed to assist in the test preparation measures of the corequisite course. 1.00 credit hour. Prerequisites: DH 139 Concepts in Dental Health, DH 223 Dental Hygiene Seminar III, DH 226 Dental Hygiene Materials, DH 226L Dental Hygiene Materials Lab, DH 227C Dental Hygiene Ethics and Jurisprudence, DH 229 Local Anesthesia and Pain Management, and DH 229L Local Anesthesia and Pain Management Lab. Corequisite: DH 236 Dental Hygiene Board Review.

DH 327C Dental Hygiene Clinical Practice III

In this course, students will provide direct patient care in supervised clinical settings. The clinical experiences will include patient assessment, dental hygiene diagnosis, oral prophylaxis, complete periodontal therapy, oral health education, and radiographs. Students will provide dental hygiene care to all types of periodontal patients. Emphasis will be placed on the students' ability to demonstrate comprehensive periodontal treatment planning. Students will be required to use the SOAP method of documentation. 4.00 credit hours. Prerequisites: DH 139 Concepts in Dental Health, DH 223 Dental Hygiene Seminar III, DH 226 Dental Hygiene Materials, DH 226L Dental Hygiene Materials Lab, DH 227C Dental Hygiene Ethics and Jurisprudence, DH 229 Local Anesthesia and Pain Management, and DH 229L Local Anesthesia and Pain Management Lab.

DH 336 Dental Hygiene Seminar IV

This seminar course prepares the student to enter the profession as a practicing dental hygienist. Topics include practice management and professional development, quality assurance in dental hygiene, and management and leadership as well as alternatives to clinical practice. Students will be introduced to research and development theories in dental hygiene and computer applications. 3.00 credit hours. Prerequisites: DH 139 Concepts in Dental Health, DH 223 Dental Hygiene Seminar III, DH 226 Dental Hygiene Materials, DH 226L Dental Hygiene Materials Lab, DH 227C Dental Hygiene Ethics and Jurisprudence, DH 229 Local Anesthesia and Pain Management, and DH 229L Local Anesthesia and Pain Management Lab.

(DN) DIETETICS AND NUTRITION

DN 100 Principles of Nutrition

This course introduces a basic understanding of nutritional guidelines and lifestyle risk factors related to diet. It includes assessment of the individual's diet and related behaviors. Solutions to everyday nutritional problems that lead to lifestyle enhancements are presented. 3.00 credit hours. Prerequisites: SC 145/SC 145L Anatomy and Physiology I/Lab.

DN 200 Food Science With Lab

This course explores the chemical and physical composition of foods: their changes during processing and storage and preparation. It includes the evaluation of the chemical, physical, microbiological, and nutritional principals of food preparation. 4.00 credit hours. Prerequisites: SC 220/SC 220L Organic Chemistry/Lab and SC 235/SC 235L General Biochemistry/Lab.

DN 210 Fundamentals of Food With Lab

This course covers the applications of the fundamentals of food engineering, microbiology, and chemistry to the methods of food processing and preservation. Emphasis will be on the processing concepts, preparation for food processing, food formulation, and thermal processing. 4.00 credit hours. Prerequisites: DN 100 Principles of Nutrition and DN 200 Food Science With Lab.

DN 300 Nutrition Education With Lab

This course provides an overview of basic nutrition and its application to current trends and controversies. Emphasis is placed on teaching techniques and communicating sound nutritional techniques to the lay audience. 3.00 credit hours. Prerequisite: DN 100 Principles of Nutrition.

DN 310 Nutrition in Health and Physical Activity

In this course, students will study the relationship between physical fitness/sports activity and nutrition resulting in optimum health. Special emphasis is placed on nutritional demands during exercise or sports activities. 4.00 credit hours. Prerequisite: DN 100 Principles of Nutrition.

DN 320 Lifecycle Nutrition

This course provides a study of the basic principles of food and nutrition from pregnancy through the primary years as well as methods to achieve good nutritional status. There is special emphasis on nutritional education, legislation, and regulation in preschool and elementary (K-3) classrooms. Solutions to everyday nutritional problems at all stages of the lifecycle are presented. 3.00 credit hours. Prerequisite: DN 100 Principles of Nutrition.

DN 330 Advanced Nutrition

This course provides an analysis of the metabolism of macronutrients, carbohydrates, lipids, and protein in humans, integrating physiology, biochemistry, and nutrition with a focus on maintaining optimal health and preventing disease. 3.00 credit hours. Prerequisite: DN 310 Nutrition in Health and Physical Activity.

DN 340 Nutrition and Health Issues

In this course, students will explore health issues with an emphasis on nutrition, and they will review current research in normal and preventative nutrition throughout the lifecycle. The focus is on general and global health issues. 3.00 credit hours. Prerequisite: DN 310 Nutrition in Health and Physical Activity.

DN 350 Institutional Food Service Production With Lab

This course will introduce students to fundamental knowledge and skills and the working environment pertaining to professional food preparation through lecture and laboratory exercises. Lectures will introduce food types, compare and contrast culinary methods, and explain the underpinning of the physical and biochemical transformations that occur. Laboratory work will show students how to observe and practice professional cooking, as well as appreciate the results, from a consumer and patient perspective. 3.00 credit hours. Prerequisites: DN 200 Food Science With Lab and DN 210 Fundamentals of Food With Lab.

DN 360 Dietetics in Community Health

This course offers a study of strategies for improving nutritional status and community health. It includes an examination of principles of community nutrition and reviews existing federal and nongovernmental programs designed to meet food and nutritional needs of various population groups. 3.00 credit hours. Prerequisite: DN 330 Advanced Nutrition; Corequisite: DN 370 Applied Dietetics in Community Health.

DN 370 Applied Dietetics in Community Health

This course is designed to acquaint the student with the application of general nutritional principles for community groups, including different ethnic and socio-economic groups, pregnant women, infants, children, and seniors. Exploration of governmental programs in nutritional and community health is also covered. 4.00 credit hours. Prerequisite: None; Corequisite: DN 360 Dietetics in Community Health.

DN 380 Medical Nutrition Therapy

Students will learn the therapeutic approaches to treating medical conditions and their associated symptoms via the use of a specifically tailored diet plan. They will gain the skills to assess the nutritional status and needs of a patient and to devise individualized diet modification and administration of EN and TPN. 4.00 credit hours. Prerequisite: DN 330 Advanced Nutrition.

DN 390 Nutrition Counseling

In this course, the student will learn techniques for nutritional counseling and will apply individualized nutritional care and diet modification of eating habits. The student will learn how to select appropriate educational materials for nutritional counseling. 3.00 credit hours. Prerequisite: DN 340 Nutrition and Health Issues.

DN 410 Management of Dietary Systems

This course provides an introduction to food preparation methods and service techniques in quantity food settings. Students will become familiar with ingredients, culinary terminology, food vendors, and food service equipment, and they will learn to read and evaluate menus. Recipe conversion and costing skills are developed. Different production methods and product flow are examined, and the relationships between back-of-the-house activities are discussed. 4.00 credit hours. Prerequisite: DN 350 Institutional Foodservice Production With Lab.

DN 420 Applied Dietetics

This course provides a clinical experience in an approved healthcare or other appropriate facility in the area of nutritional care management. Emphasis is on the application of general nutritional principles under the supervision of a registered dietitian. 6.00 credit hours. Prerequisites: DN 360 Dietetics in Community Health and DN 370 Applied Dietetics in Community Health.

DN 430 The Business of Dietetics

This course offers the student an overview of the dietetics profession, including standards, ethics, educational and employment opportunities, and professional credentialing. 3.00 credit hours. Prerequisites: DN 360 Dietetics in Community Health and DN 370 Applied Dietetics in Community Health.

DN 440 Clinical Nutrition

This course will allow students to study the relationship between food and good health and the application of these principles to the human body. Students will learn to examine how food is processed, stored, and discarded by the human body within the context of overall wellness. 3.00 credit hours. Prerequisites: DN 330 Advanced Nutrition and DN 340 Nutrition and Health Issues; Corequisite: DN 450 Supervised Clinical Nutrition.

DN 450 Supervised Clinical Nutrition

The purpose of this course is to enhance student expertise in an area of dietetic/nutritional practice. Emphasis is on the application of nutritional principles and patient/client education and counseling under the direction of a registered dietitian. This clinical experience will ultimately include total staff responsibility as a dietitian in nutritional care. 9.00 credit hours. Prerequisites: None; Corequisite: DN 440 Clinical Nutrition.

DN 460 Research Methods

In this course, students will learn terminologies, strategies, and techniques that are used to conduct scientific research and analyze data in the social and behavioral sciences. Examples include surveys, focus groups, interviews, and observation. 3.00 credit hours. Prerequisite: MA 320 Statistics.

DN 470 Advanced Practicum in Dietetics

This course will provide the student with expertise in an area of dietetic/nutritional practice and incorporates a supervised on-the-job experience related to the profession of dietetics in institutions, business, industry, and community programs, etc. The student is responsible for arrangement and approval of the experience through the supervising dietician and course instructor. 9.00 credit hours. Prerequisites: DN 450 Supervised Clinical Nutrition and Final semester.

DN 480 Seminar in Dietetics and Nutrition

This is an integrative course in that it allows students to identify a real-world problem and provide a recommended solution. Each student selects a topic or project with instructor approval and completes a paper which documents the process, including the use of industry-standard research methods. Students are required to make a professional oral presentation of their project analysis and recommendations. 3.00 credit hours. Prerequisite: Final semester.

(DS) DENTAL SCIENCE

DS 101 Chairside Assisting I

This course introduces the student to the dental terminology, oral anatomy, and morphology that will be utilized in patient charting. The student will be introduced to the fundamentals of working in a dental office as a chairside assistant. It introduces concepts and techniques of basic equipment, four-handed dentistry, oral evacuation, and instrument identification and proper use. The course provides an introduction to the psychology of patient management skills necessary for effective interaction with the patient. Students will utilize oral communication skills to instruct patients in proper oral hygiene and preventive dentistry. It also will provide the students with basic nutritional concepts and their practical applications. 4.00 credit hours. Prerequisite: None.

DS 102 Pre-Clinical Dental Assisting

This course will introduce the student to the health and safety considerations for basic infection control, dental emergencies and the disease process, including infectious diseases and disease transmission. Topics include occupational safety, personal protection, exposure control, infection control, sterilization and disinfection techniques, hazard and bloodborne pathogens standards, and waste disposal as defined by government guidelines. Government guidelines follow OSHA, CDC, and EPA standards. This course will also discuss the prevention and treatment of medical emergencies commonly found in the dental office. The student will have a basic understanding of the classification, administration, and use and effects of drugs commonly used in a dental office. 4.00 credit hours. Prerequisite: None.

DS 105 Dental Communications

This course is designed to develop the student's oral communications skills. Students will prepare and present a speech on subjects related to dentistry. Various topics covered include understanding patient behavior, human relations skills, psychology in the dental office, professional boundaries, and stress management. Through lecture, discussion, and individual and small group presentations, the student will become more confident in communicating with others. 1.00 credit hour. Prerequisite: None.

DS 107 Dental Materials

This course is designed to provide the student with the knowledge of dental materials commonly utilized in the dental office. Emphasis is placed on chemical and physical properties of individual dental materials. Topics include the uses, types, and applications for gypsum products, impression materials, waxes, cements, temporary and permanent restorative materials, resins, and bleaching trays. Students will become familiar with laboratory procedures that are commonly performed in the dental office. Practical experience will be gained by manipulating various dental materials and working with dental equipment. 3.00 credit hours. Prerequisite: None.

DS 108 Dental Science

This course provides an overview of basic normal body structure and functions including an understanding of the common disease process and pathological conditions. Emphasis will be given to a comprehensive overview of oral anatomical structures and functions and the development of the oral cavity, as well as the structures of the head and neck and their functions. Special attention will be given to the nervous system and its relation to anesthesia. 4.00 credit hours. Prerequisite: None.

DS 110 Expanded Functions I

This course will provide the student in performing expanded functions that may be required of a dental assistant. This course covers didactic and laboratory training in the following expanded functions: placement and removal of rubber dam; taking impressions for casts and appropriate bite registrations; removing excess cement; placing and removing periodontal dressings; drying root canals with paper

points and placing cotton pellets and temporary restorative materials into endodontic openings; etching appropriate enamel surfaces; and applying and adjusting pit and fissure sealants. Orthodontic expanded functions that will be covered in the classroom as well as the lab include: removing excess bonding with rotary instruments; placement and removal of ligature ties; preselecting orthodontic bands; placing and removing separators; cutting arch wires; and removal of loose bands or brackets. Various stains are covered as well as the application of bleaching agents and the fabrication, adjusting, cementation, and removal of temporary crowns/bridges. 4.00 credit hours. Prerequisite: DS 101 Chairside Assisting I.

DS 116 Radiology

This course will provide the student with the necessary background knowledge of ionizing radiation including the following: history of dental radiography; image and x-ray production; radiation safety; and patient and operator protection and quality assurance. Paralleling and bisecting techniques used in exposing intraoral radiographs, advantages and disadvantages of these techniques and errors in technique will be discussed. Students will identify anatomy of the oral cavity region that appear radiographically. Students will expose, process, mount, and evaluate dental radiographs on a variety of patients for their diagnostic value. Extraoral accessory films utilized in dental offices and the procedural techniques for exposing them will be discussed. 5.00 credit hours. Prerequisites: DS 101 Chairside Assisting I, DS 102 Pre-Clinical Dental Assisting, DS 108 Dental Science, DS 110 Expanded Functions, and CPR.

DS 119 Advanced Expanded Functions

This course is a continuation of Expanded Functions I and will prepare students to perform the expanded functions that may be required of a dental assistant. This course provides didactic training in the following expanded functions: mechanical polishing techniques; application of topical fluoride and medications; administration of nitrous oxide analgesia; use of a rubber dam; taking impressions for casts and appropriate bite registrations; removing excess cement; placing and removing separators; and etching appropriate enamel surfaces to apply and adjust pit and fissure sealants. This course will also cover concepts of taking vital signs, including pulse and respiration rates and blood pressure. 2.00 credit hours. Prerequisites: DS 101 Chairside Assisting I, DS 102 Pre-Clinical Dental Assisting, DS 108 Dental Science, DS 110 Expanded Functions I, and current CPR certification; Corequisite: DS 119L Advanced Expanded Functions Lab (MN students only) or DS 120 Clinical Applications (OH students only).

DS 119L Advanced Expanded Functions Lab (MN Students Only)

This course serves as a clinical/laboratory experience in which students will demonstrate application of the following: mechanical polishing techniques; application of topical fluoride and medications; administration of nitrous oxide analgesia; use of a rubber dam; taking impressions for casts and appropriate bite registrations; removing excess cement; placing and removing separators; etching appropriate enamel surfaces; and applying and adjusting pit and fissure sealants. 2.00 credit hours. Prerequisites: DS 101 Chairside Assisting I, DS 102 Pre-Clinical Dental Assisting, DS 108 Dental Science, and DS 110 Expanded Functions I. Corequisite: DS 119 Advanced Expanded Functions.

DS 120 Clinical Applications (OH Students Only)

This course requires the student to work in the dental clinic performing four- and six-handed dentistry on patients with a dentist, hygienist, and/or an EFDA. The students will be required to participate in chairside assisting, performing tasks needed for examinations, prophylaxis, and restorative procedures as well as endodontic, prosthodontic, orthodontic, periodontic, and oral surgery procedures. Laboratory techniques will involve utilizing dental materials and laboratory equipment needed for these procedures. This course requires students to expose and process radiographs, perform administrative duties, and demonstrate infection-control techniques required by regulatory and non-regulatory agencies. 2.00 credit hours. Prerequisites: DS 101 Chairside Assisting I, DS 102 Pre-Clinical Dental Assisting, DS 108 Dental Science, and DS 110 Expanded Functions I. Corequisite: DS 119 Advanced Expanded Functions.

DS 152 Chairside Assisting II

In this course, the student will be introduced to the different specialties in dentistry, specifically: endodontics, oral surgery, prosthodontics, periodontics, and pediatric dentistry. Through lecture and instrument identification, the student will become familiar with the procedures and instruments used in each specialty. Current concepts of chairside assisting in general dentistry, as well as dental specialties, are presented with emphasis on the utilization of the dental assistant. Chairside Assisting II includes a clinical rotation where each student is introduced to a general office for observation and practical experience in chairside assisting. The rotation will provide the student with the opportunity to experience and participate in the duties of a dental assistant in a clinical setting. 5.00 credit hours. Prerequisites: DS 101 Chairside Assisting, DS 102 Pre-Clinical Dental Assisting, DS 108 Dental Science, and DS 110 Expanded Functions.

DS 204 Dental Management

In this course, the student will be introduced to the responsibilities of office management and the administrative assistant, including scheduling and appointment control, records management, recall systems, financial transactions, telephone technique, dental insurance, inventory control, and application of dental practice management software. Information regarding patient rights and privacy under the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA) will also be discussed. 2.00 credit hours. Prerequisites: DS 101 Chairside Assisting, DS 102 Pre-Clinical Dental Assisting, DS 108 Dental Science, and DS 110 Expanded Functions.

DS 207 Dental Ethics and Jurisprudence

This ethics and jurisprudence course is designed to prepare the student for their internship experience as well as the appropriate state and/or national certifications. This course provides information on the ethical, legal, and professional experiences and obligations of the dental assistant as a member of the dental healthcare team. Students will receive information on a variety of topics representative of the dental assisting profession. Topics will include, but are not limited to: ethical behaviors; professional associations; legal terminology; patient rights and responsibilities; and assistant-related responsibilities. Rules and statutes published and enforced by the state dental board will be covered. Ethics and Jurisprudence is a course that aids the student in combining their didactic training and professional development skills in preparation for a comprehensive examination and entry-level employment. 2.00 credit hours. Prerequisites: DS 101 Chairside Assisting I, DS 102 Preclinical Dental Assisting, DS 108 Dental Science, and DS 110 Expanded Functions I.

DS 294 Internship

During the internship clinical phase of training, the student will experience various aspects of working in a private dental office, group dental practice, or specialty dental office. The internship will provide the student with the opportunity to experience and participate in the duties of a dental assistant in a clinical setting. Areas such as treatment room preparation, infection control procedures, four-handed dentistry, front office procedures, laboratory procedures, and expanded functions will be emphasized. Students will learn by observing experienced dental office personnel and participating in a clinical setting under close supervision of trained healthcare professionals. 7.00 credit hours. Prerequisites: All didactic course work, PD 214 AS/AAS/BS/Diploma Internship Preparation, program GPA of 2.00, and CPR.

(DT) DRAFTING TECHNOLOGY

DT 150 AutoCAD I

This course introduces the use of AutoCAD commands. Topics include the main menu functions of file, edit, view, insert, format, tools, draw, dimension, modify, and image and the creation of two-dimensional detail drawings to standards and conventions. 4.00 credit hours. Prerequisite: None.

DT 202 Civil Drafting

This course provides a practical application of the civil drafting standards. Drawings are produced that institute proper site development including access roads, street, subdivisions, and road design. Definitions of location terms are provided along with calculations to locate distance via longitude and latitude. Current appropriate software is used to develop three-dimensional drawings and man-made and natural land contours. 4.00 credit hours. Prerequisite: DT 150 AutoCAD I.

DT 220 Architectural Drafting I

This course integrates currently accepted standards and conventions of the American Institute of Architects in order to introduce students to the materials and methods used in current residential drafting and design. Topics include how to select and use materials, how to detail foundation plans, framing plans, wall sections, building sections, and stair window and door details. 4.00 credit hours. Prerequisite: DT 150 AutoCAD I.

DT 225 Architectural Drafting II

This course integrates currently accepted standards and conventions of the American Institute of Architects in order to design a complete set of working drawings for commercial drafting and design. Topics include: how to develop a site plan; designing footing, foundation, floor and roof plans; working with wall, building, and stair sections; and developing room finish, window, and door schedules. 4.00 credit hours. Prerequisite: DT 220 Architectural Drafting I.

DT 235 Drafting Standards and Conventions I

This course focuses on developing skills and techniques in reading, analyzing, comprehending, and detailing complex orthographic projections. Topics include: normal, inclined, and oblique surfaces; cylindrical surface intersections; dimensioning features of size and their locations; and welding fastener and finish notation. 4.00 credit hours. Prerequisite: DT 150 AutoCAD I.

DT 245 Drafting Standards and Conventions II

This course focuses on developing skills and techniques in reading, analyzing, and comprehending sectional, auxiliary, and detailed views of gears, cams, and bearings. Topics include: revolved sections, removed sections, and aligned sections; projection and measurement in developing auxiliary views; and gear, cam, and bearing notation. 4.00 credit hours. Prerequisite: DT 235 Drafting Standards and Conventions I.

DT 250 AutoCAD II

This course provides instruction in AutoCAD, focusing on the creation of isometric exploded assemblies and assembly drawings. Topics include solid modeling in AutoCAD and the creation of two-dimensional drawings from solids. 4.00 credit hours. Prerequisite: DT 150 AutoCAD I.

DT 285 Mechanical and Electrical Drafting

This course provides instruction in drafting and detailing mechanical and electrical systems used in architectural plans. Students will be introduced to the concepts of building information modeling (BIM) for architectural drafting and design applications. Topics will cover the basics of building design and the tools for parametric design and documentation using a BIM program. Other topics include: detailing; calculating electrical, heating, ventilating, and air conditioning requirements by determining heat loss and gain; duct and furnace sizing; plumbing needs; electrical loads; and lighting requirements. 4.00 credit hours. Prerequisite: DT 220 Architectural Drafting I.

DT 300 Geometric Dimensioning and Tolerancing

This course provides the practical application through class projects and the standards and conventions of geometric dimensioning and tolerancing (GDT) as established by the American Society of Manufacturing Engineers (ASME). Topics include: the advantages of GDT; surface, axis, and planer datums; form, orientation, positional, and location controls; geometric tolerance zones; and the inspection of geometric controls. 4.00 credit hours. Prerequisite: DT 245 Drafting Standards and Conventions II.

DT 311—3D Modeling I

This course provides the foundation of the major concepts and frequently used commands required to advance from a novice to an intermediate user of parametric solid modeling and editing in 3D Modeling applications software. Topics include part and assembly creation and the creation of engineering drawings. 4.00 credit hours. Prerequisite: DT 250 AutoCAD II.

DT 350 Structural Drafting

This course explores structural steel, concrete, and wood drafting. Beam shapes and identification, standard and seated-beam connections, sectioning, fastening systems, and dimensioning practices are covered. Assignment and laboratory work will be covered at CAD workstations. 4.00 credit hours. Prerequisite: DT 225 Architectural Drafting II.

DT 357 3D Modeling II

This course provides instruction in parametric solid modeling and editing in 3D modeling software applications. Topics include: profiling, constraining, and dimensioning; Boolean extrusions; revolving, lofting, and editing features; sketch planes and work planes; drawing views and annotation; and an introduction to surface modeling. 4.00 credit hours. Prerequisite: DT 311 3D Modeling I.

DT 461 Design and Drafting Project I

This is an independent study course for researching, designing, and drafting a project, with emphasis on developing the necessary detail and assembly drawings for project production. It focuses on design projects developed independently and in consultation with the instructor. Students will complete an individualized project which applies the skills taught in the CAD area. Topics covered include, but are not limited to: parametric modeling; civil/mechanical piping; architectural applications; structural, electro-mechanical, and 3D solids; exploration of application software; electrical and biomedical BIM/HVAC; and the integration of CAD/CAM. Other topics include: the creation of two progress reports; the use of brainstorming techniques; and the work necessary to produce a final oral proposal presentation. 4.00 credit hours. Prerequisites: DT 285 Mechanical and Electrical Drafting and DT 245 Drafting Standards and Conventions II.

DT 462 Design and Drafting Project II

The intent of this course is for the student to assimilate and integrate the content of the program. It teaches the use of drafting equipment with possible CAD applications, emphasizing knowledge and skill required for industrial drawing. A final professional presentation is created that can serve as an assessment portfolio for employers and the college. Topics covered include, but are not limited to: parametric modeling; civil/mechanical piping; architectural applications; structural, electro-mechanical, and 3D solids; exploration of application software; electrical/biomedical BIM/HVAC; and the integration of CAD/CAM. Selection will depend upon current interests and needs. Special project application will offer instruction and practical experience and applying CAD principle to industry. 4.00 credit hours. Corequisite: DT 461 Design and Drafting Project I.

(EC) ECONOMICS

EC 111 Principles of Microeconomics

This course provides an overview of economics and the economy from a microeconomics perspective. Topics include: economic analysis; factors in the market system; market structure and pricing strategies; the availability of resource markets; supply and demand; and the impact of public policy on markets. 3.00 credit hours. Prerequisite: None.

EC 121 Principles of Macroeconomics

This course provides an overview of economics and the economy from a macroeconomics perspective. Topics include: an introduction to economic concepts; the fundamentals of macroeconomics; macroeconomic theory and policy; the role of money, banking, and monetary policy; and the relationship of macroeconomics to the global economy. 3.00 credit hours. Prerequisite: None.

(EE) ELECTRONICS ENGINEERING

EE 100 Electronic Fabrication

This is an introductory course of electronic fabrication techniques necessary for an electronic technician to enter the work world of electronics. These electronic techniques include printed circuit boards, wire-wrapping, bread-boarding, and soldering. Soldering practices, including placement and identification of both through-hole and surface-mount technologies, are covered in theory and with hands-on applications. 2.00 credit hours. Prerequisite: None.

EE 110 Electricity and Test Equipment

The principles of voltage, current, resistance, and power with their interrelationship to Ohm's law and Watt's law are covered in this course. Both DC and AC properties, with their various measurement parameters, are discussed. The operation and use of electronic test equipment, including DC power supplies, digital multimeters, function generators, frequency counters, and oscilloscopes are covered and developed with hands-on applications. 2.00 credit hours. Prerequisite: None.

EE 120 DC Circuits

This course will cover the concepts of series, parallel, and series-parallel circuits including analysis with Kirchoff's laws and network theorems. The theories of magnetism and electromagnetism needed by an electronics technician are discussed. Also covered are the principles of capacitance and inductance, their construction as components, and their operation in DC circuits. 4.00 credit hours. Prerequisite: EE 110 Electricity and Test Equipment.

EE 130 AC Circuits

The concepts of resistance, capacitance, and inductance in AC circuits are explored. These concepts are investigated in RC, RL, and RLC circuits with their relationships to impedance, phase angle, power factor, and frequency response. Transformer construction, operation, and uses are discussed. The principles of filter circuits, including low-pass, high-pass, band-pass, and band-stop filters are covered and demonstrated with the use of bode plots. 4.00 credit hours. Prerequisite: EE 120 DC Circuits.

EE 200 Digital Electronics

This course will provide an introduction to the world of digital technology. Concepts include the application of number systems and codes used in digital electronics, logic families, logic gates, Boolean algebra, and circuit simplification. Also covered are the digital concepts and design of combinational and sequential circuits. 4.00 credit hours. Prerequisite: EE 110 Electricity and Test Equipment.

EE 210 Solid State Electronics I

Discrete solid state devices, including semiconductor theory where the characteristics and operation are various diodes, bipolar transistors (BJT), field effect transistors (FET), and thyristors, are introduced in this course. An introduction to vacuum tubes will also be discussed. Various circuits will be introduced that use solid state devices. These circuits include regulated DC power supplies, clippers and clampers, and DC biasing circuits. 4.00 credit hours. Prerequisite: EE 130 AC Circuits.

EE 220 Solid State Electronics II

The theory and application of amplifiers and oscillators are explored. The coverage of amplifiers includes amplifier classes, amplifier circuit configurations, linear and nonlinear amplifiers, small signal and power amplifiers, single and multistage amplifiers, and amplifier frequency response. Discrete device amplifiers are compared with bipolar junction transistors (BJT), field effect transistor (FET), and vacuum tubes. Also discussed are the requirements, characteristics, and operation of various oscillator circuits. 4.00 credit hours. Prerequisite: EE 130 AC Circuits.

EE 294 Career Internship

This is an elective course in associate's degree programs that students take in their final semester. The career internship course is designed for students interested in pursuing a career in biomedical electronics engineering technology. The outcome of the internship is an informed student fully apprised of the opportunities his/her degree program offers for professional growth. During the internship phase of training, the student will experience various aspects of working in the actual field in which the student has been educated. The internship is designed to provide the student with the opportunity to experience and participate in duties typical of a contemporary workplace setting. Student learning will center on observing experienced personnel as well as participating in actual hands-on procedures under close supervision of trained professionals. 4.00 credit hours. Prerequisite: Final semester, program GPA of 2.50 or better, and PD 214 AS/AAS/BS/Diploma Internship Preparation.

EE 300 Microprocessors

This course provides the introduction of microprocessors and how they interface with the other devices to create a microcomputer system. How to interface the microprocessor to memory, input devices, and output devices will demonstrate the hardware and software interaction of the microprocessor to other components. Machine language and assembly language are covered to show how different addressing modes can be used to control data and decision-making by the microprocessor. The principles and concepts learned in this course will be reinforced and applied with hands-on laboratory activities and electronic simulation software. 4.00 credit hours. Prerequisite: EE 200 Digital Electronics.

EE 305 Anatomy and Physiology for the Technician

This course focuses on the basic organization, function, and interaction of the systems of the human body as needed by biomedical technicians. Also covered are the elements of medical terminology, including root words, prefixes and suffixes, and the terms used in diagnostic, operative, and symptoms relating to the various systems of the body. Emphasis will be placed on the correct spelling and pronunciation of medical terminology. 4.00 credit hours. Prerequisite: None.

EE 310 Industrial Controls I

This course explores the concepts of industrial controls. An introduction to control processes and technologies will be covered including on-off, proportional, integral, differential, and PID controllers. The operation and application of various sensors and transducers are discussed. The application and operation of robots are covered including operating robots, robot coordinate systems, and programming methods. Also discussed are the theory and operations of lasers. 4.00 credit hours. Prerequisite: EE 200 Digital Electronics.

EE 312 Biomedical Electronic Instrumentation

This course focuses on the electronic instrumentation used in biomedical electronic equipment. This includes medical device terminology, sensors used in biomedical electronics, amplifiers and signal processing, and electrodes and amplifiers used with biopotentials. The types of biomedical electronic instrumentation are covered with their use for various body functions. 4.00 credit hours. Prerequisites: EE 300 Microprocessors and EE 305 Anatomy and Physiology for the Technician.

EE 315 Biomedical Electronics Equipment

This course covers the electronic equipment and instrumentation used in the healthcare-related fields used for obtaining physiological data. Covered are monitoring systems, life support equipment, therapeutic equipment, laboratory equipment, and diagnostic imaging. 4.00 credit hours. Prerequisites: EE 300 Microprocessors, and EE 312 Biomedical Electronic Instrumentation.

EE 320 Telecommunications I

This course provides the introduction to electronic communications including the electromagnetic spectrum, noise, modulation techniques, and signal transmission. The modulation techniques will cover amplitude modulation, angle modulation, and pulse modulation. The principles of transmission lines, characteristic impedance, and standing wave ratios are discussed. Also covered are the different types of wave propagation and the effects the environment has on it. 4.00 credit hours. Prerequisite: EE 220 Solid State Electronics II.

EE 330 Computers and Networks

A working knowledge of how computers work and the general principles that affect their performance are provided in this course. Topics include computer hardware and software concepts, system board components, memory devices, memory management, and operating system software. Also covered are network fundamentals, network operating systems, network protocols, and network security. 4.00 credit hours. Prerequisite: EE 300 Microprocessors.

EE 335 Programming for Electronics

An introduction to object-oriented techniques, software problem specifications, algorithm development, program development, debugging, and testing are presented. Also covered are data types, programming standards, and file structures. Programming skills learned are reinforced with projects specific to the electronics discipline. 4.00 credit hours. Prerequisite: EE 330 Computers and Networks.

EE 340 Telecommunications II

This course explores systems and techniques used to transmit and receive audio and video systems. This includes the principles of antennas, terrestrial and satellite microwave systems, land-based and cellular telephone systems, and television principles. Additional topics include data communications, network systems, and fiber optics. 4.00 credit hours. Prerequisite: EE 320 Telecommunications I.

EE 345 Home Technology

This course is a general introduction to the rapidly growing field of home technology and its integration and use. The convergence of home entertainment audio-visual equipment, surveillance and security systems, computer networks, and telecommunications are discussed. This course also stresses the topics of planning, application, and testing of home-integrated systems. 4.00 credit hours. Prerequisite: EE 330 Computers and Networks.

EE 350 FCC License Preparation

This course is designed for electronics technicians with prior training and provides an overview of radio communication procedures and electronics technology contained in Element 1 and Element 3 of the Federal Communications Commission General Radiotelephone Operator's License (GROL) examination. Many employers recognize this license as evidence of one's ability and knowledge in the field of radio and electronic communications. These concepts are reinforced with practice tests in the areas of the license examination. 4.00 credit hours. Prerequisite: EE 320 Telecommunications II.

EE 355 Certified Biomedical Equipment Technician (CBET) Preparation

This course prepares the student for the examination for Certified Biomedical Equipment Technician (CBET). Topics include: anatomy and physiology; public safety in the healthcare facility; fundamental electronics; medical equipment function and operation; and medical equipment problem-solving. 4.00 credit hours. Prerequisite: EE 312 Biomedical Electronic Instrumentation.

(EM) EMERGENCY MEDICAL TECHNICIAN

EM 116 EMT Basic Theory and Lab

This course introduces theory and techniques of basic emergency medical care in the pre-hospital setting and pathophysiological principles related to the recognition and management of a variety of patient conditions. 9.00 credit hours. Prerequisite: None. Corequisite: EM 117 EMT Basic Clinical.

EM 117 EMT Basic Clinical

The student will be placed in a field experience for 45 hours to gain experience in emergency service. 1.00 credit hour. Prerequisite: None. Corequisite: EM 116 EMT Basic Theory and Lab.

EM 189 Paramedic Anatomy and Physiology

This course will provide the paramedic with information about anatomy and physiology relating to each of the following body systems: integumentary, skeletal, muscular, joints, nervous and special senses. Biochemistry, cellular biology, and histology will be integrated into each body system. 3.00 credit hours. Prerequisite: None. Corequisite: EM 189L Paramedic Anatomy and Physiology Lab.

EM 189L Paramedic Anatomy and Physiology Lab

This is the lab portion of EM 189 1.00 credit hour. Prerequisite: None. Corequisite: EM 189 Paramedic Anatomy and Physiology.

EM 191 Paramedic Preparation

This course introduces issues related to the practice of pre-hospital advanced life support as a career with a focus on issues common to all healthcare professions. Content areas include: paramedic roles and responsibilities; well-being of the paramedic; illness and injury prevention; medical-legal-ethical issues; therapeutic communications; and medical terminology. Upon completion, the student will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT Paramedic. 2.00 credit hour. Prerequisite: None. Corequisites: EM 189/EM 189L Paramedic Anatomy and Physiology/Lab.

EM 192 Paramedic Operations

This course focuses on the operational knowledge and skills needed for safe and effective patient care within the paramedic's scope of practice. Content areas include pathophysiology, life span development, ambulance operations, medical incident command, rescue awareness and operations, hazardous materials incidents, crime scene awareness, and state EMS laws and rules. Upon completion, the student will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT Paramedic. 3.00 credit hours. Prerequisite: None. Corequisites: EM 189/EM 189L Paramedic Anatomy and Physiology/Lab.

EM 193 Patient Assessment and Management

This course provides the knowledge and skills needed to perform a comprehensive patient assessment, make initial management decisions, and communicate assessment findings and patient care verbally and in writing. Content areas include airway management, history taking, techniques of the physical examination, patient assessment, clinical decision-making, communications, documentation, and assessment-based management. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic. 3.00 credit hours. Prerequisites: EM 189/EM 189L Paramedic Anatomy and Physiology/Lab, EM 191 Paramedic Preparation, and EM 192 Paramedic Operations. Corequisite: EM 194 Paramedic General Pharmacology.

EM 194 Paramedic General Pharmacology

This course introduces basic pharmacological agents and concepts with an emphasis on drug classifications and the knowledge and skills required for safe, effective medication administration. Content areas include: general principles of pharmacology and pharmacologic pathophysiology; venous and intravenous access techniques; the metric and apothecary system; computation of dosage and solution problems; administration of pharmacologic agents; and nasogastric tube placement. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic. 2.00 credit hours. Prerequisite: None. Corequisite: EM 193 Patient Assessment and Management.

EM 195 Advanced Trauma Management

This course relates pathophysiology and assessment findings to the formulation of field impressions and implementation of treatment plans for trauma patients. Content areas include the pathophysiology, assessment, and management of trauma as related to trauma systems, mechanisms of injury, hemorrhage and shock, soft-tissue injuries, burns, and head, facial, spinal, thoracic, abdominal, and musculoskeletal trauma. Theory

and skills are applied to a variety of patient situations in the clinical setting with a focus on patient assessment, trauma management, advanced airway management, IV/IO initiation, and medication administration. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic. 6.00 credit hours. Prerequisite: EM 194 Paramedic General Pharmacology.

EM 196 Cardiovascular Electrophysiology

This course introduces the cardiovascular system, cardiovascular electrophysiology, and electrocardiograph monitoring. Content areas include cardiovascular anatomy and physiology, cardiovascular electrophysiology, electrocardiograph monitoring, rhythm analysis, and pre-hospital 12-lead electrocardiogram monitoring and interpretation. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic. 3.00 credit hours. Prerequisite: EM 195 Advanced Trauma Management. Corequisite: EM 203 Cardiovascular Patient Management.

EM 197 Medical Patient Management I

This course relates pathophysiology and assessment findings to the formulation of field impression and implementation of treatment plans for specific medical conditions. Content areas include pulmonology, neurology, gastroenterology, renal, urology, toxicology, hematology, environmental conditions, infectious and communicable diseases, abuse and assault, patients with special challenges, and acute interventions for the chronic-care patient. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic. 3.00 credit hours. Prerequisites: EM 195 Advanced Trauma Management and EM 196 Cardiovascular Electrophysiology.

EM 201 Medical Patient Management II

This course relates pathophysiology and assessment findings to the formulation of field impressions and implementation of treatment plans for specific medical conditions. Content areas include endocrinology, allergies and anaphylaxis, behavioral and psychiatric conditions, gynecology, obstetrics, neonatology, pediatrics, and geriatrics. In the clinical setting, theory and skills are applied to a variety of medical situations across the life span of the patient, focusing on communication with and management of cardiac, acute care, psychiatric, behavioral, obstetrical, newborn, pediatric, geriatric, and acute interventions for chronic-care patients and patients with special challenges. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic. 6.00 credit hours. Prerequisites: EM 195 Advanced Trauma Management and EM 197 Medical Patient Management I.

EM 203 Cardiovascular Patient Management

This course relates pathophysiology and assessment findings to the formulation of field impressions and implementation of treatment plans for specific cardiovascular conditions. Content areas include assessment of the cardiovascular patient, pathophysiology of cardiovascular disease, and techniques of management including appropriate pharmacologic agents and electrical therapy. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic. 3.00 credit hours. Prerequisite: None. Corequisite: EM 196 Cardiovascular Electrophysiology.

EM 204 Transition to Paramedic Practice

This course is designed to meet additional state and local educational requirements for paramedic practice. Content may include pre-hospital protocols, transfer medications, topics in critical care and transport, systems presentation, and/or national standard certification courses as dictated by local needs or state requirement. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic. 3.00 credit hours. Prerequisites: EM 201 Medical Patient Management II and EM 203 Cardiovascular Patient Management.

EM 205 Paramedic Terminal Competencies

This course is designed to review the National Standard Curriculum for the EMT-Paramedic and to assist students in preparation for the paramedic licensure examination. Emphasis is placed on validation of knowledge and skills through didactic review, skills lab performance, computer simulation, and practice testing. Upon course completion, students should be sufficiently prepared to sit for the paramedic licensure examination. 2.00 credit hours. Prerequisites: EM 201 Medical Patient Management II and EM 203 Cardiovascular Patient Management.

EM 206 Paramedic Field Preceptorship

This course provides field experiences in the pre-hospital setting with advanced life support EMS units. Under the direct supervision of a field preceptor, students synthesize cognitive knowledge and skills developed in the skills laboratory and hospital clinical to provide safe and effective patient care in the pre-hospital environment. Upon course completion, students should have refined and validated their patient-care practices to provide safe and effective patient care over a broad spectrum of patient situations and complaints. 6.00 credit hours. Prerequisites: EM 201 Medical Patient Management II and EM 203 Cardiovascular Patient Management.

EM 207 Paramedic Team Leadership Preceptorship

This course is designed to evaluate students' ability to integrate didactic and psychomotor skills and clinical and field internship instruction to serve as a competent entry-level paramedic. This final evaluation (rather than instructional) course focuses on students' professional attributes

and integrative competence in clinical decision-making and team leadership in the pre-hospital setting. Upon course completion, students should have demonstrated adequate knowledge and skills, professional attitudes and attributes, and clinical decision-making and team leadership abilities to effectively function as a competent entry-level paramedic. 1.00 credit hour. Prerequisites: EM 201 Medical Patient Management II and EM 203 Cardiovascular Patient Management.

(EN) ENGLISH

EN 090 Principles of Communication

This course will enable students to develop reading and basic written communication skills. Topics will include reading comprehension, spelling, grammar, punctuation, sentence structure, paragraphing, and basic essay writing. 4.00 credit hours. Prerequisite: None.

EN 104 English Composition I

This course introduces the principles and practices of developing effective communications by using reflective critical thinking in the writing and reading processes. Topics include understanding the writing process; applying essay development patterns; using research techniques; and writing essays, summaries, and reports. 3.00 credit hours. Prerequisite: EN 090 or test out.

EN 106 Information Literacy and Research Writing

This course introduces the principles and practices of information literacy by using reflective critical thinking in the research and writing processes. Topics include understanding the research process; evaluating resources; using research techniques; outlining; providing in-text citations; understanding APA style; and using appropriate voice in writing formal research papers. 1.00 credit hour. Prerequisite: None.

EN 116 Speech

The course is designed to provide the student the opportunity to develop speaking and presentation skills in a variety of situations. Topics include the elements and structure of speeches, researching topics and developing presentation materials, analyzing and responding to audience characteristics, learning effective speech techniques, and delivering different types of speeches. Microsoft PowerPoint is used as a presentation tool. 3.00 credit hours. Prerequisite: None.

EN 250 English Composition II

This course continues and expands upon materials covered in English Composition I, with an emphasis on literary analysis. Students will be expected to read, analyze, and write about literature including fiction, poetry, and drama. The course will include extensive research and essay writing. 3.00 credit hours. Prerequisite: EN 104 English Composition I.

EN 325 Creative Writing

This course examines the underlying craft of creative writing. Topics may include analyzing works of fiction, nonfiction, drama, and poetry, exploring genres and forms within these fields, and submitting multiple drafts of creative work for peer review. This course is intended to provide the student with an understanding of the basic tools and craft of creative writing as well as to provide a forum for sharing and development of the student's own creative work. 3.00 credit hours. Prerequisite: None.

EN 330 English/Chinese Language and Cultural Exchange

This course is for participants in the China Study Abroad Program who are required to teach conversational English to Chinese students as part of the admission requirement for this cultural exchange program. This experientially based practicum includes both teaching and learning components, fostering group interaction, confidence, and appreciation for cultural differences in learning approaches. Students are expected to teach sections of English as a foreign language (conversational English) to Chinese students and to engage Chinese students in English-based educational activities. A Chinese faculty member at the host school will supervise this practicum and provide effective teaching tips to promote a successful teaching experience. Students will be required to deliver a thoughtful and informative presentation about key cultural and linguistic features of their experience upon returning to the U.S. Herzing University campus. 3.00 credit hours. Prerequisites: EN 104 English Composition I and EN 116 Speech.

(ET) ELECTRONICS TECHNOLOGY

ET 106 Basic DC Electricity

This course introduces the fundamental principles of DC electronic conduction, including the effects of series, parallel, and series-parallel resistors on voltage, current, and power. Topics include: measuring instruments; circuit characteristics; Ohm's Law; power and energy; series, parallel and series-parallel circuits; circuit theorems, conversion, and analysis; magnetism and electromagnetism; and laboratory activities designed to illustrate and reinforce theoretical concepts through exercises and projects. 4.00 credit hours. Prerequisite: MA 090 Fundamentals of Mathematics.

ET 107 AC Electrical Components

This course introduces the fundamental principles of AC electronic conduction, including the effects of series, parallel, and series-parallel resistors, capacitors, and inductors on voltage, current, and power. Topics include: alternating current and voltage; the physical and electrical characteristics of capacitors, inductors, and transformers; RC, RL, and RLC circuits; circuit theorems in AC analysis; and laboratory activities designed to illustrate and reinforce theoretical concepts through exercises and projects. 4.00 credit hours. Prerequisite: ET 106 Basic DC Electricity.

ET 119 Electronics Fabrication Laboratory

This course provides a study of the manufacture of electronic assemblies and systems, knowledge of safety/shop practices, and construction techniques as used in industry. Work includes studying chassis layout, printed circuit board materials, soldering to ISO-9001 standards, hardware assembly and interconnection techniques, equipment testing and calibration, DC circuits, Kirchhoff's Law, insulators, resistors, and DC meter circuits. 4.00 credit hours. Prerequisite: None.

ET 208 Transistor and Microchip Technology

This course explores the physical and electrical characteristics of solid-state components. Topics include solid-state principles, diodes and power supply circuits, clippers and clampers, bipolar junction transistors (BJTs), DC biasing circuits, amplifiers, and laboratory activities designed to illustrate and reinforce theoretical concepts through exercises and projects. 4.00 credit hours. Prerequisite: ET 106 Basic DC Electricity.

ET 209 Advanced Transistor and Microchip Technology

This course explores the physical and electrical characteristics of solid-state components with alternating currents. Topics include: field-effect transistors; amplifier frequency response; operational amplifiers; oscillators and solid-state switch circuits; thyristors and optoelectronic devices; discrete and integrated voltage circuits; and laboratory activities designed to illustrate and reinforce theoretical concepts through exercises and projects. 4.00 credit hours. Prerequisite: ET 208 Transistor and Microchip Technology.

ET 232 Digital Electronics

This course explores the concepts and applications of digital circuits. Topics include: numbering systems, logic gates, and Boolean algebra; combinational logic and functions of combinational logic; flip-flops, counters, and shift registers; and laboratory activities designed to illustrate and reinforce theoretical concepts through exercises and projects. 4.00 credit hours. Prerequisite: ET 209 Advanced Transistor and Microchip Technology.

ET 236 Modulation and Propagation for Communications

This course explores basic communication subsystems and modulation circuits. Topics include: circuit performance calculations, noise, filters, and oscillators; AM, FM, and pulse modulation; and transmission of RF signals in the atmosphere and space. Laboratory activities are designed to give hands-on experience to support theoretical learning. 4.00 credit hours. Prerequisite: ET 209 Advanced Transistor and Microchip Technology.

ET 237 Applied Telecommunications and Fiber Optics

This course provides instruction in telecommunication concepts and their applications. Topics include: signal formation, modulation, and propagation; microwave, satellite, voice, and data transmission; fiber optic communications; cellular phone systems; and wide-area networking technology. Laboratory activities include exercises and projects designed to illustrate and reinforce theoretical concepts. 4.00 credit hours. Prerequisite: ET 236 Modulation and Propagation for Communications.

ET 238 Industrial Controls and Motors

This course provides instruction on the construction and application of industrial electronics. Topics include: electronic control devices and control diagrams; solid-state devices, transducers, and sensors; signal conditioning; thyristors; solid-state power control; industrial-use motors; electrical power-control devices and motor control; and laboratory activities designed to illustrate and reinforce theoretical concepts through exercises and projects. 4.00 credit hours. Prerequisite: ET 209 Advanced Transistor and Microchip Technology or ET 272 Microprocessors.

ET 272 Microprocessors

This course focuses on linear integrated circuits and their applications to microprocessors. Topics include: an introduction to programmable logic devices (PLD); sequential logic applications of PLDs; computer memory concepts and design; interfaces and microprocessors; integrated circuit technologies; and laboratory activities designed to illustrate and reinforce theoretical concepts through exercises and projects. 4.00 credit hours. Prerequisite: ET 232 Digital Electronics.

ET 294 Career Internship

This is an elective course in associate's degree programs that students take in their final semester. The career internship course is designed for students interested in pursuing a career in computer, electronics, and telecommunications technology. The outcome of the internship is an informed student fully apprised of the opportunities his/her degree program offers for professional growth. During the internship phase of

training, the student will experience various aspects of working in the actual field in which the student has been educated. The internship is designed to provide the student with the opportunity to experience and participate in duties typical of a contemporary workplace setting. Student learning will center on observing experienced personnel as well as participating in actual hands-on procedures under close supervision of trained professionals. 4.00 credit hours. Prerequisite: Final semester, program GPA of 2.50, and PD 214 AS/AAS/BS/ Diploma Internship Preparation.

ET 355 FCC Certification Preparation

This course provides a comprehensive review of DC electricity to digital electronics and covers the laws, rules and regulations, and theory of communications needed to prepare for the Federal Communications Commission's Marine Radio Operator Permit (MROP) or the Higher Federal Communications Commission's General Radiotelephone Operator License (GROL). Most employers give immediate recognition to these U.S. government certifications as evidence of the technician's ability and knowledge in the field of electronics and RF communications, and these certifications are a prerequisite for employment in a number of positions in the field. The concepts reviewed in the course will be reinforced with practice tests taken directly from the FCC test banks. 4.00 credit hours. Prerequisite: ET 236 Modulation and Propagation for Communications.

ET 363 Industrial Controls: PLCs, Robotics, and Lasers

This course provides advanced study of control circuitry as used in the industrial, biomedical, and other related fields. Topics include: inputs sensors; programmable logic controller (PLC) operation and programming; application, design, and construction of robotic devices; and the theory and operation of lasers. 4.00 credit hours. Prerequisite: ET 238 Industrial Controls and Motors.

ET 365 HTI+ – Home Networking+

This course provides an in-depth and up-to-date study of home technology subjects including networking, audiovisual systems, automation methods, and telecommunication techniques that converge in integrated home technology. Home network design, hardware, installation, and configuration are included for all the major wired and wireless systems. The course also covers high-voltage wiring, audio and video systems, telecommunications, home security systems, home lighting controls, and automated utility systems. This is a preparation course for both exams under the CompTIA HTI+ certification: Residential Systems (HTO 101) and Systems Infrastructure and Integration (HTO 102). 4.00 credit hours. Prerequisites: ET 236 Modulation and Propagation for Communications and IS 112 Computer Networks.

(FL) FOREIGN LANGUAGE

FL 105 Beginning Chinese

This course offers the study and practice of Chinese as a second language. The focus is on the development of conversational language skills speakers commonly use when discussing food and shopping, travel and leisure activities, literature, and news events. Students will practice the correct use of Chinese grammar in present, past, and future tenses. 3.00 credit hours. Prerequisite: None.

FL 112 Beginning Spanish

This course offers the study and practice of Spanish as a second language. The focus is on the development of conversational language skills speakers commonly use when discussing food, shopping, travel, and leisure activities and literature and news events. Students will practice the correct use of Spanish grammar in present, past, and future tenses. 3.00 credit hours. Prerequisite: None.

FL 155 Intermediate Chinese

This is the second course in Chinese. It builds upon conversational and grammar skills and enables students to engage in conversation in a broader range of settings and with greater confidence. 3.00 credit hours. Prerequisite: FL 105 Beginning Chinese.

FL 200 Intermediate Spanish

This is the second course in Spanish. It builds upon conversational and grammar skills and enables students to engage in conversation in a broader range of settings and with greater confidence. 3.00 credit hours. Prerequisite: FL 112 Beginning Spanish.

(FS) FIRE SCIENCE

FS 100 Introduction to Fire Service

This course details the job of today's firefighter, beginning with the basic requirements of Firefighter I and II and including extensive information on subjects such as hazardous materials and terrorism. 3.00 credit hours. Prerequisite: None.

FS 101 Introduction to Fire Science and Emergency Management

This course details an overview of the fire science and emergency management fields. The course focuses on the history of the fire service and the future of the field covering the fundamentals. 3.00 credit hours. Prerequisite: None.

FS 105 Building Construction for Fire Service

This course highlights and assesses the problems and hazards to fire personnel when a building is attacked by fire or is under stress from other factors dealing with collapse. Emphasis is placed on construction principles: wood, ordinary, steel, concrete, and truss construction. 3.00 credit hours. Prerequisite: FS 100 Introduction to Fire Service or FS 101 Introduction to Fire Science and Emergency Management.

FS 115 National Incident Management System

This course introduces the student to the incident command system, its organizational structure, history, principles, and features, and the National Incident Management System as a template for integration of public and private entities working together on emergency incidents. Tabletop exercises and scenarios will be used to give the student opportunity to apply the practical aspects of the incident command system and to demonstrate its relationship to the National Incident Management System. The course will also introduce students to the concepts and principles of the National Response Framework and the National Response Plan. Students will be given the opportunity to take online exams of certification for FEMA IS-100, IS-700, and IS-800. This course will meet the NIMS baseline training requirements for the above-mentioned courses. 3.00 credit hours. Prerequisite: FS 100 Introduction to Fire Service or FS 101 Introduction to Fire Science and Emergency Management.

FS 125 Introduction to Fire Suppression

This course is a study of organizational structure, fire suppression, fire suppression equipment, characteristics and behavior of fire, and fire hazard properties of ordinary materials. Emphasis is placed on the most common structural, vehicle, and urban interface fires. 3.00 credit hours. Prerequisite: FS 100 Introduction to Fire Service or FS 101 Introduction to Fire Science and Emergency Management.

FS 135 Fire Extinguishing Principles

This course is a study of water supplies and services, fire extinguishing chemicals, and the selection and use of extinguishing agents. Emphasis is placed on dry chemical, dry powder, foam, and halogenated agents. 3.00 credit hours. Prerequisite: FS 100 Introduction to Fire Service or FS 101 Introduction to Fire Science and Emergency Management.

FS 145 Hazardous Materials Awareness and Operations

This course is for emergency response personnel who may be first on the scene of a hazardous materials emergency. First responders at the awareness level are expected to recognize the presence of hazardous materials, protect themselves, secure the area, and call for trained personnel. At the operational level, the first responder uses the knowledge gained from the awareness level to act in a defensive posture to protect people, the environment, or property from the effects of an unplanned hazardous materials release. This course meets the requirements of the mandatory awareness/operational training in hazardous materials required by the *Title III—Emergency Planning and Community Right-to-Know Act of 1986* and *NFPA 472, Standard on Professional Competence of Responders to Hazardous Materials Incidents*, current edition. 3.00 credit hours. Prerequisite: FS 100 Introduction to Fire Service or FS 101 Introduction to Fire Science and Emergency Management.

FS 155 Fire Hydraulics and Water Supply

This course provides a foundation of theoretical knowledge in order to understand the principles of the use of water and fire protection and to apply hydraulic principles to analyze and resolve water supply problems. 3.00 credit hours. Prerequisite: FS 100 Introduction to Fire Service or FS 101 Introduction to Fire Science and Emergency Management.

FS 200 Fire Prevention

This course covers model building and fire prevention codes, including detailed information on the legal, economic, and political aspects of the fire inspection process. It addresses right-of-entry, enforcement authority, the permit system, building limits, and types of construction, as well as fire protection systems and their maintenance. 3.00 credit hours. Prerequisite: FS 100 Introduction to Fire Service or FS 101 Introduction to Fire Science and Emergency Management.

FS 205 Fire Investigator I

This course targets fire investigators, police officers, and company-level officers with a desire to learn more about determining the origin and the cause of fire. Students wishing to attend this course should be prepared for an intense week of training and practical skills application. Topics covered include: determining the point of origin; burn patterns; evidence collection and analysis; interviewing techniques; and court procedure and testifying. 3.00 credit hours. Prerequisite: FS 100 Introduction to Fire Service or FS 101 Introduction to Fire Science and Emergency Management.

FS 215 Fire Inspector I

A beginning-level course for firefighters and other interested parties wishing to become more involved in the aspect of fire prevention and inspections. This course is primarily designed for those entering into fire service inspections and would be extremely useful to city inspectors and company-level officers. Some of the topics covered in this course include: building construction; decorative materials and furnishings; fire drills; inspection procedure; code enforcement; and fire alarm and communications. 3.00 credit hours. Prerequisite: FS 100 Introduction to Fire Service; or FS 101 Introduction to Fire Science and Emergency Management; or FS 200 Fire Prevention.

FS 225 Legal Aspects of Fire Service

This course introduces students to the legal obligations and responsibilities within the fire service along with the limitations and restrictions placed on emergency responders. Students will discuss and apply federal and state laws, codes, regulations, and standards relevant to the fire service. Both civil and criminal law will be addressed. 3.00 credit hours. Prerequisite: FS 100 Introduction to Fire Service; or FS 101 Introduction to Fire Science and Emergency Management; or FS 200 Fire Prevention.

FS 226 Fire Combat Tactics and Strategy

This course is designed to offer the advanced firefighter or beginning fire officer the necessary information and related techniques to ensure effective fire scene operations. Topics of study include: pre-fire planning; tactical operations; and scene management techniques. Students are given the opportunity to participate in group activities, discussions, and practical exercises to further enhance the learning experience and reinforce methodology discussed. 3.00 credit hours. Prerequisite: FS 200 Fire Prevention.

FS 235 Fire Instructor I

This course trains participants to teach a class from a prepared lesson plan. It introduces the student to the concept of utilizing training aids to enhance his/her presentation, how to properly select these training aids, and how to use the training aid selected. Subject areas for this course include: communication; concepts of learning; methods of teaching; organizing the class; performance evaluations; testing and evaluations; the lesson plan; teaching techniques; and the use of instructional materials. The student will give several presentations during the week, all leading to the final fifteen-minute graded presentation on the final day of class. 3.00 credit hours. Prerequisite: FS 200 Fire Prevention.

FS 240 Fire Officer I

The Fire Officer I curriculum identifies the requirements necessary to perform the duties of a first-line supervisor. This course introduces the student to the basic concepts of management and supervision by concentration on such topics as organizational structure, communication skills, human resource management, public relations, planning, emergency service delivery, and safety. 3.00 credit hours. Prerequisite: FS 200 Fire Prevention.

FS 245 Public Fire and Life Safety Educator

With the leading cause of death among children being unintentional injuries, the need for fire and life safety education has become evident in today's society. This course will train the student to coordinate and deliver existing comprehensive community fire and injury prevention programs designed to eliminate or mitigate situations that endanger lives, health, property, and the environment. 3.00 credit hours. Prerequisite: FS 200 Fire Prevention.

(GA) GRAPHIC ARTS

GA 101 Graphic Design Fundamentals

This course is a basic introduction to the design software programs and will be an overview of layout, typography, raster and vector graphics, and simple print production techniques. 3.00 credit hours. Prerequisite: GA 102 Introduction to Digital Design Applications.

GA 102 Introduction to Digital Design Applications

This survey course provides an introduction to the current software used in digital design and layout, web design, and photo archiving. The course will emphasize vector- and raster-based programs. There will be hands-on experience with the Adobe Creative Suite including Photoshop, Illustrator, Acrobat, and Bridge. 3.00 credit hours. Prerequisite: None

GA 104 Illustration Fundamentals

Students will develop their basic hand-drawing skills. Topics include the use of pencil, marker, charcoal, ink, and other mixed media to render original works of still life and commercial product sketches. 3.00 credit hours. Prerequisite: None.

GA 105 Digital Photography—Introduction

This hands-on course teaches you to make the most of your digital photographs by utilizing latest software. Learn techniques for brightening a picture, bringing out colors, cropping, and simple photographic manipulations. 3.00 credit hours. Prerequisite: GA 102 Introduction to Digital Design Applications.

GA 201 Color Theory in Design

In this course, the students will examine the nature of color as it relates to various media while implementing the full range of software tools available. Students will be exposed to the principles of color space: additive, subtractive color, and color model theory including RGB, CMYK, and the Pantone Color System. 3.00 credit hours. Prerequisite: GA 102 Introduction to Digital Design Applications.

GA 205 Diagrammatic Design

This vector-based graphics course teaches students to create dynamic visual communications. They will learn skills required to take advantage of powerful software tools to create illustrations, type effects, charts, graphs, and diagrams. Students work with colors,

gradients, layers, fonts, and photos to create eye-catching illustrations and text effects. 3.00 credit hours. Prerequisite: GA 102 Introduction to Digital Design Applications.

GA 212 Introduction to Typography

In this course, the student will be introduced to and examine the principles of typography. History of type, classifications of fonts, physical components of letters, and legibility will be studied. Typographic vocabulary and terminology will be studied and used to explain design projects. Students will study applications of digital typography in print, web, and multi-media. Knowing that typefaces can portray emotion, emphasis will be placed on quality of information and communication through the selection of the proper typeface. 3.00 credit hours. Prerequisite: GA 102 Introduction to Digital Design Applications.

GA 215 Web Design Fundamentals

This course is an introduction to basic coding and design fundamentals for web development. Topics covered include an introduction of web design fundamentals in layout, typography, and usability. Studying existing websites shows real-life scenarios on how concepts are put to work. Application navigation and multiple platform use will be covered. 3.00 credit hours. Prerequisite: GA 105 Digital Photography—Introduction.

GA 220 Pixel-Based Images

In this course, there is an emphasis on correcting and enhancing digital and raster images using state-of-the-art software. Students will create, manipulate, and edit digital graphics and photographs. This hands-on course shows techniques of image formatting, filter effects, retouching digital photos, working with layers, and using various painting tools. It examines the use of raster graphics in industry. Topics include resolution, color correction, color usage, hue, saturation and luminosity, and preparation of raster graphics, including retouching, color correction, image composition, silhouetting, and special effects. 3.00 credit hours. Prerequisite: GA 102 Introduction to Digital Design Applications.

GA 225 Advanced Illustration Techniques

This course builds on techniques learned in Illustration Fundamentals. Topics include the use of various media to develop advanced illustration skills. Perspective drawing and figurative illustration skills are developed through use of color, line, and texture to present conceptual designs and ideas. 3.00 credit hours. Prerequisite: GA 104 Illustration Fundamentals.

GA 235 Corporate Identity Design

In this course students will begin to develop a full-scale campaign including corporate identity, corporate branding materials, direct mail advertising, and web design. Students will prepare for business success through strategic marketing and design. 3.00 credit hours. Prerequisite: GA 201 Color Theory in Design.

GA 245 Web in Motion

Students will learn to create graphics for websites with vector and pixel images. They will develop sophisticated user-face interactive elements including rollovers, navigations bars and dropdown menus. This course will teach professional techniques including layering, text formatting, dynamic graphics, hyperlinks, templates, tables, frames, style sheets, and forms in order to develop a well-organized, state-of-the-art website. 3.00 credit hours. Prerequisite: GA 215 Web Design Fundamentals.

GA 255 Fundamentals of 3D Design

This course is an introduction to packaging design, die cut forms, wrap-around graphics, and hierarchy of messaging for packaging display. 3.00 credit hours. Prerequisite: GA 205 Diagrammatic Design.

GA 265 Exhibition Design

Exhibition design is more than just putting up a booth. Students will learn the strategy of developing an overall trade show program by designing an effective exhibit, preparing budgets, and planning pre-show promotions that will generate successful sales. 3.00 credit hours. Prerequisite: GA 255 Fundamentals of 3D Design.

GA 285 Sophomore Portfolio Assessment

This course provides an introduction to the concepts and practices associated with the preparation of portfolio creation and its importance in gaining employment in the design field. During this course, students have the opportunity to enhance their design skills by developing a visual identity and brand. They will also review and rework projects from previous classes and create a student portfolio. Emphasis in this course is placed on not only the content of the portfolio, but also on the preparation and presentations of the portfolio so that it meets professional standards. Student portfolios and presentation will undergo single-faculty review. Graduating ASGRD students will use this course to enhance their presentation and interview skills. Students who continue their studies in the bachelor's degree programs will build upon these topics in their junior- and senior-level courses. 3.00 credit hours. Prerequisite: 2nd year/Sophomore.

GA 294 Career Internship

This is an elective course in associate's degree programs that students take in their final semester. The career internship course is designed for students interested in pursuing a career in graphic design. The outcome of the internship is an informed student fully apprised of the opportunities his/her degree program offers for professional growth. During the internship phase of training, the student will experience various aspects of working in the actual field in which the student has been educated. The internship is designed to provide the student with the opportunity to experience and participate in duties typical of a contemporary workplace setting. Student learning will center on observing experienced personnel as well as participating in actual hands-on procedures under close supervision of trained professionals. 4.00 credit hours. Prerequisite: final semester, program GPA of 2.50, and PD 214 AS/AAS/BS/Diploma Internship Preparation.

GA 307 Advanced Digital Imaging

This course offers the opportunity for advanced studies of pixel-based images and digital photo manipulation. Students will study the different usage requirements needed when an image is created for web, animations, repeating backgrounds, and print. They will use previously defined design methodology to create detailed computer generated graphics for print, web design, and animations. 3.00 credit hours. Prerequisite: GA 220 Pixel-Based Images.

GA 310 Print Production

This course focuses on the print industry language and methods to ensure that the printing process with vendors is smooth and cost-efficient. It gives the students a real-life experience in print specification and markup as well as the graphic steps in preparing a file and releasing it for print. 3.00 credit hours. Prerequisite: GA 201 Color Theory in Design.

GA 315 Advanced Dynamic Websites

Students will learn to develop powerful websites that are easy to build and even easier to update. This course will teach advanced techniques in layering, text formatting, dynamic graphics, hyperlinks, templates, tables, frames, style sheets, and forms. Metadata tags, creating URLs, movies, videos, and slide shows are also included. Templates are created to reduce editing when managing a growing website. 3.00 credit hours. Prerequisite: GA 245 Web in Motion.

GA 322 Managing Web and Interactive Media

This course covers the process of conceptualizing, researching, implementing, and managing Web and interactive media. Emphasis is not based on production details. Rather, students will focus on managing a project by breaking the process into individual tasks, documenting and working through the planning and development stages, and proceeding and completing the project relative to the initial proposal and brief. 3.00 credit hours. Prerequisites: GA 215 Web Design Fundamentals, GA 245 Web in Motion and GA 315 Advanced Dynamic Websites.

GA 325 Corporate Campaigns

This course is a continuation of Corporate Identity Design. Students will focus on advance design of the corporate identity including annual reports, corporate brochures, and product brochures. 3.00 credit hours. Prerequisite: GA 235 Corporate Identity Design.

GA 335 Web Design II

This course covers intermediate studies in Web design and development. Emphasis will be placed on the further study of: XHTML; CSS; HTML5 and CSS3; JQuery; site management; and organization. Students will develop sensitivity to usability issues through the study of technical computer considerations and the needs of the user via user-centered interface design. Using their own design methodology, the student will create a fully functional, integrated, and cohesive multi-paged website. 3.00 credit hours. Prerequisite: GA 215 Web Design Fundamentals.

GA 342 Rich Media

This course covers intermediate studies in animation, video, and interactivity in Web pages, production, and ActionScripting. Using rich media (audio, video, and animated graphics), students will create an interactive final project. Emphasis is based on the student's own design methodology. 3.00 credit hours. Prerequisite: GA 322 Managing Web and Interactive Media.

GA 345 Vector Graphic Design

Designers will work with practical software applications to organize information and solve the design challenges in the hierarchy levels of visual communication. This advanced vector-based graphics program gives the students the opportunity to continue to create professional information system graphics while expanding on skills learned in Diagrammatic Design. 3.00 credit hours. Prerequisite: GA 205 Diagrammatic Design.

GA 405 New Media Design Studio: Across Mediums

Student will use previous skills and multiple applications to create static, interactive animation and motion graphics. Using Flash and Dreamweaver, as well as non-linear and other bitmap- and vector-based software, students will learn the importance of media convergence. This course simulates a real-world digital design and production studio. Through their own design methodology, students will conceptualize, research, design, and produce multimediam-based projects. This gives students the opportunity to explore the concept of designing an interface for print, new media, and the Internet. Projects can take on the form of individual or group projects. 3.00 credit hours. Prerequisites: GA 322 Managing Web and Interactive Media and GA 342 Rich Media.

GA 410 Portfolio in Print Design

Taking all projects developed up to this point, students will have projects reviewed, edited and selected by the instructor. These selected projects will be reworked to develop a consistent and well-rounded portfolio. 3.00 credit hours. Prerequisite: GA 325 Corporate Campaigns.

GA 415 Web Design III/Advanced Coding

Using server-side scripting and MySQL database techniques, students will develop a complex, functional website. This course will focus on the usability of the site, eye tracking, the user experience, and managing the content of the site. 3.00 credit hours. Prerequisite: GA 335 Web Design II.

GA 420 Online Portfolio Design

This course will use advanced web techniques to build the student's own website URL, which consists of the portfolio developed in the Portfolio in Print Design course. 3.00 credit hours. Prerequisite: GA 315 Advanced Dynamic Websites.

GA 490 Capstone Project

Students will work in a variety of disciplines on an instructor-approved project. It will include designing and building a marketing base for client needs, including production costs resulting in a final project presentation. 4.00 credit hours. Prerequisite: Final semester.

GA 494 Internship

This is an elective course in bachelor's degree programs that students take in their final semester. The career internship course is designed for students interested in pursuing a career in graphic design. The outcome of the internship is an informed student fully apprised of the opportunities his/her degree program offers for professional growth. During the internship phase of training, the student will experience various aspects of working in the actual field for which the student has been educated. The internship is designed to provide the student with the opportunity to experience and participate in duties typical of a contemporary workplace setting. Student learning will center on observing experienced personnel as well as participating in actual hands-on procedures under close supervision of trained professionals. 4.00 credit hours. Prerequisite: Final semester and PD 214 AS/AAS/BS/Diploma Internship Preparation.

(GD) GAME DEVELOPMENT

GD 210 Level Design I

This course provides an overview of current industry-standard game development level design production techniques and processes. Students will use industry-standard design software to create working game levels using design processes. 4.00 credit hours. Prerequisite: None.

GD 220 Game Modeling I

This course examines areas of sound production in industry. Topics include acoustic theory, sound design, and production in software, Foley arts, and appropriate use in industry. Students will develop basic sound production skills. 4.00 credit hours. Prerequisite: None.

GD 250 Serious Gaming

This course examines topics associated with the game development industry in relation to serious games. Topics covered include: new opportunities for game developers; serious games defined; serious games design and development issues; serious games markets; serious games design documentation; and pros and cons of serious games development. 4.00 credit hours. Prerequisite: None.

GD 260 Script Writing and Storyboarding

This course examines the nature of script writing and storyboarding. Topics include organizational skills necessary to take a project efficiently from idea to presentable script or storyboard. Students will be expected to develop their creative writing skills as well as their story-telling ability, including working in groups. 3.00 credit hours. Prerequisite: None.

GD 300 Game Development I

This course examines appropriate topics in game development. Topics include the use of industry-standard software and APIs. Students will be expected to develop basic, single-player games on the PC platform using skills and concepts from previous coursework. 4.00 credit hours. Prerequisite: IS 245 Game Programming I.

GD 310 Animation I

This course provides an overview of current industry-standard animation. Topics include 2D and 3D animation, emphasizing both black and white and color. Students will be exposed to the basic processes of creating simple animations. 4.00 credit hours. Prerequisite: GD 350 Game Modeling II.

GD 350 Game Modeling II

This course applies the current industry standard of 3D modeling by extending the modeling techniques from Game Modeling I. This course explores advanced 3D modeling including environment modeling, character modeling, character skinning, character UV unwrapping, character rigging, and the basics of animation in a 3D package. 4.00 credit hours. Prerequisite: GD 220 Game Modeling I.

GD 360 Game Development Production

This course provides an overview of current industry-standard game development production techniques. The main emphasis is on Agile Development, commonly applied and accepted in the game development industry. Students will be exposed to, and learn, basic processes of Agile and Scrum software development. 4.00 credit hours. Prerequisite: GD 300 Game Development I.

GD 380 Cinematography

This course provides instruction in the basic processes of cinematic production. Topics include script writing, storyboarding, character and plot development, and use of lighting and sound. Students will be expected to develop basic cinema treatment using the aforementioned topics. 4.00 credit hours. Prerequisite: None.

GD 400 Game Development II

This course examines advanced topics in game development. Topics include the use of industry-standard software and APIs. Students will be expected to develop complex, multi-player games on multiple platforms using skills and concepts from previous coursework. 4.00 credit hours. Prerequisite: GD 300 Game Development I.

GD 420 Advanced Topics in Game Development

This course explores relevant advanced topics in game development. These topics include coordinate systems, using polynomial roots, vector spaces, matrices, eigenvectors, 3D file formats, scaling, translations, rotations, collisions, 3D simulation, and rendering techniques. Additional topics will include cell shading, shadows, textures, and other advanced programming topics. At the completion of this course, students will be able to apply the skills gained in this class to advanced game development. 4.00 credit hours. Prerequisite: GD 400 Game Development II.

GD 430 Games Business

This course examines topics associated with the game development industry as a business entity. Topics covered include business operations, contracts, marketing, PR plans and programs, intellectual property, international sales, taxation, project deliverables, and project workflow. 4.00 credit hours. Prerequisite: GD 300 Game Development I.

GD 490 Capstone Project

Students work in project teams on an industry-sponsored or instructor-approved project. The project teams perform all facets of product and process design from inception to marketing the product. Students will be required to perform the following: problem identification; formulation of design specifications; and integration of criteria based on customer needs, production costs, and marketing issues. Project teams are expected to provide interim reports to the sponsor or to the class, a final project report, and a final presentation. 4.00 credit hours. Prerequisite: Final semester.

GD 494 Internship

This is an elective course in bachelor's degree programs that students take in their final semester. The career internship course is designed for students interested in pursuing a career in game development. The outcome of the internship is an informed student fully apprised of the opportunities his/her degree program offers for professional growth. During the internship phase of training, the student will experience various aspects of working in the actual field in which the student has been educated. The internship is designed to provide the student with the opportunity to experience and participate in duties typical of a contemporary workplace setting. Student learning will center on observing experienced personnel as well as participating in actual hands-on procedures under close supervision of trained professionals. 4.00 credit hours. Prerequisite: Final semester and PD 214 AS/AAS/BS/Diploma Internship Preparation.

(HC) HEALTHCARE MANAGEMENT

HC 115 Medical Terminology for Healthcare Professionals

This course introduces the foundations of the language of medicine and develops medical vocabulary through the study of the structures, functions, diagnostic procedures, pathology, and treatment procedures of the body systems. 2.00 credit hours. Prerequisite: None.

HC 210 Medical Billing Procedures for Managers

This course is designed to provide students with an understanding of the management of billing and insurance reimbursement operations in a medical office setting. The most frequently employed billing procedures and insurance forms are reviewed. It also acquaints students with accounts receivable processes most often used in traditional business offices including medical offices. The various reimbursement methodologies will be emphasized with medical compliance strategies being stressed. 3.00 credit hours. Prerequisite: None.

HC 305 Healthcare Human Resource Management

This course focuses on the links that exist among strategy, organizational design and behavior, and human resources management in the healthcare environment. Students will learn about diversity, recruiting and retaining staff, job analysis, training and development, leadership development, physician practice management, medical staff relations, and labor relations. 2.00 credit hours. Prerequisite: None.

HC 310 Medical Law and Ethics

The course will emphasize both legal questions and ethical considerations in the modern medical organization. Contracts and physician-patient relationships will be addressed. Legal proceedings, such as interrogatories and depositions, will be described. In the area of medical ethics, the issues of patient confidentiality and standards will be addressed. 3.00 credit hours. Prerequisite: None.

HC 311 Management of Patient Records

This course covers the structure and content, technical evaluation and completion, and retention and storage of patient health records in acute care and non-acute care settings. Best practices in health record documentation will be reviewed. 1.00 credit hour. Prerequisite: HC 310 Medical Law and Ethics.

HC 401 Current Issues in Healthcare

This course is designed to provide a forum for the contemporary issues related to healthcare. Improving access, ensuring quality, and controlling costs are addressed. 3.00 credit hours. Prerequisite: None.

HC 405 Healthcare Quality

This course covers the latest trends in healthcare quality control and performance improvement and serves as a solid base of performance-improvement foundations, fundamentals, and core principles. 3.00 credit hours. Prerequisite: HI 300 Epidemiology and Applied Healthcare Statistics.

HC 490 Healthcare Management Internship

This course, which students take in their final semester, is designed for students interested in pursuing a career in healthcare management. The outcome of the internship is an informed student fully apprised of the opportunities his/her degree program offers for professional growth. During the internship phase of training, the student will experience various aspects of working in the actual field in which the student has been educated. The internship is designed to provide the student with the opportunity to experience and participate in duties typical of a contemporary workplace setting. Student learning will center on observing experienced personnel as well as participating in actual hands-on procedures under close supervision of trained professionals. 3.00 credit hours. Prerequisites: Final semester and PD 214 AS/AAS/BS/Diploma Internship Preparation.

HC 492 Capstone Project

Students work in project teams on an industry-sponsored or instructor-approved project. The project teams perform all facets of product and process design from inception to marketing the product. Students will be required to perform problem identification, formulation of design specifications, and integration of criteria based on customer needs, production costs, and marketing issues. Project teams are expected to provide interim reports to the sponsor or to the class, a final project report, and a final presentation. 3.00 credit hours. Prerequisite: Final semester.

(HI) HEALTH INFORMATION MANAGEMENT

HI 105 Introduction to Healthcare Information Systems

This course will teach students the fundamentals of information systems, provide an introduction to healthcare information systems, and review information systems needed for managerial and clinical support in the healthcare environment. The course also provides an overview on the integrity and security of data and how to mitigate the risk of exposure to security breaches. 1.00 credit hour. Prerequisite: None.

HI 210 Principles of Health Information Management

This course provides an overview of health information practice and healthcare delivery systems, professional associations, accrediting, licensing, and regulatory bodies, the content and standards of health records, and the management of HIM staffing and resources including productivity and performance. 3.00 credit hours. Prerequisite: None.

HI 296 Professional Practice Internship

This course provides a 90-hour supervised professional practice internship in the field of health information management, focusing on technical and operational activities. The student will gain practical work experience in the field of health information management. Students will be supervised by someone with the credentials of registered health information administrator (RHIA), registered health information technician (RHIT), or other qualified personnel to whom they are assigned. Students will also receive university faculty consultation and are expected to complete other course requirements such as completing all assignments and participating in discussion threads. 2.00 credit hours. Prerequisites: (HI 105 Introduction to Healthcare Information Systems or HI 450 Advanced Healthcare Information Systems), HI 300 Epidemiology and Applied Healthcare Statistics, HI 320 Healthcare Data, MC 173 Intermediate Diagnosis Coding, MC 174 Intermediate Procedure Coding, and PD 213 Health Information Management Internship Preparation.

HI 300 Epidemiology and Applied Healthcare Statistics

This course introduces concepts of epidemiology, basic biostatistics, vital statistics, and data collection and data presentation. 3.00 credit hours. Prerequisite: MA 107 College Algebra.

HI 305 Healthcare Finance

This course introduces the unique aspects of healthcare finance, including payment sources and reimbursement methodologies, emerging industry trends, resource management, cost, benefit analysis, case mix management, compliance and reimbursement audit processes, and charge-master management. 3.00 credit hours. Prerequisite: AC 107 Accounting I.

HI 320 Healthcare Data

This course provides students with an advanced understanding of the management of data in healthcare organizations including uniform data sets and healthcare informatics standards for health data collection, evaluation of coded and statistical data and quality assurance of data, case mix systems, data collection for enterprise, reportable and specialized databases, data mining of healthcare data, and the design of data collection tools. In addition, this course will include all aspects of data content and collection including structure and use of health information, clinical and healthcare data sets, data quality assessment and integrity, National Healthcare Information Infrastructure (NHII), and primary and secondary data sources. 3.00 credit hours. Prerequisite: HI 210 Healthcare Data.

HI 450 Advanced Healthcare Information Systems

This is a course in the design and implementation of information systems specifically designed to store and process healthcare data information and file structures, systems development, human factors and user/interface design, data warehousing, data storage and retrieval, and systems life cycle. Basic security principles of effective security policies, including HIPAA's security rule, risk assessment, user tracking, permissions, audit and control systems, and data recovery, are also addressed. 3.00 credit hours. Prerequisites: HC 311 Management of Patient Records or HI 320 Healthcare Data.

HI 480 Research Methodologies

This course will teach research design and methodologies and knowledge-based research techniques, evaluating resource credibility and research protocol management. National guidelines regarding human subject research and other healthcare-related regulations and leading development of health information resources and systems will also be covered. 3.00 credit hours. Prerequisites: HI 300 Epidemiology and Applied Healthcare Statistics and HI 320 Healthcare Data.

HI 491 Management Affiliation

This course provides a 90-hour supervised internship in the field of health information management, focusing on managerial responsibilities. Students will be supervised by someone with the credentials of registered health information administrator (RHIA), registered health information technician (RHIT), or other qualified personnel to whom they are assigned. The PPE is designed to enable students to obtain actual work experience in theoretical and application-based procedures previously studied. Students will also receive university faculty consultation and are expected to complete other course requirements such as completing all assignments, participating in discussion threads, and completing a capstone project. 2.00 credit hours. Prerequisites: HI 296 Professional Practice Internship, HI 305 Healthcare Finance, HI 450 Advanced Healthcare Information Systems, HI 480 Research Methodologies, MC 173 Intermediate Diagnosis Coding, MC 174 Intermediate Procedure Coding, and PD 213 Health Information Management Internship Preparation.

(HR) HUMAN RESOURCES

HR 100 Introduction to Human Resource Management

Students in this course explore contemporary concepts and techniques essential to managing corporate human resources. Topics include resource planning, staffing, and rewards as well as developing and maintaining positions and people. 3.00 credit hours. Prerequisite: None.

HR 220 Human Resource Information Systems

This course provides a foundation for the data entry, data tracking, and data information needs of human resources, payroll, management, and accounting functions within a business. Topics covered: managing employee records; technology portals; employee orientation; and compensation management. 3.00 credit hours. Prerequisites: HR 100 Introduction to Human Resource Management and IS 102 Computer Applications and Software.

HR 230 Employment Law and Labor Relations

Students in this course explore collective bargaining and labor relations, with an emphasis on real-world situations. There is also a strong emphasis on the historical and legal basis for labor relations and collective bargaining in the United States. Topics include labor relations, the collective bargaining process, and labor contracts. 3.00 credit hours. Prerequisites: BU 206 Business Law I and HR 100 Introduction to Human Resource Management.

HR 310 Compensation and Benefits

This course will examine compensation models and discuss how to design and administer a compensation system that permits the organization to operate profitably. Topics include employee benefits, benefits administration, pay and compensation, and legislation. 3.00 credit hours. Prerequisites: HR 100 Introduction to Human Resource Management or HR 230 Employment Law and Labor Relations.

HR 320 Training and Development

This course will provide an overview of training and development within the business enterprise. Topics include: measurement design; identifying employee and management development goals; developing employee advancement plans; employee retention; mentoring; and coaching. 3.00 credit hours. Prerequisite: HR 100 Introduction to Human Resource Management.

HR 330 Risk Management

This course focuses on the concerns of how risks are managed by organizations. Topics include: corporate governance audit standards; risk assessments; and mitigation of risk. Further topics to be discussed are quality-control programs, ethics, and outsourcing. 3.00 credit hours. Prerequisite: HR 100 Introduction to Human Resource Management.

HR 340 Alternative Dispute Resolution (ADR) Essentials

This course provides an overview of ADR principles. Topics include how to use principled negotiation to mediate disputes as well as how to develop practical skills and techniques needed to resolve disputes effectively and with confidence. Students will be given tools for managing conflict constructively in the workplace and at home. 3.00 credit hours. Prerequisite: HR 100 Introduction to Human Resource Management.

HR 410 Strategic Staffing

This course provides strategies for managing human resources. Students will discuss techniques for human resource planning, recruiting and selecting, training, and retaining employees. Topics include human resource measurement, sustainability, job analysis techniques, and personality assessments. 3.00 credit hours. Prerequisites: HR 230 Employment Law and Labor Relations, HR 310 Compensation and Benefits, and HR 320 Training and Development.

(HS) HOMELAND SECURITY

HS 100 Introduction to Homeland Security

This course provides a basic overview of homeland security, including the creation of the Department of Homeland Security, the homeland security transformation, homeland security strategies and initiatives, and legal issues related to homeland security. 3.00 credit hours. Prerequisite: None

HS 205 Domestic and International Terrorism

This course provides an introduction to the methods utilized by a terrorist or a terrorist group, including the hierarchical structure, an introduction to the methods utilized for training, funding, and gathering intelligence, the operational phases of a terrorist attack, and the process of target selection. Students will examine foreign and domestic terrorist organizations and the organization's primary spheres of influence and ideologies, methods of funding, past terrorist attacks, and the potential for attack against U.S. interests, both domestically and globally. 4.00 credit hours. Prerequisite: None

HS 210 First Responder Introduction to Hazardous Materials

This course is comprehensive as a study of administering first aid in emergency situations. 4.00 credit hours. Prerequisite: None.

HS 310 First Responder Communications Dispatching

This course emphasizes how to prepare communications center staff and their families for a terrorist event by providing them with well thought-out employee emergency plans for contingencies. This course also covers the coordination of the efforts of first responders and local resources. 4.00 credit hours. Prerequisite: None.

HS 320 Critical Incident Stress Management

This course covers both basic and advanced knowledge and the suggested skills required to provide effective group crisis intervention services. 3.00 credit hours. Prerequisite: PS 101 Psychology.

HS 325 Computer Forensics

This course will provide the student with instruction in basic computer forensics. Computer forensics is simply the application of computer investigation and analysis techniques in the interests of determining potential legal evidence. Evidence might be sought in a wide range of computer crime or misuse, including but not limited to, theft of trade secrets, theft of or destruction of intellectual property, and fraud. This may range from tracing the tracks of a hacker through a client's systems to tracing the originator of defamatory e-mails or recovering signs of fraud. Topics covered in this course will include an overview of the field including components of PCs, information storage and retrieval, varieties of computer-related crimes, and securing and analyzing electronic evidence. 4.00 credit hours. Prerequisite: IS 112 Computer Networks.

HS 330 Cybercrime

This course covers how criminals and terrorist organizations use computers, networks, and the Internet in the commission of crime and terrorist acts as well as the steps government and private system operators can take to protect computer systems from exploitation or attack. 4.00 credit hours. Prerequisite: IS 112 Computer Networks.

HS 335 Hacking Prevention

This class will immerse the student into an interactive environment where they will be shown how to scan, test, hack, and secure their own systems. The lab-intensive environment gives each student in-depth knowledge and practical experience with the current essential security systems. Students will begin by understanding how perimeter defenses work and then be led into scanning and attacking their own networks—no real network is harmed. Students then learn how intruders escalate privileges and what steps can be taken to secure a system. Students will also learn about Intrusion detection, policy creation, social engineering, open source intelligence, incident handling and log interpretation. 4.00 credit hours. Prerequisite: IS 112 Computer Networks.

HS 491 Homeland Security Capstone Project

This course covers the Citizen Corps/Community Emergency Response Team Program created to spearhead the effort to harness the power of every individual through education, training, and volunteer service to make communities safer, stronger, and better-prepared to respond to the threats of terrorism, crime, public health issues, and disasters of all kinds. Units of the CERT Program include emergency preparedness, fire safety, emergency medical operations, light search and rescue operations, CERT administration and organization, disaster psychology, terrorism, and a disaster simulation practicum. Project teams are expected to provide interim reports to the sponsor or to the class, a final project report, and a final presentation. 4.00 credit hours. Prerequisite: Final semester.

HS 494 Internship

This is an elective course in programs that students take in their final semester. The career internship course is designed for students interested in pursuing a career in homeland security and its related fields. The outcome of the internship is an informed student fully apprised of the opportunities his/her degree program offers for professional growth. During the internship phase of training, the student will experience various aspects of working in the actual field in which the student has been educated. The internship is designed to provide the student with the opportunity to experience and participate in duties typical of a contemporary workplace setting. Student learning will center on observing experienced personnel as well as participating in actual hands-on procedures under close supervision of trained professionals. 4.00 credit hours. Prerequisites: Final semester and PD 214 AS/AAS/BS/Diploma Internship Preparation.

(HU) HUMANITIES

HU 101 Critical Thinking

This course is designed to introduce students to the theory and practice of thinking critically about the world through discussion, analysis, and the evaluation of information across all disciplines. Topics may include decision-making, argumentation and debate, ethics, value analysis, fairness, an effective use of language, and cultural awareness. 3.00 credit hours. Prerequisite: None.

HU 210 Ethics, Values and Professional Responsibility

This course provides an overview of the role of ethics and values in professional activities. Topics include: an introduction to ethics, values, and professional responsibility; an introduction to ethical decision-making; ethical issues within organizations; ethical issues for organizations; and ethics codes and policies. 3.00 credit hours. Prerequisite: HU 101 Critical Thinking.

HU 315 Applied Bioethics

This course leads the student from a foundational understanding of major ethical theories into the practice of applied ethics in general case studies and toward expert ethical practice within the student's individual field of study. The course is especially relevant to allied health majors but is also open to any student. The course begins with an examination of rule-based, outcomes-based, ethical egoism and virtue-based and existentialist ethical theories. Next, students engage in case study exercises in a collaborative learning environment with emphasis on ethical problems related to personhood, privacy/confidentiality, duty, consent, and the double effect. These exercises initially address ethical cases relevant to any field of study and then narrow in focus to address ethical cases specific to the student's particular field of study with emphasis on the codes of ethics for the respective fields of study. 3.00 credit hours. Prerequisite: HU 101 Critical Thinking.

HU 320 Art History

This course is a survey of Renaissance and modern art history. Topics include defining and identifying artistic eras and movements and identifying major artists and their periods, techniques, and works of art. Emphasis will be placed on discussing how major artists are affected by the social and cultural climates in which they have created their work. 3.00 credit hours. Prerequisite: None.

HU 325 Literature and the Art of Healthcare

This course introduces students to the intersection of literature, illness, and healthcare. Narrative, drama, and poetry provide fertile sources for healthcare providers to reflect upon and integrate into their professional lives. Through literature, students will examine the motives and emotions that inform both patient and caregiver perspectives. Students will realize differing perceptions of disease within various cultural, religious, ethnic, and age groups, resulting in a more compassionate sensibility. 3.00 credit hours. Prerequisite: EN 104 English Composition I.

HU 326 Theatre and the Sociocultural Context

This course is a survey of Western dramatic literature in the context of theatrical production. Topics may include an introduction to professional theatre roles and terminology, a brief overview of dramaturgical concepts, an explanation of artistic eras and movements, a discussion of major theatre artists and their works, and an overview of the historical importance of theatrical design and production techniques. Emphasis will be placed on theatre history and the interplay between the sociocultural climate of each era as well as the concurrent development of Western theatre. 3.00 credit hours. Prerequisite: EN 250 English Composition II.

(IS) INFORMATION SYSTEMS

IS 102 Computers and Application Software

This course provides an introduction to operating systems and browsers as well as word processing, presentation, spreadsheets, and e-mail applications used in office productivity software. 4.00 credit hours. Prerequisite: None.

IS 103 Programming Logic

This course provides instruction in fundamental object-oriented programming concepts. Topics include problem solving and algorithm development, programming standards, variables, data types, operators, decisions, repetitive statements, modularity, methods, attributes, objects, classes, arrays, file I/O, and software testing and debugging, all within an object-oriented programming framework. Concepts may be introduced with a visual tool. Topics are demonstrated and implemented in a higher-level contemporary language such as Java or C#. 4.00 credit hours. Prerequisite: None.

IS 106 Computer Applications—Word Processing, Spreadsheets, and E-Mail

This course provides an introduction to computer operating systems, word processing, spreadsheets, and e-mail programs. 2.00 credit hours. Prerequisite: None.

IS 108 Internet Foundation

This course describes the history, architecture, and development of the World-Wide Web. Tagging languages such as XHTML and XML are introduced along with scripting languages such as JavaScript. Topics also include popular web page authoring tools, design, graphic and multimedia formats, and commerce, implementation, and security issues. Project: Static website. 4.00 credit hours. Prerequisite: IS 102 Computers and Application Software.

IS 109 Object-Oriented Programming I

The goal of this course is to introduce the student to the design, implementation, and maintenance of event-driven software systems using an object-oriented approach. Common ways of organizing data are discussed such as basic data structures, class design and modeling, exception handling, file I/O, and database processing techniques. In addition, object-oriented concepts such as inheritance, encapsulation, and polymorphism are discussed and utilized in this course. A higher level language such as Visual Basic, C#, and Java are used for implementation and illustration. 4.00 credit hours. Prerequisite: IS 103 Programming Logic.

IS 112 Computer Networks

This course provides instruction in network design and technologies using the Open Systems Interconnection (OSI) model. Topics include network fundamentals, the OSI model, network operating systems, TCP/IP fundamentals and utilities, network installation and upgrades, network remote access configuration and protocols, network administration and security, fault tolerance and disaster recovery considerations and procedures, and network troubleshooting procedures. 4.00 credit hours. Prerequisite: IS 102 Computers and Application Software.

IS 119 Current and Emerging Trends in Technology

This course introduces students to current and emerging technologies that have significance in business and industry and the related areas of employment. Students will conduct research to identify strategies and techniques for finding critical information regarding the current and emerging technologies and their impacts on related jobs. Students will use this research to devise plans for preparing and adjusting to those changes, were they employed in such jobs, through updating their skills or transitioning to other related fields. 3.00 credit hours. Prerequisite: IS 102 Computers and Application Software.

IS 120 Word Processing

This course presents the practical application of the concepts and features of a leading word processor. Topics include formatting text and documents, creating and formatting tables, working with graphics, integrating information with other programs, managing styles and templates, working with columns, merging documents, file management techniques, creating forms, and creating web documents. 4.00 credit hours. Prerequisite: IS 102 Computers and Application Software.

IS 121 Introduction to the Internet

This course provides an overview of the structure and technologies of the Internet. Topics include: networking and Internet basics; the application of protocols and addressing; Internet servers and their applications; types of Internet clients and client configuration; security fundamentals and working with the different levels of security; Internet development through programming languages, databases, HTML, and multimedia; Internet site design and troubleshooting; and an overview of business on the Internet. 4.00 credit hours. Prerequisite: None.

IS 124 Database Applications

This course provides the study of the principles and features of a leading desktop database management system. Topics include creating and managing databases, data management and integrity, working with queries and forms, managing reports, using tools and macros, database and file management, analyzing and filtering data, relational databases, and linking databases to the web. 4.00 credit hours. Prerequisite: MO 111 Computer Software Applications in Healthcare or IS 102 Computers and Application Software.

IS 144 Introduction to WAN and Telecommunications

This course provides an introduction to data communications and wide area networks with a focus on sending and receiving information and the networks required for data transmission. Topics include data communication fundamentals, data transmission, modems and multiplexers, telephone systems, satellite communications, network security and network management, and wide area networks (WANs). 4.00 credit hours. Prerequisite: IS 102 Computers and Application Software.

IS 160 Spreadsheets

This course presents the practical application of the concepts and features of a leading spreadsheet package. Topics include: using and managing worksheets and workbooks; applying formatting and style features; working with data, formulas, and functions; managing charts and graphics; working with outlines, views, and reports; automating tasks with the macro feature; using auditing tools, collaborative tools, and hyperlinks; and integrating with other programs. 4.00 credit hours. Prerequisite: IS 102 Computers and Application Software.

IS 161 Presentation Graphics Applications

This course will provide an overview of the tools available for presentations, including virtual presentations. It will also cover the elements of a good technology-based presentation, design techniques, formatting, and use of audio/video. 2.00 credit hours. Prerequisite: IS 102 Computers and Application Software.

IS 162 E-Mail Applications

This course will provide an overview of e-mail uses within an office environment. Topics to be covered are use of e-mail, archiving e-mails, distribution lists, and meeting planning. 2.00 credit hours. Prerequisite: IS 102 Computers and Application Software.

IS 165 Programming in Java I

The focus of this course is the study of the Java Programming language, with an emphasis on introducing the basic concepts of object orientation and the basic structure and framework of a Java program. Topics include: object-oriented program development; defining, creating, and using objects; communicating through methods; working with applets; the Java development environment and coding conventions; variables, data types, and operators; conditionals and loops; strings and string processing; and an introduction to one-dimensional arrays and array processing. 4.00 credit hours. Prerequisite: IS 103 Programming Logic.

IS 170 Visual Basic I

This course provides instruction on how to create desktop applications using Visual Basic. Topics include: designing applications; using variables; selection and repetition structures; sequential access files; menus and reports; dialog boxes and error trapping; random access files; database access and variable arrays; COM and ActiveX; and optimization, deployment, maintenance, and support. 4.00 credit hours. Prerequisite: IS 103 Programming Logic.

IS 180 Database Concepts and Applications I

This course provides an introduction to fundamental principles and guidelines for designing, developing, and implementing secure relational databases. Topics include: object-oriented analysis and entity relationships as foundations of relational database design; ensuring data integrity; the use of standard SQL as a means of developing complex queries; and the creation and purpose of custom database forms and reports. 4.00 credit hours. Prerequisite: IS 103 Programming Logic.

IS 182 Database Concepts and Applications I

This course provides an introduction to fundamental principles and guidelines for designing, developing, and implementing secure relational databases. Topics include: object-oriented analysis and entity relationships as foundations of relational database design; ensuring data integrity; the use of standard SQL as a means of developing complex queries; and the creation and purpose of custom database forms and reports. 3.00 credit hours. Prerequisite: IS 103 Programming Logic.

IS 185 Computer Architecture and Troubleshooting I

This course provides instruction in microcomputer software and hardware concepts using the latest technology and troubleshooting techniques. Topics include: the function and purpose of hardware and software; system board components and memory management; working with floppy and hard drives; supporting input and output devices; multimedia technology; supporting operating systems, printers, and notebook computers; troubleshooting fundamentals; applying disaster-recovery techniques and developing maintenance plans; and working with networks and the Internet. 4.00 credit hours. Prerequisite: None.

IS 186 Computer Architecture and Troubleshooting II

This course provides instruction in IT infrastructure-related topics that include personal computer elements, portable devices, network operating systems, printers and imaging devices, networks and network security, safety and environmental issues, and professionalism. It covers the material required to pass the CompTIA IT technician A+ certification exam. 4.00 credit hours. Prerequisite: IS 185 Computer Architecture and Troubleshooting I.

IS 191 Linux Administration

This course introduces the capabilities and features of Linux as a multi-user operating system. Topics include: planning and installing a Linux system; using and managing desktop interfaces; working with Linux shells and text files; performing system administration and management tasks such as file system management, application, process, and module management; network services installation and configuration; system security evaluation and enhancement; performance tuning; and troubleshooting techniques. 4.00 credit hours. Prerequisite: IS 112 Computer Networks.

IS 207 Object-Oriented Programming 2

This course focuses on using object-oriented programming languages such as Java, C#, C++, or Visual Basic in the development of modern, business applications. Topics include: object-oriented design using UML; encapsulation; object interfaces; inheritance; aggregation; abstract classes; polymorphism; user interfaces; and database access along with advanced file I/O. Using object-oriented techniques to help manage complexity, improve communication among project stakeholders, and adapt to change are explored. Current software modeling and integrated development environments are demonstrated. Project: Development of a business application. 4.00 credit hours. Prerequisite: IS 109 Object-Oriented Programming 1.

IS 209 Novell Network Administration

This course provides instruction in the administration of a Novell network using the current NetWare operating system. Topics include: networking fundamentals; managing container and leaf objects; using NetWare security; managing log-in scripts and workstations; managing printing services; and performing server installations. 4.00 credit hours. Prerequisite: IS 112 Computer Networks.

IS 210 Discrete Structures for Computer Science

This course covers the fundamental mathematical concepts used in computer science. Topics include numbering systems, sets, relations, functions, counting, induction and recursion, trees, and logic. There is an emphasis on applications in computer science. 3.00 credit hours. Prerequisites: IS 103 Programming Logic and MA 107 College Algebra.

IS 211 Legacy Systems Introduction

This course introduces legacy technologies and programming languages, which are still widely used. Maintenance strategies for these technologies are explored. Integration with newer technologies are discussed and compared. Replacement technologies are analyzed for feasibility and effectiveness. Some basic features of older technologies are introduced and contrasted. 4.00 credit hours. Prerequisite: IS 103 Programming Logic.

IS 212 Database Concepts and Applications II

This course continues instruction in designing, developing, and implementing secure relational databases. Topics include: advanced techniques for queries, forms, and reports in an event-driven environment; in-depth coverage of structuring databases using object-oriented concepts of properties and methods of classes and objects; techniques for debugging, error handling, and optimizing database applications; client and server strategies; transaction processing; multi-user applications; replication; Internet integration; and security. 4.00 credit hours. Prerequisite: IS 180 Database Concepts and Applications I.

IS 213 C++ Programming

This course provides an introduction to the C++ programming language for those students that have already been successful with fundamental object-oriented programming language concepts. After demonstrating the syntax for implementing the fundamental concepts in C++, advanced topics, such as pointers, operator overloading, preprocessing, and templates, are covered. 4.00 credit hours. Prerequisite: IS 207 Object-Oriented Programming 2.

IS 214 SQL Server Administration

This course provides instruction in the planning, installation, and administration of a leading SQL Server database management system. Topics include: planning SQL Server capacity and security; installing and configuring the SQL Server; security configuration and management; data maintenance and management; monitoring performance; and troubleshooting various problems. 4.00 credit hours. Prerequisite: NT 180 Network and Server Operating Systems or (NT 160 Network Operating Systems and NT 170 Server Operating Systems).

IS 216 Database Concepts and Applications II

This course continues instruction in designing, developing, and implementing secure relational databases. Topics include: advanced techniques for queries, forms, and reports in an event-driven environment; in-depth coverage of structuring databases using object-oriented concepts of properties and methods of classes and objects; techniques for debugging, error handling, and optimizing database applications; client and server strategies; transaction processing; multi-user applications; replication; Internet integration; and security. 3.00 credit hours. Prerequisite: IS 182 Database Concepts and Applications I.

IS 217 Introduction to SQL

This course provides the student with an introductory look at SQL fundamentals and features. Topics include an introduction to SQL, single and multiple table queries, updating data, database administration, and reports. 4.00 credit hours. Prerequisite: IS 102 Computers and Application Software.

IS 218 Web Graphics

This course provides the opportunity to develop knowledge and skill in bitmapped and vector graphics using a web imaging or graphics tool. Topics include: working with file size and format; using web-safe color palettes and managing color; image masking and image compression; Graphics Interface File (GIF), Joint Photographic Experts Group (JPEG) and Portable Network Graphics (PNG) file formats; using tools to alter photographs; and applying filters and effects. The web animation tool includes creating graphic elements, turning objects into animations, using action scripts and sounds, and putting movies on the web. 4.00 credit hours. Prerequisite: IS 102 Computers and Application Software.

IS 239 TCP/IP

The focus of this course is to provide comprehensive working knowledge of the concepts essential to the practice of TCP/IP networking and TCP/IP administration. Topics include: network addresses, names, and implementation issues; internetwork architectures, models, and conceptual tools; TCP/IP Internet and routing protocols; FTP, TFTP, Telnet, and r-utilities; resource sharing and distributed computing; TCP/IP internetwork management with DNS and DHCP; troubleshooting and security; and intranets, extranets, and Internet commerce. 4.00 credit hours. Prerequisite: IS 112 Computer Networks.

IS 245 Game Programming I

This course introduces the basic structure of game programming in appropriate object-oriented languages. Languages may include, but are not limited to C++ and/or Java. Concepts introduced will include: working efficiently with memory (variables, arrays, data types, data structures); structuring and using methods efficiently; and the use of programming structures relevant to coding games efficiently (including the use of loops, selection statements, arrays, data structures, and sequences). Topics will also include the use of constants, strings, built-in class libraries, references, documentation/commenting code, and compilation and testing of program code. 4.00 credit hours. Prerequisite: IS 103 Programming Logic.

IS 258 Web Scripting

This course presents the concepts and syntax of JavaScript programming for adding dynamic content and interactive elements to web pages. Topics include: JavaScript programming fundamentals; integrating JavaScript and HTML; creating pop-up windows; adding scrolling messages and validating forms; enhancing the use of image and form objects; and using cookies, arrays, and frames. 4.00 credit hours. Prerequisite: IS 108 Internet Foundation.

IS 272 Introduction to Computer Security

This course is a survey of information and computer security. Topics include security standards and policies, common threats and risk management, disaster recovery planning, security architectures and design principles, access control, and network security. 3.00 credit hours. Prerequisite: IS 112 Computer Networks.

IS 282 Network Security

This course introduces basic security principles such as establishing an effective security policy and the different types of hacker activities that you are most likely to encounter. It also will instruct the student in the latest security industry recommendations and how to properly protect leading OS servers in a variety of settings and conduct security audits. 4.00 credit hours. Prerequisites: IS 191 Linux Administration and NT 180 Network and Server Operating Systems (or NT 160 Network Operating Systems and NT 170 Server Operating Systems).

IS 284 Routers and Switches I

This course introduces part one of concepts and procedures required to utilize industry-standard switches and routers in multi-protocol internet works. Topics include: exploring router components and their function; configuring routers according to the industry-standard operating system (OS); routing fundamentals in a subnetted network infrastructure; and LAN design technologies. The class focuses on the TCP/IP protocol suite and IP addressing in regards to function and importance in a routed environment. Routing protocol basics, such as static and dynamic routing techniques, are covered with extensive labs and hands-on exercises. The class goes into detail concerning the design and usage of access control lists to enhance network security and control the flow of traffic across routed networks. 4.00 credit hours. Prerequisite: IS 112 Computer Networks or IS 185 Computer Architecture and Troubleshooting I.

IS 286 Routers and Switches II

This course is a continuation of the Routers and Switches I course and is based on current industry standards. The focus of the course will cover topics such as: switching basics; intermediate routing; introduction to VLSM (variable length subnet masking); scaling IP addresses; route flapping; RIP version 2; Enhanced Interior Gateway Routing Protocol implementation; switching concepts in regards to LAN design; VLAN configuration; and VLAN trunking techniques. The class also explores the leading industry standards associated with WAN communication technologies and design such as ISDN, PPP, and Frame Relay operations. 4.00 credit hours. Prerequisite: IS 284 Routers and Switches I.

IS 289 Applied Routers and Switches

This course reinforces academic knowledge and advanced routing and switching concepts and emphasizes the importance of the critical nature of self-assessment, giving students hands-on experience. The course introduces students to advanced concepts in router and switch design and configurations. Topics include: supernetting; VLSM; subnetting; VLANs; interVLAN routing; access lists; technical drawing; troubleshooting networks with routers and switches; and integrating Cisco routers and switches into a Windows networking environment. 4.00 credit hours. Prerequisite: IS 286 Routers and Switches II.

IS 292 Linux Application Server

This course is a study of intermediate to advanced topics regarding Linux server-based applications. Topics include advanced Linux system administration, using Linux as an e-mail server, FTP server, database server, web server, and news server. Topics will also discuss implementing Linux services including DHCP, DNS, NIS, firewall, and network security. 4.00 credit hours. Prerequisite: IS 112 Computer Networks.

IS 294 Career Internship

This is an elective course in associate's degree programs that students take in their final semester. The career internship course is designed for students interested in pursuing a career in a variety of computer science, information, or network technology-related studies. The outcome of the internship is an informed student fully apprised of the opportunities his/her degree program offers for professional growth. During the internship phase of training, the student will experience various aspects of working in the actual field in which the student has been educated. The internship is designed to provide the student with the opportunity to experience and participate in duties typical of a contemporary workplace setting. Student learning will center on observing experienced personnel as well as participating in actual hands-on procedures under close supervision of trained professionals. 4 credit hours. Prerequisite: Final semester, program GPA of 2.50 and PD 214 AS/AAS/BS/Diploma Internship Preparation.

IS 312 C# Programming

This course provides an introduction to programming in C#. Topics include: net framework; C# language fundamentals; creating objects in C#; implementing object-oriented programming techniques, windows form, and controls; using ADO.NET to access data; using XML Web service; and creating applications. 4.00 credit hours. Prerequisite: IS 207 Object-Oriented Programming 2.

IS 313 C++ Project

This course focuses on the development of an application using C++. Topics include: user interfaces; database access; current object libraries; good programming practices; development environment; and testing, deploying, and supporting C++ applications. 4.00 credit hours. Prerequisite: IS 213 C++ Programming.

IS 316 Programming in Linux

This course presents shell programming in a Linux environment using the Bourne and Bash shells. Topics include: Linux tools and utilities; interactive command line programs; programming using constructs, variables, commands, and functions; and debugging processes. 4.00 credit hours. Prerequisite: IS 103 Programming Logic.

IS 317 C++ Project

This course focuses on the development of an application using C++. Topics include user interfaces, database access, current object libraries, good programming practices, development environment, testing, deploying, and supporting C++ applications. 3.00 credit hours. Prerequisite: IS 213 C++ Programming.

IS 320 Client-Side Website Development

This course provides instruction in advanced client-side Web authoring including the design and implementation of Web pages and websites using popular layout and graphics tools. Topics include: creating websites and Web pages; working with HTML, links, and URLs; managing images and text; working with tables, forms, frames, and colors; using cascading style sheets (CSS), layers, and JavaScript; and managing websites. Graphics topics include: creating canvases and paths; working with drawing tools and text; and using image mapping, animation features, and imported files. 4.00 credit hours. Prerequisite: IS 108 Internet Foundation.

IS 321 Mobile Application Security

This course will cover a wide breadth of security issues that apply to mobile application environments. The current top issues of mobile security will be analyzed and strategies discussed for each major mobile operating system including Android, Apple iPhone, Windows Mobile, BlackBerry and Symbian OS. The course will also cover security issues pertaining to mobile services such as WAP, Bluetooth, SMS, mobile geolocation, and enterprise security. 3.00 credit hours. Prerequisite: IS 109 Object-Oriented Programming 1.

IS 324 Introduction to Android Mobile Development

The goal of this course is to introduce the student to the design and development of mobile software utilizing the Android Operating System and an appropriate Android Java SDK. The setup and configuration of such an environment will be demonstrated and employed. The development tools will be mastered through building an Android application, managing application resources, configuring the manifest file, designing an application framework, implementing a main menu, building forms to collect user input, creating dialogs, and adding application logic that stores state information. 4.00 credit hours. Prerequisite: IS 165 Programming in Java I or IS 207 Object-Oriented Programming 2.

IS 325 Database Development and Design

This course focuses on developing database applications in a Windows-based client/server environment. Topics include: a review of using SQL; understanding open database connectivity, data modeling, database design; DataWindows; the DataWindow Painter; DataWindow objects and controls; graphing; using edit and display formats; the Web DataWindow; and tips and techniques. 4.00 credit hours. Prerequisite: IS 212 Database Concepts.

IS 327 Software Engineering I

This course provides coverage of the major topics in software engineering. Students will learn how to apply software engineering concepts to real-world systems design and development. Topics include: software processes; requirements engineering; software design, development, verification, and validation; and emerging technologies in software engineering. Project: Fully developed system design. 4.00 credit hours. Prerequisite: IS 340 Business Systems Analysis.

IS 328 Software Engineering I

This course provides coverage of the major topics in software engineering. Students will learn how to apply software engineering concepts to real-world systems design and development. Topics include: software processes; requirements engineering; software design, development, verification, and validation; and emerging technologies in software engineering. Project: fully developed system design. 3.00 credit hours. Prerequisite: IS 207 Object-Oriented Programming 2.

IS 330 Data Warehousing

This course provides an introduction to the fundamentals of data warehousing and the concepts involved in building a successful data warehouse. Topics include: how data warehouses differ from traditional transaction processing systems; the history of data warehousing; and an overview of fundamental data warehousing design principles within the context of relational database systems and its implementation. Oracle Database is used for illustration and implementation. 4.00 credit hours. Prerequisite: IS 212 Database Concepts and Applications II.

IS 332 Data Warehousing

This course provides an introduction to the fundamentals of data warehousing and the concepts involved in building a successful data warehouse. Topics include: how data warehouses differ from traditional transaction processing systems; the history of data warehousing; and an overview of fundamental data warehousing design principles within the context of relational database systems and their implementation. Oracle Database 10g is used for illustration and implementation. 3.00 credit hours. Prerequisite: IS 216 Database Concepts and Applications II.

IS 334 Introduction to Blackberry Mobile Development

The goal of this course is to introduce the student to the design and development of mobile software utilizing the BlackBerry Operating System and an appropriate RIM Java SDK. The setup and configuration of such an environment will be demonstrated and employed. The development

tools will be mastered through building a Blackberry application, managing application resources, configuring the manifest file, designing an application framework, implementing a main menu, building forms to collect user input, creating dialogs, and adding application logic that stores state information. 4.00 credit hours. Prerequisite: IS 165 Programming in Java I or IS 207 Object-Oriented Programming 2.

IS 336 Mobile Applications Development

This course will cover good practices concerning mobile application development at the software engineering level. Requirements, design, development, integration, testing, release, and maintenance will be covered as well as building effective user interfaces for mobile applications. Different fat-client and thin-client architectures will be discussed as well as managing client-server data transfers. 3.00 credit hours. Prerequisite: IS 328 Software Engineering I.

IS 340 Business Systems Analysis

This course provides the study of the analysis and design of information systems for business applications. The course concentrates on systems development process—the analysis. The analysis process provides a strong basis for understanding and modeling the user needs in an information system solution with a business-driven conception. Topics include: requirements elicitation; initial proposal; project management; data flow diagramming; agile modeling; data dictionaries; structured decision tables/trees; effective input/out designs; database designs; quality data entry procedures; and object-oriented concepts. The course does not include any programming of the system or actual layout of the network. Emphasis is placed on the tools and analytical skills required of the systems analyst. The final project of the class aims at producing a professional systems document using most of the analyst's tools. 4.00 credit hours. Prerequisite: IS 112 Computer Networks.

IS 344 Introduction to iPhone Mobile Development

The goal of this course is to introduce the student to the design and development of mobile software utilizing the iPhone operating system. After an introduction to objective-C, the setup and configuration of the development environment will be demonstrated and employed. The development tools will be mastered through building an iPhone application, managing application resources, designing an application framework, implementing a main menu, building forms to collect user input, creating dialogs, and adding application logic that stores state information. Access to a Mac is required for this course. 4.00 credit hours. Prerequisite: IS 213 C++ Programming.

IS 345 Business Systems Analysis

This course provides the study of the analysis and design of information systems for business applications. The course concentrates on systems development process—the analysis. The analysis process provides a strong basis for understanding and modeling the user needs in an information system solution with a business-driven conception. Topics include: requirements elicitation; initial proposal; project management; data flow diagramming; agile modeling; data dictionaries; structured decision tables/trees; effective input/out designs; database designs; quality data-entry procedures; and object-oriented concepts. The course does not include any programming of the system or actual layout of the network. Emphasis is placed on the tools and analytical skills required of the systems analyst. The final project of the class aims at producing a professional systems document using most of the analyst's tools. 3.00 credit hours. Prerequisite: IS 112 Computer Networks.

IS 346 Game Programming II

This course continues appropriate game programming topics utilizing an object-oriented language. Languages may include, but are not limited to, C++ and/or Java. Multi-user concepts introduced will include: the use of I/O; streams; sockets; pointers; threads; graphics; recursion; data structures and protocols; and various technologies (which may include operating system-specific topics). Compilation and testing of various program code will be required. 4.00 credit hours. Prerequisite: IS 245 Game Programming I.

IS 354 Introduction to Symbian Mobile Development

The goal of this course is to introduce the student to the design and development of mobile software utilizing the Symbian operating system. The setup and configuration of such an environment will be demonstrated and employed. The development tools will be mastered through building a Symbian application, managing application resources, designing an application framework, implementing a main menu, building forms to collect user input, creating dialogs, and adding application logic that stores state information. 4.00 credit hours. Prerequisite: IS 213 C++ Programming.

IS 357 Software Engineering II

This course provides coverage of the post-development stages of software engineering and software testing, quality, and maintenance. Students learn how to apply testing throughout the development process to improve the quality of systems and how to use state-of-the-art tools for test planning, test design, and defect tracking. Topics include software testing, quality assurance, and software maintenance. Industry leading and state-of-the-art tools are used. Project: Fully developed test plan. 4.00 credit hours. Prerequisite: IS 327 Software Engineering I.

IS 358 Software Engineering II

This course provides coverage of the post-development stages of software engineering and software testing, quality, and maintenance. Students learn how to apply testing throughout the development process to improve the quality of systems and how to use state-of-the-art tools for test planning, test design, and defect tracking. Topics include software testing, quality assurance, and software maintenance.

Industry leading and state-of-the-art tools are used. Project: fully developed test plan. 3.00 credit hours. Prerequisite: IS 328 Software Engineering I.

IS 360 Web Commerce

This course provides the opportunity to develop abilities and skills in designing, building, and implementing web-based commerce solutions. Topics include: how to analyze business requirements; how to define the technical architecture for a solution; conceptual and logical designs; how to design user interfaces and user services; how to derive the physical design; installing and configuring a web server; creating user and data services; creating and executing a test plan; and deploying and supporting web applications. 4.00 credit hours. Prerequisite: BU 195 E-Business Concepts or BU 204 The Digital Firm and Business Communications.

IS 364 Introduction to Windows Mobile Application Development

The goal of this course is to introduce the student to the design and development of mobile software utilizing the Windows Mobile 7 Operating System and the .NET Compact Framework. The setup and configuration of such an environment will be demonstrated and employed. The development tools will be mastered through building a Windows Mobile application, managing application resources, configuring the manifest file, designing an application framework, implementing a main menu, building forms to collect user input, creating dialogs, and adding application logic that stores state information. 4.00 credit hours. Prerequisite: IS 312 C# Programming.

IS 390 Advanced Web Development

This course explores web development tools and techniques. Students learn server-side and client-side programming technologies and build dynamic web applications. Topics include data validation, state management, integration with files, and relational databases and security. Industry leading and state-of-the-art tools are used. Team project: Fully-functional database-driven website. 4.00 credit hours. Prerequisites: IS 108 Internet Foundation and (IS 180 Database Concepts and Applications I or IS 182 Database Concepts and Applications I).

IS 420 Advanced Specialization

This course is an advanced-level independent study course that allows a student to work on an agreed-upon project from conception through implementation. The student is expected to prepare a proposal and time line prior to beginning the course. The student will explore technology issues related to the project. A written report and oral presentation is expected to complete the course. The student is expected to meet regularly with the instructor to track technical and project-management issues. An ability to work independently is required. 3.00 credit hours. Prerequisite: Program GPA of 3.00 and written approval of both the faculty advisor and academic dean.

IS 421 Firewall Security

This course provides instruction in the fundamental theories and practices of firewall operation and management. Topics include: deployment planning; and installation, configuration, management and troubleshooting of both hardware- and software-based firewalls. Mastery of advanced TCP/IP operating principles and associated business practices is required. The lab component covers a wide variety of firewall products and implementation strategies. 4.00 credit hours. Prerequisite: IS 282 Network Security.

IS 422 Mobile Game Development

This course explores the development of interactive games for a variety of mobile devices. Topics include the game development process, graphics, mobile networking for multiplayer games, interface design, and programming. 4.00 credit hours. Prerequisite: IS 207 Object-Oriented Programming 2.

IS 424 Advanced Android Mobile Development

The goal of this course is to further the student's knowledge base of Android development and to create robust applications using powerful device features. This will include accessing images and the camera, adding support for location-based services (GPS), implementing network communications, internationalizing the application, developing methodologies for different devices, implementing testing practices for Android applications, and publishing their app in the Android Market for distribution. 4.00 credit hours. Prerequisite: IS 324 Introduction to Android Mobile Development.

IS 425 Advanced Specialization

This course is an advanced-level independent study course that allows a student to work on an agreed-upon project from conception through implementation. The student is expected to prepare a proposal and time line prior to beginning the course. The student will explore technology issues related to the project. A written report and oral presentation is expected to complete the course. The student is expected to meet regularly with the instructor to track technical and project-management issues. An ability to work independently is required. 4.00 credit hours. Prerequisite: Program GPA of 3.00 and written approval.

IS 434 Advanced Blackberry Mobile Development

The goal of this course is to further the student's knowledge base of BlackBerry development and to create robust applications using powerful device features. This will include utilizing the PIM interface to access the devices contacts, telephone numbers, e-mail addresses and events in the calendar. Network communications will also be covered as well as interfacing to the GPS hardware, internationalizing the application,

developing for different devices, implementing testing strategies for different devices, code signing your application, and distributing your application through BlackBerry App World. 4.00 credit hours. Prerequisite: IS 334 Introduction to Blackberry Mobile Development.

IS 447 Game Programming III

This is an advanced project-based course geared towards creation of code for an electronic portfolio. The course continues appropriate game programming topics from previous classes utilizing an object-oriented language. Languages may include, but are not limited to, C++ and/or Java. Topics include: how to derive the physical design; how to develop a project; creating user interfaces; efficient utilization of previously discussed topics (memory usage, code reuse); use of appropriate graphical technologies; code management; working with a group of programmers; testing and deployment of the project; and hosting/distribution of the finished project. 4.00 credit hours. Prerequisite: IS 346 Game Programming II.

IS 464 Advanced Windows Mobile Development

The goal of this course is to further the student's knowledge base of Windows Mobile development and to create robust applications using powerful device features. This will include accessing images and the camera, adding support for location-based services (GPS), implementing network communications, internationalizing the application, developing methodologies for different devices, implementing testing practices for WinMo applications, and publishing to the Windows Mobile Market Place. 4.00 credit hours. Prerequisite: IS 364 Introduction to Windows Mobile Application Development.

IS 481 IT Strategic Management

This course provides a comprehensive guide to information technology strategic management with a focus on the essential components found in an information technology (IT) strategic plan. Topics include: the role of an IT manager; IT as a strategic issue; the IT/business strategy relationship; determining a high-level direction for IT; IT strategy gap analysis; option analysis and action plans; IT problem, change, and recovery management strategies; emerging technology evaluation strategies; managing IT functions and resources; and trends affecting IT strategic management. 4.00 credit hours. Prerequisite: Final semester.

IS 482 Database Administration

The focus of this course is on the foundations of database administration. Topics include: managing users, profiles, privileges, and resources; creating operational databases; managing database files; start up and shut down of an instance and database; and managing tablespaces, segments, indexes, extents, and blocks. 3.00 credit hours. Prerequisite: IS 216 Data Concepts and Applications II.

IS 485 Database Administration

The focus of this course is on the foundations of database administration. Topics include: how to manage users, profiles, privileges, and resources; creating operational databases; managing database files; start up and shut down of an instance and database; and managing tablespaces, segments, indexes, extents, and blocks. 4.00 credit hours. Prerequisite: IS 212 Data Concepts and Applications II.

IS 490 Capstone Project

Students work individually or in project teams on an industry-sponsored or instructor-approved project. Students identify a problem, develop design specifications based on stakeholder needs, consider alternative designs, develop a schedule and/or budget, design, develop, and test the proposed process or product. Interim reports to the sponsor or to the class, a final project report, and a final presentation will be required. 4.00 credit hours. Prerequisite: Final semester.

IS 491 Capstone Project

Students work individually or in project teams on an industry-sponsored or instructor-approved project. They will identify a problem, develop design specifications based on stakeholder needs, consider alternative designs, develop a schedule and/or budget, design, develop, and test the proposed process or product. Interim reports to the sponsor or to the class, a final project report, and a final presentation will be required. 3.00 credit hours. Prerequisite: Final semester.

IS 494 Internship

This is an elective course in bachelor's degree programs that students may take in their final semester. The career internship course is designed for students interested in pursuing a career in the computer science and information technology fields. The outcome of the internship is an informed student fully apprised of the opportunities their program offers for professional growth. During the internship, the student will experience various aspects of working in the actual field for which the student has been educated. The internship is designed to provide the student with the opportunity to experience and participate in duties typical of a contemporary workplace setting. Student learning centers on observing experienced personnel as well as participating in actual hands-on procedures under close supervision of trained professionals. 4.00 credit hours. Prerequisites: Final semester and PD 214 AS/AAS/BS/Diploma Internship Preparation.

IS 495 Internship

This is an elective course in bachelor's programs that students may take in their final semester. The career internship course is designed for students interested in pursuing a career in the computer science and information technology fields. The outcome of the internship is an informed

student fully apprised of the opportunities their program offers for professional growth. During the internship, the student will experience various aspects of working in the actual field in which the student has been educated. The internship is designed to provide the student with the opportunity to experience and participate in duties typical of a contemporary workplace setting. Student learning centers on observing experienced personnel as well as participating in actual hands-on procedures under close supervision of trained professionals. 3.00 credit hours. Prerequisites: Final semester and PD 214 AS/AAS/BS/Diploma Internship Preparation.

(IT) INFORMATION TECHNOLOGY

IT 202 Fundamentals of Human Computer Interaction

Human computer interaction (HCI) is a discipline concerned with the design, evaluation, and implementation of interactive computing systems for human use and the study of major problems surrounding them. This course is introductory and intends to expose students to the basic concepts of the field, in particular, specifically designing for interaction between humans and computers. Topics will include: definition of user interface; general usability principles and paradigms; usability standards; cognitive principles; ergonomics; input/output devices; conceptual models; dialog styles; screen layout and color principles; and response time. A team-based project, dealing with the design, development, and evaluation of human computer interaction, will be required at the end of the course. 3.00 credit hours. Prerequisite: IS 102 Computers and Application Software.

IT 330 Routing and Switching Security

This course equips students with the knowledge and skills needed to design and support network security in a typical routing and switching topology. The course aims to develop an in-depth understanding of network security principles as well as tools and configurations such as protocol sniffers/analyzers, TCP/IP and common desktop utilities, IOS software, and VPN client software. Topics include access control lists, intrusion prevention systems, IPSec, and virtual private networks. 4.00 credit hours. Prerequisite: IS 284 Routers and Switches I or NT 215 Routers and Switches.

IT 335 Ethical Hacking

The threat to systems is one that is continuously changing and evolving. The goal of the ethical hacker is to help organizations take pre-emptive measures against malicious attacks by attacking the system themselves while staying within legal limits. This course will explore the various means that an intruder has available to gain access to the security of a network and various resources. Students will be introduced to penetration testing with the ethics and responsibilities of testing in mind as well as various security attacks to the advanced level. The course will have an intense laboratory component which will be limited to student networks. Foundations in security policy, perimeter defenses, intrusion detection, security monitoring, liability issues and ethics will be covered. Topics to be covered include, but are not limited to, penetration testing, enumerating, footprinting, scanning, hacking techniques, firewall, IDS, procedural documentation, host reconnaissance Trojans, backdoors, and system attacks such as WLAN, database servers, web servers, and email servers. *It must be noted that hacking is a felony in the United States and most other countries. When it is done by request and under a contract between an Ethical Hacker and an organization, it is legal.* 4.00 credit hours. Prerequisite: IS 282 Network Security.

IT 345 Information Technology Project Management

This course covers techniques and managerial concepts of information technology project management. It prepares students to manage complex information technology projects. Students are introduced to all five major process groups in project management, namely initiating, planning, executing, monitoring and controlling, and closing. Topics include: project life cycles; cost benefit analysis; work breakdown structure; staffing; roles, responsibilities, accountability; finance; estimation; budgeting; planning; risk management; scheduling; and tracking. The course also introduces students to computer software for project management. Students will work in teams to design a project plan for a real-world IT project that demonstrates an ability to follow standard project management methodology. 3.00 credit hours. Prerequisite: IS 102 Computers and Application Software.

IT 365 Network Infrastructure Hardening

This course offers an in-depth look at TCP/IP, performing volumes of packet captures and analysis, and auditing and generating documentation for hardening procedures. Topics include implementation of IPSec in several different scenarios including a detailed and extensive lesson on securing Linux and Windows network infrastructures. The course will focus on best practices for network design to avoid security breaches and hardening network services such as DNS, DHCP, Directory Services, Operating System Routing, and NAT. Students will also be introduced to securing routers and switches in an infrastructure design as well as professional documentation of network infrastructures. Students will work in teams on a project to demonstrate concepts of hardening a network infrastructure. 4.00 credit hours. Prerequisite: NT 200 Network Infrastructure Administration.

IT 371 Web Security

This course offers an in-depth look at web application security for students who have some prior understanding of web technologies. There is an in-depth treatment of several significant topics such as user authentication, browser security, business logic, data handling, and distributed

threats. The course also covers motivating attacks, defense mechanisms, and security tools and techniques. Emphasis is placed on the skills and abilities for analyzing and documenting web security as a security specialist in order to protect web-related services. Topics include: client security; cookies and web beacons; phishing; transaction security—certificates and secure connections; spyware and viruses; man-in-the-middle attacks; server security; denial-of-service attacks; attacks via clients (e.g., zombies and DOS); and DNS poisoning. 4.00 credit hours. Prerequisite: NT 370 Web Server Installation and Administration.

IT 460 Advanced Security Implementation

This course examines and explains the technologies required to design, build, and audit a trusted network. Topics include: detailed discussions of corporate security culture; the reasons for building and components of a trusted network; and an in-depth look into cryptography, computer forensics law, and legislation, looking at the legalities surrounding networks and network security. Additional topics include a detailed look at biometrics and its applications, strong authentication, and a discussion of two of the cornerstones of trusted networks: digital certificates and digital signatures. 4.00 credit hours. Prerequisite: IS 282 Network Security.

IT 470 Enterprise Security Solution

This course begins with a discussion of the following: the needs and requirements for building a trusted network; an examination of Certificate Policies and Certificate Practice Statements key to the planning and design of a trusted network; procedures for configuring certificate authorities (CA), both stand-alone and as the root; and the creation and configuration of Certification Authority. Additional topics include: management of digital certificates, including their use and configuration on Smart Cards; the procedures available for securing local resources, including documentation of problems and solutions; encryption and biometrics; securing a wireless network in the enterprise; securing e-mail, including the use of S/MIME and PGP; and building a trusted network. 4.00 credit hours. Prerequisites: IS 282 Network Security and NT 200 Network Infrastructure Administration.

(MA) MATHEMATICS

MA 090 Fundamentals of Mathematics

This course introduces students to practical mathematics, developing conceptual and problem-solving skills. It includes the study of linear equations, basic statistical concepts, and mathematical functions and applications. 4.00 credit hours. Prerequisite: None.

MA 107 College Algebra

This course covers topics of algebra including linear functions, equations, inequalities, systems of equations in two variables, polynomial functions, quadratic equations, and rational and radical equations. 4.00 credit hours. Prerequisite: MA 090 or test-out.

MA 175 Business Mathematics

This course provides instruction in the mathematical operations associated with the retail, banking, and accounting industries. Topics include: decimals, fractions, and percentages; bank services; interest payment; purchase orders and invoices; and selling prices and mark-ups. This course does not satisfy the general education math requirement for degree programs. 3.00 credit hours. Prerequisite: None.

MA 204 Trigonometry

This course focuses on the concepts of trigonometry. It includes the geometry of triangles, the Pythagorean theorem, logarithms, trigonometric functions and identities, and vectors. 3.00 credit hours. Prerequisite: MA 107 College Algebra.

MA 225 Trigonometry and Pre-Calculus

This course presents instruction in the math of algebraic and transcendental functions. Covered topics include basic trigonometry functions, complex numbers, logarithms, and analytic functions. Each topic is demonstrated with specific applications from natural science, computer science, and electronics. 4.00 credit hours. Prerequisite: MA 107 College Algebra with a grade of C or better.

MA 320 Statistics

This course presents the study of basic statistical theory and concepts. Topics include: statistical probabilities; measures of central tendency; measures of variation; hypothesis testing; regression; correlation; and quality control applications. 3.00 credit hours. Prerequisite: MA 107 College Algebra.

(MC) MEDICAL CODING

MC 171 Basic Diagnosis Coding

Basic Diagnosis Coding is an introduction to the ICD-9-CM data set used for reporting diagnoses. This course will also include instruction on how to classify and index diagnosis in the healthcare setting. The various uses for diagnosis codes will be discussed as well. 3.00 credit hours. Prerequisites: HC 115 Medical Terminology for Healthcare Professionals, MO 150/MO 150L Pathophysiology and Pharmacology/Lab, and SC 245/SC 245L Anatomy and Physiology II/Lab.

MC 172 Basic Procedure Coding

Basic Procedure Coding helps students describe all types of healthcare services, treatments, and procedures provided to patients in both inpatient and outpatient facilities, as well as ancillary departments such as imaging centers and pathology laboratories. 3.00 credit hours. Prerequisites: HC 115 Medical Terminology for Healthcare Professionals, MO 150/MO 150L Pathophysiology and Pharmacology/Lab, and SC 245/SC 245L Anatomy and Physiology II/Lab.

MC 173 Intermediate Diagnosis Coding

Intermediate Diagnosis Coding is a continuation of Basic Diagnosis Coding with advanced instruction on ICD-9-CM chapter-specific guidelines (specialty coding). Abstracting skills will continue to be reinforced. An overview of ICD-10-CM will be included to provide an introduction to this new code set. 3.00 credit hours. Prerequisite: MC 171 Basic Diagnosis Coding.

MC 174 Intermediate Procedure Coding

Intermediate Procedure Coding continues to teach students how to identify all types of healthcare services, treatments, and procedures provided to patients in both inpatient and outpatient facilities as well as ancillary departments, such as imaging centers and pathology laboratories. In addition, how to properly apply HCPCS Level II Codes and ICD-9-CM Volume 3 Procedure Codes will be covered. An introduction to ICD-10-PCS will be provided. 3.00 credit hours. Prerequisite: MC 172 Basic Procedure Coding.

MC 207 Program Review

This directed practice seminar is a class in which the student will participate in seminars to prepare for certification examinations. The Certified Coding Associate (CCA) is a nationally recognized credential that enables employers to have confidence in a potential employee's ability. Students will also attend meetings to discuss their experience in the seminar. Students will be required to complete cover letters, résumés, and reference lists to use in job placement. This course aids the student in combining their didactic training with the seminar experience. 2.00 credit hours. Prerequisite: All didactic coursework with a program GPA of 2.00.

MC 208 Program Review

This directed practice seminar is a class in which the student will participate in seminars to prepare for certification examinations. The Certified Coding Associate (CCA) is a nationally recognized credential that enables employers to have confidence in a potential employee's ability. Students will also attend meetings to discuss their experience in the seminar. Students will be required to complete cover letters, résumés, and reference lists to use in job placement. This course aids the student in combining their didactic training with the seminar experience. 1.00 credit hour. Prerequisite: All didactic coursework with a program GPA of 2.00.

MC 294 Internship

During the internship phase of training, the student will experience various aspects of working in the coding field. The internship will provide the student with the opportunity to experience and participate in the duties of a medical coder in a working environment. Areas such as abstracting from medical records, CPT-4, and ICD-9-CM coding schemes will also be used. Other aspects of medical coding and billing will be experienced. Experienced coding personnel provide the instruction. 4.00 credit hours. Prerequisites: All didactic coursework with a program GPA of 2.00 and PD 212 Medical Billing and Insurance Coding Internship Preparation.

(ML) MILITARY SCIENCE

(These courses are part of the Army ROTC program offered through some Herzing University campuses where an agreement exists with a local college or university hosting an Army ROTC detachment. Military science courses are taken at the hosting college and apply toward the Herzing University degree requirements as open elective courses.)

ML 110 Basic Military Science I

This is the first freshmen level course in military science as part of the Army ROTC leadership program offered in conjunction with the Army ROTC detachment at a local partner college or university. The course may include a leadership lab or other Army ROTC elective activities in addition to classroom instruction on military and leadership related topics. 2.00 credit hours. Prerequisite: None.

ML 120 Basic Military Science II

This is the second freshmen-level course in military science as part of the Army ROTC leadership program offered in conjunction with the Army ROTC detachment at a local partner college or university. The course may include a leadership lab or other Army ROTC elective activities in addition to classroom instruction on military and leadership-related topics. 2.00 credit hours. Prerequisite: ML 110 Basic Military Science I or permission of the host college/university Professor of Military Science.

ML 210 Basic Military Science III

This is the first sophomore-level course in military science as part of the Army ROTC leadership program offered in conjunction with the Army ROTC detachment at a local partner college or university. The course may include a leadership lab or other Army ROTC elective activities in addition to classroom instruction on military and leadership-related topics. 2.00 credit hours. Prerequisite: ML 120 Basic Military Science II or permission of the host college/university Professor of Military Science.

ML 220 Basic Military Science IV

This is the second sophomore-level course in military science as part of the Army ROTC leadership program offered in conjunction with the Army ROTC detachment at a local partner college or university. The course may include a leadership lab or other Army ROTC elective activities in addition to classroom instruction on military and leadership-related topics. 2.00 credit hours. Prerequisite: ML 210 Basic Military Science III or permission of the host college/university Professor of Military Science.

ML 310 Advanced Military Science I

This is the first junior-level course in military science as part of the Army ROTC leadership program offered in conjunction with the Army ROTC detachment at a local partner college or university. The course may include a leadership lab or other Army ROTC elective activities in addition to classroom instruction on military and leadership-related topics. 4.00 credit hours. Prerequisite: ML 220 Basic Military Science IV or permission of the host college/university Professor of Military Science.

ML 320 Advanced Military Science II

This is the second junior-level course in military science as part of the Army ROTC leadership program offered in conjunction with the Army ROTC detachment at a local partner college or university. The course may include a leadership lab or other Army ROTC elective activities in addition to classroom instruction on military and leadership-related topics. 4.00 credit hours. Prerequisite: ML 310 Advanced Military Science I or permission of the host college/university Professor of Military Science.

ML 330 American Military History

This course surveys American military history through the end of the twentieth century. The course examines the strategies and tactics of warfare throughout this period and explores how social, economic, and technological advances contributed to the distinct patterns of war that characterized the struggles over the past 300 years. Additionally, this course gives an appreciation of the U.S. military establishment in society and the evolution of the military profession. 3.00 credits. Prerequisite: None.

ML 410 Advanced Military Science III

This is the first senior-level course in military science as part of the Army ROTC leadership program offered in conjunction with the Army ROTC detachment at a local partner college or university. The course may include a leadership lab or other Army ROTC elective activities in addition to classroom instruction on military and leadership-related topics. 4.00 credit hours. Prerequisite: ML 320 Advanced Military Science II or permission of the host college/university Professor of Military Science.

ML 420 Advanced Military Science IV

This is the second senior-level course in military science as part of the Army ROTC leadership program offered in conjunction with the Army ROTC detachment at a local partner college or university. The course may include a leadership lab or other Army ROTC elective activities in addition to classroom instruction on military and leadership-related topics. 4.00 credit hours. Prerequisite: ML 410 Advanced Military Science III or permission of the host college/university Professor of Military Science.

(MO) MEDICAL OFFICE ADMINISTRATION

MO 110 Keyboarding

This course includes the development of keyboarding skills through touch, mastery of the keyboard, speed building, and preparation of office documents. 1.00 credit hour. Prerequisite: None.

MO 111 Computer Software Applications in Healthcare

This course introduces the student to the administrative portion of the healthcare environment, including medical office management software (patient registration, appointments, office financial management, and electronic health records) and appropriate Microsoft Office applications. 3.00 credit hours. Prerequisite: MO 110 Keyboarding.

MO 113 Medical Business Operations

This course introduces the student to the administrative portion of the healthcare environment as well as important legal and ethical guidelines. Students will become familiar with health information systems, interpersonal communication, and customer service techniques. 3.00 credit hours. Prerequisite: None.

MO 129 Medical Office Procedures

This course provides an overview of administrative tasks performed in a medical office. Students will learn about office financial management, accounting concepts, the types of medical recordkeeping, accepting and entering payments, and human resource management. 3.00 credit hours. Prerequisite: None.

MO 144 Medical Terminology

This course introduces the foundations of the language of medicine and develops medical vocabulary through the study of the structures, functions, diagnostic procedures, pathology, and treatment procedures of the body systems. 1.00 credit hour. Prerequisite: None.

MO 150 Pathophysiology and Pharmacology

This course provides instruction in the study of human diseases with focus on the symptoms, signs, causes, and diagnosis of disease. Additionally, students will learn about pharmacology, drug categories, and pharmacological treatment related to human diseases. 2.00 credit hours. Prerequisite: HC 115 Medical Terminology for Healthcare Professionals. Corequisites: MO 150L Pathophysiology and Pharmacology Lab and SC 245/SC 245L Anatomy and Physiology II/Lab.

MO 150L Pathophysiology and Pharmacology Lab

This is the lab portion of MO 150 Pathophysiology and Pharmacology. 1.00 credit hour. Prerequisite: HC 115 Medical Terminology for Healthcare Professionals. Corequisites: MO 150 Pathophysiology and Pharmacology and SC 245/SC 245L Anatomy and Physiology II/Lab.

MO 161 Medical Billing and Insurance Procedures

This course is designed to provide students with an understanding of the basic types of medical insurance programs available in today's healthcare system. It also acquaints students with billing formats, using the universal claim form, and provides the skills necessary to master the basic aspects of medical insurance billing. Current reimbursement methodologies (i.e., RBRVS, APCS) and compliance will also be covered. 3.00 credit hours. Prerequisite: None.

MO 205 Insurance Claims, Processing and Adjudication

In this course, the student will understand the basic types of medical insurance programs available in today's healthcare environment. It acquaints students with billing formats, using universal claim forms, and provides the skills necessary to master basic aspects of medical insurance billing and adjudication. Current reimbursement methodologies and compliance will also be covered. 3.00 credit hours. Prerequisite: MO 111 Computer Software Applications in Healthcare.

MO 210 Healthcare Systems and Operations

This course introduces the student to various medical office procedures, including content of records, documentation requirements, and filing systems. The student will also learn about types of healthcare delivery systems such as governing bodies that regulate health information management (HIM) processes and various professions and settings that employ healthcare workers. 2.00 credit hours. Prerequisite: None.

MO 215 Ethics and Health Information Management

This course is designed to introduce the student to important legal and ethical guidelines within the healthcare profession. The student will be introduced to patient confidentiality and information security as identified and enforced through HIPAA regulations. Additionally, the student will learn legal and ethical guidelines as they relate to documentation, content, and structure of healthcare data, risk management, and various health laws and regulations. 3.00 credit hours. Prerequisite: None.

MO 270 Case Study Research Project

This course prepares students for challenges in the workplace by improving their critical thinking and problem-solving skills using research as a problem-solving tool. Students will examine real-world business problems analyzing, developing, and implementing workplace solutions to build relationships that support the organization's strategic goals. In addition to building a foundation and developing competencies, students will develop important skills in ethical and values considerations, technology, and business communication. 4.00 credit hours. Prerequisites: All didactic coursework, a program GPA of 2.00, and PD 215 Medical Office Administration Internship Preparation.

MO 295 Medical Office Administration Internship

During the internship phase of training, the student will experience various aspects of working in the medical office. The internship will provide the student with the opportunity to experience and participate in the duties of a medical office administrator in a working environment. Areas such as scheduling, billing, insurance coding, medical records, transcription, and customer service will be experienced. Instruction will be provided by experienced medical office personnel. The internship consists of 135 hours of practical experience in the medical office and 15 hours of lecture and discussions within the classroom environment. 4.00 credit hours. Prerequisites: All didactic coursework, a program GPA of 2.00, and PD 215 Medical Office Administration Internship Preparation.

(MS) MEDICAL SCIENCE

MS 109 Clinical Assisting I

This course is designed to provide the basic theoretical knowledge in assisting physicians or medical office staff with medical exam room preparation and routine patient examination preparation as well as assisting with basic clinical procedures and in-office diagnostic testing. 3.00 credit hours. Prerequisites: HC 115 Medical Terminology for Healthcare Professionals, MO 150/MO 150L Pathophysiology and Pharmacology/Lab, SC 245/SC 245L Anatomy and Physiology II/Lab (and PD 216 Proctor Preparation for Online students only).

MS 121 Clinical Assisting II

Clinical Assisting II is a continuation of Clinical Assisting I. Following the Clinical Assisting II experience, the students will be able to understand the concepts of medication delivery, proper techniques of obtaining blood and other body fluid specimens, and assisting with specialty

procedures in the ambulatory setting. 4.00 credit hours. Prerequisites: MS 109 Clinical Assisting I (and PD 216 Proctor Preparation for Online students only).

MS 131 Clinical Laboratory Procedures I

This course is designed for persons interested in a medical assisting career. It is an introduction to diagnostic procedures routinely performed in the physician's office laboratory setting. Students will learn to perform electrocardiography on patients, proper hand-washing, wrapping items for autoclaving, respiratory testing, and obtaining vital signs and patient history. 4.00 credit hours. Prerequisites: HC 115 Medical Terminology for Healthcare Professionals, MO 150/MO 150L Pathophysiology and Pharmacology/Lab, SC 245/SC 245L Anatomy and Physiology II/Lab (and PD 216 Proctor Preparation for Online students only).

MS 141 Clinical Laboratory Procedures II

This course is designed for medical assisting students who will be exposed to hands-on clinical practice after completing the clinical medical assisting theory courses. This is an introduction to clinical skills routinely performed in the physician's office setting prior to internship. This course will provide student with hands-on experience. 4.00 credit hours. Prerequisites: MS 131 Clinical Laboratory Procedures I (and PD 216 Proctor Preparation for Online students only).

MS 207 Program Review

This directed practice seminar is a class in which the student will participate in seminars to prepare for successful completion of the national certification examination. This nationally recognized credential enables employers to have confidence in a potential employee's ability. Students will also attend meetings to discuss their experiences in the seminar. Students will be required to complete cover letters, résumés, and reference lists to use in job placement. This course aids the student in combining their didactic training with the seminar experience. Professional credentialing opportunities are addressed as well as practice examinations focused on the graduate sitting for the National Certification Examination offered by the American Association of Medical Assistants (AAMA). 2.00 credit hours. Prerequisites: All didactic coursework with a program GPA of 2.00.

MS 215 Medical Clinical Assisting I With Lab

This course is designed to provide the basic theoretical knowledge and hands-on experience in assisting physicians or medical office staff with medical exam room preparation and routine patient examination preparation with an emphasis on various communication techniques. Students will be introduced to basic clinical procedures including vital signs, first aid, injections, and emergency preparedness. 5.00 credit hours. Prerequisites: MO 150/MO 150L Pathophysiology and Pharmacology/Lab, PD 216 Proctor Preparation (online students only), and SC 245/SC 245L Anatomy and Physiology II/Lab.

MS 235 Medical Clinical Assisting II With Lab

This course is a continuation of MS 215 Medical Clinical Assisting I. It is an introduction to diagnostic procedures routinely performed in the physician's office laboratory setting. Students will be introduced to electrocardiography, respiratory testing, hematology, microbiology, proper specimen collection techniques, quality control, and equipment inventory and maintenance. 5.00 credit hours. Prerequisite: MS 215 Medical Clinical Assisting I With Lab.

MS 280 Program Certification Review

This directed practice seminar is a class in which the student will participate in seminars to prepare for successful completion of the national certification examination. This nationally recognized credential enables employers to have confidence in a potential employee's ability. Students will also attend meetings to discuss their experiences in the seminar. Students will be required to complete cover letters, résumés, and reference lists to use in job placement. This course aids the student in combining their didactic training with the seminar experience. Professional credentialing opportunities are addressed as well as practice examinations focused on the graduate sitting for the National Certification Examination offered by the American Association of Medical Assistants (AAMA). 2.00 credit hours. Prerequisites: All didactic coursework with a program GPA of 2.00.

MS 295 Externship

During the externship phase of training, the student will experience various aspects of working in the actual field they have trained for. The externship will provide the student with the opportunity to experience and participate in the duties typical to a real workplace setting. Instruction centers on observing experienced personnel as well as participating in actual procedures under close supervision of trained professionals. This portion of training must be completed within one year of completion of didactic training. 4.00 credit hours. Prerequisites: All didactic coursework with a program GPA of 2.00, PD 211 MA Internship Preparation and a valid CPR certification.

(MT) MEDICAL LABORATORY

MT 110 Clinical Laboratory Techniques

This course covers the basic principles and techniques used in the medical laboratory. Emphasis is placed on medical terminology, basic microscopy, and phlebotomy. Other topics include an overview of all the disciplines in clinical laboratory science, laboratory safety,

infection control, accreditation, certification, and licensure. Upon completion, students will be able to perform basic laboratory procedures and utilize basic theories of laboratory principles. 3.00 credit hours. Prerequisite: None. Corequisites: SC 245/SC 245L Anatomy and Physiology II/Lab.

MT 111 Clinical Laboratory Calculations and Statistics

This course incorporates the practical application of mathematical concepts in the medical laboratory. Instructions include the metric systems, solution preparation, dilutions, and other laboratory calculations. Upon completion, students will be able to make determinations of precision and accuracy using statistical data for various laboratory departments. 2.00 credit hours. Prerequisites: MA 107 College Algebra and MT 110 Clinical Laboratory Techniques. Corequisites: SC 185/SC 185L General Chemistry/Lab.

MT 112 Urinalysis and Body Fluids

This course focuses on the theory and techniques in the examination of urine and other body fluids. Proper techniques in the collection and handling are discussed. Students will be introduced to the physical and chemical properties of these fluids as well as microscopic examination of sediment and the identification of cells and crystals. Upon completion, students will be able to perform basic urinalysis and body fluid analysis and correlate laboratory results in renal disorders and other disease states. 2.00 credit hours. Prerequisite: MT 111 Clinical Laboratory Calculations and Statistics.

MT 113 Clinical Chemistry

The course introduces students to the principles and procedures of various tests performed in clinical chemistry. It presents the physiological basis, principle and procedure, and clinical significance of the test results, including quality control and normal values. Topics also include quality assurance, basic chemical laboratory techniques, safety, specimen collection and handling, carbohydrates, proteins, methodologies and pathophysiology for renal and hepatic functions, endocrine function, toxicology, electrolytes, acid-base balance, enzymes, and lipids. Upon completion, the student will evaluate laboratory test outcomes and correlate test results with patient condition(s). 4.00 credit hours. Prerequisite: MT 112 Urinalysis and Body Fluids. Corequisite: MT 114 Clinical Hematology.

MT 114 Clinical Hematology

In this course, the theory and techniques of hematology are covered. The student is presented with blood components, normal and abnormal cell morphology, blood-related disease conditions, and selected automated methods. Upon completion, students will be able to perform various procedures, including preparation and examination of hematologic slides, and relate results to specific disorders. 3.00 credit hours. Prerequisite: MT 112 Urinalysis and Body Fluids. Corequisite: MT 113 Clinical Chemistry.

MT 115 Coagulation

This course covers the theory and principles of blood clotting and explores mechanisms involved in clotting disorders. Emphasis is placed on laboratory techniques used in the diagnosis of disease and monitoring of treatment. Quality control and safety are also discussed. 1.00 credit hour. Prerequisite: MT 114 Clinical Hematology. Corequisite: MT 116 Immunology/Serology.

MT 116 Immunology/Serology

This course focuses on the theory and application of basic immunology, including the immune response, principles of antigen-antibody reactions, the principles of serological procedures, safety, quality control, and specimen collection and handling. 2.00 credit hours. Prerequisite: MT 114 Clinical Hematology. Corequisite: MT 115 Coagulation.

MT 210 Clinical Microbiology

This course prepares students to perform microbiological procedures on all body fluids and secretions for the purpose of identification of relevant microorganisms. There will be an emphasis on cultural, morphological, and chemical methods to identification. Topics include: microbiology fundamentals; basic techniques; clinical microbiology; anti-microbial sensitivity; safety and quality control; parasitology; mycology, mycobacteriology and virology; correlation of disease states; and process improvement. 4.00 credit hours. Prerequisites: MT 116 Immunology/Serology and SC 165/SC 165L General Microbiology/Lab. Corequisite: MT 211 Immunohematology.

MT 211 Immunohematology

This course presents the theory and techniques of immunohematology. Students study the principles of immunohematology along with the practices of blood-banking. Also studied are antigen and antibody formation, behavior, and reaction properties. The blood group antigens and antibodies are discussed at length. Upon completion, students will be able to relate principles of immunohematology to procedures for transfusion and donor services, correlate blood-banking practices to certain disease states and disorders, and describe techniques for analytical methods utilizing immunological concepts. 3.00 credit hours. Prerequisite: MT 116 Immunology/Serology. Corequisite: MT 210 Clinical Microbiology.

MT 212 Clinical Lab Simulation and Microscopy

This course provides an opportunity for the student to perform clinical laboratory procedures from all phases of laboratory testing as a review of previous laboratory courses. Emphasis is placed on microscopy, case studies, organization of tasks, and simulation of routine operations in a clinical laboratory. 2.00 credit hours. Prerequisites: MT 210 Clinical Microbiology and MT 211 Immunohematology.

MT 213 Clinical Lab Seminar

This course is a cumulative review of clinical laboratory science theory. The seminar consists of an on-campus summation of previous classes emphasizing recall, application of theory, correlation, and evaluation of all areas of clinical laboratory science. The course is also a review session of the topics necessary to prepare the students for the certification examination. Upon completion, students will be able to apply theory of analytical methods, recognize normal, abnormal, and erroneous results, and relate laboratory results to pathological conditions. 2.00 credit hours. Prerequisite: MT 212 Clinical Lab Simulation and Microscopy. Corequisite: MT 214 Clinical Lab Practicum I.

MT 214 Clinical Lab Practicum I

This is the first of two supervised practicums. The practicum is within the clinical setting and provides laboratory practice in: hematology, urinalysis, microbiology, serology, immunohematology, and clinical chemistry. Emphasis is placed on clinical skills and performance in areas such as specimen preparation and examination, instrumentation, reporting results, management of data and quality control, recovery, isolation, culturing, identification of microorganisms, detection and identification of antibodies, typing of blood, compatibility testing of blood and blood components, computerized instrumentation, and the ability to recognize technical problems. Upon completion, the student will be able to process specimens, perform analyses utilizing various methods, including instrumentation, report results, perform screening for and identification of antibodies, compatibility testing, perform biochemical analysis, and manage data and quality control using information systems. 4.00 credit hours. Prerequisite: MT 212 Clinical Lab Simulation and Microscopy. Corequisite: MT 213 Clinical Lab Seminar.

MT 215 Clinical Lab Practicum II

This is the second of two supervised practicums. The practicum is within the clinical setting and provides laboratory practice in hematology, urinalysis, microbiology, serology, immunohematology, and clinical chemistry. Emphasis is placed on clinical skills and performance in areas such as specimen preparation and examination, instrumentation, reporting results, management of data and quality control, recovery, isolation, culturing, identification of microorganisms, detection and identification of antibodies, typing of blood, compatibility testing of blood and blood components, computerized instrumentation, and the ability to recognize technical problems. Upon completion, the student will be able to process specimens, perform analyses utilizing various methods including instrumentation, report results, perform screening for and identification of antibodies, compatibility testing, perform biochemical analysis, and manage data and quality control using information systems. 4.00 credit hours. Prerequisites: MT 213 Clinical Lab Seminar and MT 214 Clinical Lab Practicum I.

(NA) NURSING—ALABAMA

NA 165 General Microbiology for Nursing

This course presents the scientific study of microscopic organisms and their effects as related to the medical profession. It also presents daily topics that are in the news and in current research journals and provides a thorough, comprehensive, and accurate overview of microbiology. Positive effects of microorganisms in our lives, along with the medically important microorganisms that cause disease, will be emphasized. 3.00 credit hours. Corequisite: NA 165L General Microbiology for Nursing Lab.

NA 165L General Microbiology for Nursing Lab

This laboratory course encompasses the learning experience with hands-on practice with organisms, including protozoa, bacteria, and fungi. The students also gain experience with culturing and staining, and various biochemical procedures used to identify microorganisms. These procedures will also be used to identify unknown bacteria. Students also learn how microbial growth is physically and chemically controlled. 1.00 credit hour. Corequisite: NA 165 General Microbiology for Nursing.

NA 205 Anatomy and Physiology II for Nursing

This course builds on previous anatomy and physiology to include biochemistry, cellular biology, and histology integrated with each body system. Laboratory interpretation will provide students experience in relevance of laboratory values to each body system and how the body systems work together to provide homeostasis as well as body functions in the healthy and diseased states. 3.00 credit hours. Corequisite: NA 205L Anatomy and Physiology II for Nursing Lab.

NA 205L Anatomy and Physiology II for Nursing Lab

The concepts of anatomy and physiology are applied to the study and assessment of the cardiovascular, immune, respiratory, urinary, digestive, and reproductive systems. Partial applications are integrated as well as laboratory work with partial applications involving the dissection of a cat and a comparison of the cat to the human organism. 1.00 credit hour. Corequisite: NA 205 Anatomy and Physiology II for Nursing.

NA 212 Advanced Pharmacology

This course focuses on the effects of drug therapy on human body systems. The body systems include the following: central nervous system; autonomic nervous system; and the cardiovascular, renal, endocrine, respiratory, and gastrointestinal systems. Also included are anti-infective, anti-inflammatory, immune and biological modifiers and chemotherapeutic, hematological, dermatologic, ophthalmic and optic agents. This course will cover laboratory practice of medication administration. It integrates the knowledge of physiology, chemistry, nursing fundamentals, calculations, interpretation of medication orders as well as the knowledge and ability to administer medications safely and their pharmacokinetics. 2.00 credit hours. Prerequisite: None.

NA 220 Medical Surgical Nursing I for RNs

This course expands on the scope of adult medical-surgical nursing by focusing on adult clients with increasingly complex self-care deficits and subsequent increase in nursing agency. The student will use critical thinking processes to guide care-planning decisions for the adult client. This course includes the nurse's role in assisting the client with self-management of acute and chronic illness. Emphasis will be placed on working as an effective member of the healthcare team, and beginning leadership skills will be presented. 4.00 credit hours. Prerequisite: NA 212 Advanced Pharmacology. Corequisite NA 225 Medical/Surgical Nursing I for RNs Clinical.

NA 225 Medical Surgical Nursing I for RNs Clinical

The student will use critical thinking processes to guide care-planning decisions for the adult client. The student will plan, implement, and evaluate medical-surgical nursing interventions for appropriateness in preparation for the client's discharge. This clinical course includes the nurse's role in assisting the client with self-management of acute and chronic illness. Students assist with planning and managing care for groups of clients. 1.00 credit hours. Corequisite NA 220 Medical Surgical Nursing I for RNs.

NA 230 Nutrition

This course offers a nursing perspective on the role of nutrition in health promotion, primary prevention, and clinical disease states. Emphasis will be on classroom and clinical application of critical thinking and caring therapeutic nursing interventions in acute, chronic, and community healthcare settings. Concepts and issues examined include nutrition throughout the lifespan, nutrition as related to specific disease processes, community nutrition, and USDA dietary guidelines. 3.00 credit hours. Prerequisite: None.

NA 235 Obstetrics/Pediatric Nursing

This course focuses on the role of the nurse on meeting the physiological, psychosocial, cultural, and developmental needs of the child and childbearing family. Course content includes human growth and development, pediatric care, prenatal, perinatal, postnatal and newborn care. Nutrition, pharmacology, culture, ethics, patient education, communication, critical thinking, and application of the nursing process are integrated throughout the course. 4.00 credit hours, Prerequisite: NA 220 Medical Surgical Nursing I for RNs. Corequisite NA 240 Obstetrics/Pediatric Nursing Clinical.

NA 240 Obstetrics/Pediatric Nursing Clinical

The student will observe, assess, and participate in the care of the maternal, newborn, and child client. This course focuses on the role of the nurse on meeting the physiological, psychosocial, cultural, and developmental needs of the childbearing family and pediatric client in a variety of settings. Upon completion of this course, students will be able to provide and manage care for maternal, newborn, and pediatric clients. 1.00 credit hours. Prerequisite: NA 225 Medical Surgical Nursing I for RNs Clinical. Corequisite NA 235 Obstetrics/Pediatric Nursing.

NA 250 Medical Surgical Nursing II for RNs

This course is a continuation of Medical Surgical Nursing I for RNs. The scope of adult medical-surgical nursing is broadened to include care of adult clients in complex and critical care areas. Upon completion of the course, the student will be able to identify adult client's complex self-care deficits and plan and provide appropriate nursing agency to adult clients in complex and critical care areas. Emphasis will be placed on clinical decision-making for patient-centered collaborative care along with emergency and disaster preparedness. 3.00 credit hours. Prerequisite: NA 220 Medical Surgical Nursing I for RNs Clinical.

NA 260 Mental Health for the RN

This course focuses on the continued application of the nursing process, critical thinking, and caring therapeutic interventions in acute, chronic, and community-based psychiatric-mental health settings. Basic mental health concepts and issues examined include: cultural beliefs and ethnic diversity of the client and nurse as well as legal and ethical issues; therapeutic nurse-client relationship; self-awareness; neuro-biopsychosocial theories; therapies and factors affecting health and wellness of clients with common psychiatric-mental health needs; and disorders across the life span, i.e., anxiety, mood, thought, cognitive, personality, and eating disorders. Emphasis is placed on client advocacy and collaboration with members of the mental healthcare team. 3.00 credit hours. Corequisite: NA 261 Mental Health for the RN Clinical.

NA 261 Mental Health for the RN Clinical

This practicum will focus on continuing nursing knowledge and skills as related to mental health nursing. Students will continue to develop these areas in hospital and community settings, guided by instructors knowledgeable in the field of mental health. 1.00 credit hour. Corequisite: NA 260 Mental Health for the RN.

NA 281 Role Transition: LPN to RN

This course provides an overview of theoretical and clinical concepts needed for the transitional role of the graduating associate-degree nurse as a provider and manager of care and a member of the profession. Concepts of effective leadership styles, advanced therapeutic communication, delegation, conflict resolution, time management, nursing ethics, and professional issues, including the recognition of the impact of cultural beliefs and ethnic diversity of the client, are analyzed and compared in this final nursing course. Emphasis is placed on classroom and clinical application of critical thinking and caring therapeutic nursing interventions in acute, chronic, and community-based healthcare settings using advanced technological and psychomotor skills. Utilizing the nursing process and advanced critical thinking, the student

implements the role of the beginning associate-degree nurse as coordinator of care, including theory and clinical accountability to provide quality care in various environments. 4.00 credit hours. Prerequisite: Final semester.

NA 282 NCLEX RN Review

This course is designed to thoroughly prepare the student for the registered nursing licensure exam. It covers essential nursing content from all core clinical areas, the nursing process, and client needs categories. Students will have the opportunity to develop and improve their test-taking skills through computer simulations and practice tests. Extensive student performance evaluation is provided throughout the course to aid in identifying and strengthening necessary content areas. 4.00 credit hours. Prerequisite: Final course.

NA 295 RN Clinical Internship

During the Internship phase of training, the student will function in a registered nurse capacity with a preceptor. Their internship will provide the student with the opportunity to experience and participate in their profession as a registered nurse. The preceptorship will center on observing experienced personnel as well as participating in actual nursing activities under close supervision of other registered nurse professionals. 3.00 credit hours. Prerequisite: Final semester.

(NB) NURSING/NURSING BRIDGE

NB 106 Introduction to Professional Nursing

Those concepts that formulate the profession of nursing will be presented to students including nursing, health, and environment. The primary roles of the baccalaureate-prepared nurse will be investigated. 2.00 credit hours. Prerequisite: None.

NB 117 Introduction to Clinical Nursing

This clinical course builds on the Introduction to Professional Nursing course and includes simulated and laboratory-based experiences focused on the nursing care of individual adult patients. The concepts of critical thinking in clinical settings, culturally competent care, and the nurse's role in interdisciplinary healthcare environments will be introduced. Foundational nursing skills are practiced and integrated into the nursing process. 2.00 credit hours. Prerequisite: NB 106 Introduction to Professional Nursing. Corequisite: NB 117L Introduction to Clinical Nursing Lab.

NB 117L Introduction to Clinical Nursing Lab

This is the lab portion of NB 117, Introduction to Clinical Nursing. 1.00 credit hour. Prerequisite: NB 106 Introduction to Professional Nursing. Corequisite: NB 117 Introduction to Clinical Nursing.

NB 126 Basic Health Assessment

The focus of this course is the development and application of beginning assessment skills across the lifespan. Emphasis is placed on history-taking skills and determining normal versus abnormal clinical signs. 1.00 credit hour. Prerequisite: NB 106 Introduction to Professional Nursing. Corequisite: NB 126L Basic Health Assessment Lab.

NB 126L Basic Health Assessment Lab

This is the lab portion of NB 126, Basic Health Assessment. 1.00 credit hour. Prerequisite: NB 106 Introduction to Professional Nursing. Corequisite: NB 126 Basic Health Assessment.

NB 135 Pharmacology

This course introduces the student to the role of pharmacotherapeutic agents in the treatment of illness and also in the promotion, maintenance, and restoration of wellness in patients throughout the lifespan. These concepts provide the basis for the study of drug actions, indications, side effects, nursing implications, and patient education. 3.00 credit hours. Prerequisites: NB 117/NB 117L Introduction to Clinical Nursing/Lab.

NB 140 Health Assessment and Promotion Across the Lifespan

This course examines the patterns of health and illness in individuals and populations as they relate to the nurse's role in health assessment, health maintenance, and health education. Students will develop interview techniques, therapeutic communication skills, and physical and mental health assessment skills relating to objectives outlined in Healthy People Goals. A systematic review of health screening, as well as physical and psychosocial assessment approaches across the lifespan, will be explored. 2.00 credit hours. Prerequisite: NB 106 Introduction to Professional Nursing. Corequisite: NB 140C Health Assessment and Promotion Across the Lifespan Clinical.

NB 140C Health Assessment and Promotion Across the Lifespan Clinical

This is the clinical portion of NB 140, Health Assessment and Promotion Across the Lifespan. 1.00 credit hours. Prerequisite: NB 106 Introduction to Professional Nursing. Corequisite: NB 140 Health Assessment and Promotion Across the Lifespan.

NB 146 Adult Health I

This course prepares students to enter their clinical experiences by providing an understanding of the complexity of the human being and underlying nursing knowledge and critical thinking skills required to respond to health and illness needs of patients. Content includes

nursing clinical assessment and nursing care of the patient across primary, secondary, and tertiary levels of prevention. 3.00 credit hours. Prerequisites: NB 140/NB 140C Health Assessment and Promotion Across the Lifespan/Clinical. Corequisites: NB 146C/NB 146L Adult Health I Clinical/Lab.

NB 146C Adult Health I Clinical

This is the clinical portion of NB 146, Adult Health I. 2.00 credit hours. Prerequisites: NB 140/NB 140C Health Assessment and Promotion Across the Lifespan/Clinical. Corequisites: NB 146/NB 146L Adult Health I/Lab.

NB 146L Adult Health I Lab

This is the lab portion of NB 146, Adult Health I. 1.00 credit hour. Prerequisites: NB 140/NB 140C Health Assessment and Promotion Across the Lifespan/Clinical. Corequisites: NB 146/NB 146C Adult Health I/Clinical.

NB 246 Adult Health II

Building on Adult Health I, this course expands the knowledge base of nursing practice in the role of health promotion, risk reduction, and disease prevention. Emphasis is on the complexity of acute healthcare needs of patients, critical thinking for nursing practice in acute care settings, and the use of evidence-based nursing interventions to respond to changing healthcare needs of the acutely ill patient. 3.00 credit hours. Prerequisites: NB 146/NB 146C/NB 146L Adult Health I/Clinical/Lab. Corequisites: NB 246C/NB 246L Adult Health II Clinical/Lab.

NB 246C Adult Health II Clinical

This is the clinical portion of NB 246, Adult Health II. 3.00 credit hours. Prerequisites: NB 146/NB 146C/NB 146L Adult Health I/Clinical/Lab. Corequisites: NB 246/NB 246L Adult Health II/Lab.

NB 246L Adult Health II Lab

This is the lab portion of NB 246, Adult Health II. 1.00 credit hour. Prerequisites: NB 146/NB 146C/NB 146L Adult Health I/Clinical/Lab. Corequisites: NB 246/NB 246C Adult Health II/Clinical.

NB 256 Mental Health Nursing

This course addresses mental health issues within a holistic nursing context, emphasizing adaptive and maladaptive behaviors. Concepts relevant to mental health and psychiatric nursing practice will be emphasized. 2.00 credit hours. Prerequisites: NB 246/NB 246C/NB 246L Adult Health II/Clinical/Lab. Corequisite: NB 256C Mental Health Nursing Clinical.

NB 256C Mental Health Nursing Clinical

This is the clinical portion of NB 256, Mental Health Nursing. 1.00 credit hour. Prerequisites: NB 246/NB 246C/NB 246L Adult Health II/Clinical/Lab. Corequisite: NB 256 Mental Health Nursing.

NB 305 Professional Role Transition

This course is designed to assist adult learners with returning-to-school issues. The course provides a link between previously learned basic nursing theory and skills with baccalaureate-level courses. The course begins to build new knowledge base in professional nursing. 3.00 credit hours. Prerequisite: None.

NB 310 Pathophysiology

This course examines the pathophysiological bases for disease process throughout the lifespan, with an emphasis on nursing clinical applications. The content builds upon previous understanding of anatomy, physiology, microbiology, basic chemistry, and the manifestations of disease. Alterations in pathophysiological functions of body systems are discussed. Physiological theory and treatment implications are explored. 3.00 credit hours. Prerequisites: SC 145/SC 145L Anatomy and Physiology I/Lab and SC 245/SC 245L Anatomy and Physiology II/Lab. The student must receive a grade of C+ or better in these prerequisites.

NB 330 Legal and Ethical Issues in Nursing

This course analyzes theoretical and clinical nursing situations, applying ethical principles and decision-making models. The basic doctrines and principles utilized for providing legally acceptable nursing care, based on standards of nursing practice, are examined. 3.00 credit hours. Prerequisite: NB 106 Introduction to Professional Nursing or NB 305 Professional Role Transition.

NB 345 Health Assessment and Promotion Across the Lifespan

This course examines the patterns of health and illness in individuals and populations as they relate to the nurse's role in health assessment, health maintenance, and health education. Students will develop interview techniques, therapeutic communication skills, and physical and mental health assessment skills relating to objectives outlined in *Healthy People Goals*. A systematic review of health screening, as well as physical and psychosocial assessment approaches across the lifespan, will be explored. 3.00 credit hours. Prerequisite: NB 305 Professional Role Transition.

NB 351 Family Nursing

This course focuses on nursing care as it relates to the function and structure of the childbearing and childrearing family, including the specific experiences of pregnancy, childbirth, postpartum experiences, and the care of newborns and children. It explores the nurse's role in promoting and maintaining family health. Cultural and lifespan developmental considerations within a family context will be included. 3.00 credit hours. Prerequisites: NB 246/NB 246C/NB 246L Adult Health II/Clinical/Lab. Corequisites: NB 351C/NB 351L Family Nursing Clinical/Lab.

NB 351C Family Nursing Clinical

This is the clinical portion of NB 351, Family Nursing. 1.00 credit hour. Prerequisites: NB 246/NB 246C/NB 246L Adult Health II/Clinical/Lab. Corequisites: NB 351/NB 351L Family Nursing/Lab.

NB 351L Family Nursing Lab

This is the lab portion of NB 351, Family Nursing. 1.00 credit hour. Prerequisites: NB 246/NB 246C/NB 246L Adult Health II/Clinical/Lab. Corequisites: NB 351/NB 351C Family Nursing/Clinical.

NB 356 Adult Health III

This course expands on previous nursing knowledge and skills to provide care to patients that have complex health stressors with unpredictable outcomes. The focus is on caring for patients in specialty settings such as critical care, cardiovascular care, surgery, and emergency care. 1.00 credit hour. Prerequisites: NB 246/NB 246C/NB 246L Adult Health II/Clinical/Lab. Corequisites: NB 356C/NB 356L Adult Health III Clinical/Lab.

NB 356C Adult Health III Clinical

This is the clinical portion of NB 356, Adult Health III. 1.00 credit hour. Prerequisites: NB 246/NB 246C/NB 246L Adult Health II/Clinical/Lab. Corequisites: NB 356/NB 356L Adult Health III/Lab.

NB 356L Adult Health III Lab

This is the lab portion of NB 356, Adult Health III. 1.00 credit hour. Prerequisites: NB 246/NB 246C/NB 246L Adult Health II/Clinical/Lab. Corequisites: NB 356/NB 356C Adult Health III/Clinical.

NB 405 Gerontological Nursing

This course provides an opportunity to explore the area of gerontological nursing, a field of nursing focusing on the care of the older adult. Normal aging processes and risk factors that affect the health and functioning of older adults are studied as well as nursing approaches to managing those needs/risks. Ethical and legal issues related to the nursing care of older adults are explored. 2.00 credit hours. Prerequisite: NB 245 Adult Health II.

NB 411 Theoretical Basis for Nursing

This course examines selected concepts and theories as a basis for decision-making in professional nursing practice. The student will learn to critique the components of the theories as well as explore the value of the theories to nursing. This critique and evaluation will include consideration of the contribution of theory to the conduct of research and evidence-based practice. Essential to this process is to identify situations that can be better understood or improved by the use of relevant theory and strategies for applying a theory to nursing clinical practice, leadership and management, education, and research. 3.00 credit hours. Prerequisites: NB 305 Professional Role Transition, NB 310 Pathophysiology, NB 330 Legal and Ethical Issues in Nursing and NB 345 Health Assessment and Promotion Across the Lifespan.

NB 416 Designing and Managing Nursing Care

The focus of this course is on managing nursing care of groups of patients with continuing care needs in a variety of interdisciplinary clinical settings. Emphasis is on the daily management of care for the long-term care patient population. 1.00 credit hour. Prerequisites: NB 246/NB 246C/NB 246L Adult Health II/Clinical/Lab. Corequisite: NB 416C Designing and Managing Nursing Care Clinical.

NB 416C Designing and Managing Nursing Care Clinical

This is the clinical portion of NB 416, Designing and Managing Nursing Care. 2.00 credit hours. Prerequisites: NB 246/NB 246C/NB 246L Adult Health II/Clinical/Lab. Corequisite: NB 416 Designing and Managing Nursing Care.

NB 420 Nursing Informatics

This course is designed to examine computers, electronic technologies, and selected computer applications of data management through information systems and telecommunications. The impact of these technologies on nursing practice, administration, teaching, and research will be examined. 3.00 credit hours. Prerequisites: IS 102 Computers and Application Software, (NB 246/NB 246C/NB 246L Adult Health II/Clinical/Lab or NB 305 Professional Role Transition), NB 310 Pathophysiology, NB 330 Legal and Ethical Issues in Nursing, and (NB 140/NB 140C Health Assessment and Promotion Across the Lifespan/Clinical or NB 345 Health Assessment and Promotion Across the Lifespan).

NB 431 Evidence-Based Nursing Research and Practice

This course examines the concepts of evidence-based nursing practice as applied to selected clinical situations. A nursing research proposal, including a review of the literature and reference materials, will be completed using situations relating to evidence-based nursing practice.

3.00 credit hours. Prerequisites: MA 320 Statistics, (NB 246/NB 246C/NB 246L Adult Health II/Clinical/Lab or NB 305 Professional Role Transition), and NB 330 Legal and Ethical Issues in Nursing.

NB 440 National and Global Health and Policy Issues

This course is an intensive overview of national and global health issues as well as the origin and effect of disease. Students will examine the natural history of disease and identify the frequency, distribution, and causation of disease. Policy development, healthcare systems, and the role of national and global healthcare agencies are examined. A course project is required for completion of this course. 3.00 credit hours. Prerequisites: (NB 246/NB 246C/NB 246L Adult Health II/Clinical/Lab or NB 305 Professional Role Transition), NB 310 Pathophysiology, NB 330 Legal and Ethical Issues in Nursing, and (NB 140/NB 140C Health Assessment and Promotion Across the Lifespan/Clinical or NB 345 Health Assessment and Promotion Across the Lifespan).

NB 450 Nursing Leadership and Management

This course will examine the student's leadership skills that are necessary for a successful practice in contemporary healthcare facilities. It explores leadership, management, and organizational theories necessary to provide effective delivery of nursing care to a diverse population in varied clinical settings. It evaluates societal and political trends and issues as they relate to healthcare. 3.00 credit hours. Prerequisites: NB 330 Legal and Ethical Issues in Nursing and NB 440 National and Global Health and Policy Issues.

NB 460 Community Nursing

This course focuses on the roles of community and public health nursing as they pertain to promotion of a healthy community. Students will be guided to think critically about the role and core competencies of community health nursing in promoting health, preventing disease, and restoring health. Emphasis is placed on the examination of concepts, theories, and practice from nursing and public health to assess and respond to the health status and needs of diverse communities. 3.00 credit hours. Prerequisites: NB 246/NB 246C/NB 246L Adult Health II/Clinical/Lab or NB 305 Professional Role Transition. Corequisite: NB 460C Community Nursing or NB 471 Community Nursing Practice.

NB 460C Community Nursing Clinical

This is the clinical portion of NB 460, Community Nursing. 2.00 credit hours. Prerequisites: NB 246/NB 246C/NB 246L Adult Health II/Clinical/Lab. Corequisite: NB 460 Community Nursing.

NB 471 Community Nursing Practice

This course provides the opportunity for students to assess a selected community in partnership with various community and healthcare agencies, emphasizing multidisciplinary collaboration. A community project will be completed under the direction of course faculty. The University will assist students in locating community agencies and will facilitate their community clinical placement if needed. 2.00 credit hours. Prerequisite: NB 305 Professional Role Transition. Corequisite: NB 460 Community Nursing.

NB 476C Nursing Preceptorship Clinical

This course provides an opportunity for synthesis of prior learning and educational experiences. This is the capstone course for the nursing major and may occur in a wide variety of settings. Students will work with a preceptor to synthesize theory, assessment, and competence expected of BSN graduates. An NCLEX-RN review will take place during the course. 4.00 credit hours. Prerequisite: Final course. Corequisite: NB 476L Nursing Preceptorship Lab.

NB 476L Nursing Preceptorship Lab

This is the lab portion of NB 476C, Nursing Preceptorship Clinical. 1.00 credit hour. Prerequisite: Final course. Corequisite: NB 476C Nursing Preceptorship Clinical.

(NF) NURSING—FLORIDA

NF 111 Nursing I

This course introduces basic concepts necessary for the provision of safe, patient-centered nursing care to diverse populations. The nursing process, communication techniques, and legal and ethical responsibilities of the nurse are introduced. Basic nursing skills and health assessment are integrated and applied in the nursing laboratory. Upon successful completion, the student will be able to provide quality nursing care, incorporating the concepts identified in this course. 7.00 credit hours. Prerequisites: MO 144 Medical Terminology, SC 165/SC 165L General Microbiology/Lab, SC 245/SC 245L Anatomy and Physiology II/Lab or permission from the department.

NF 112 Nursing II

This course introduces additional basic concepts necessary for the provision of safe, patient-centered nursing care to diverse populations across the lifespan. A nursing process approach is used to emphasize evidence-based practice, quality improvement, critical thinking, communication, collaboration, technology, and skills. Nursing skills and medication administration are integrated and applied in the nursing laboratory. Upon successful completion, the student will be able to provide quality nursing care in the clinical setting. 6.00 credit hours. Prerequisite: NF 111 Nursing I.

NF 113 Nursing III

This course is designed to further develop and enhance concepts related to the nursing management of ill clients. A nursing process approach is utilized to emphasize evidence-based practice, critical thinking, teaching/learning, professional behaviors, communication, collaboration, and managing care. Upon successful completion, the student will be able to provide safe, patient-centered nursing care to developmentally and culturally diverse populations in the acute care or community settings. 6.00 credit hours. Prerequisite: NF 112 Nursing II.

NF 170 LPN Transition to RN Practice

This course is designed to introduce the practical nurse to the concepts related to professional nursing care. Emphasis will be placed on the scope of practice of the registered nurse. A nursing process approach is utilized to emphasize evidence-based practice, critical thinking, teaching/learning, professional behaviors, communication, collaboration, managing care, technology, and skills. Nursing skills, medication administration, and health assessment are integrated and applied in the nursing laboratory. Upon successful completion, the student will be able to provide quality nursing care, incorporating the concepts identified in this course. 6.00 credit hours. Prerequisites: SC 165/SC 165L General Microbiology/Lab and SC 245/SC 245L Anatomy and Physiology II/Lab.

NF 214 Nursing IV

This course is designed to broaden concepts related to nursing management of ill clients. The nursing process is used to expand upon previously learned concepts for the provision of safe, patient-centered nursing care to developmentally and culturally diverse populations. This course emphasizes evidence-based practice, critical thinking, teaching/learning, professional behaviors, communication, collaboration, and managing care. Upon successful completion, the student will be able to provide safe, holistic nursing care for one or more ill clients in the acute care of community settings. 6.00 credit hours. Prerequisite: NF 113 Nursing III or NF 170 LPN Transition to RN Practice.

NF 215 Nursing V

This course is designed to augment previously learned concepts and introduces care of the family unit. The nursing process is utilized to emphasize the concepts of evidence-based practice, critical thinking, teaching/learning, professional behaviors, communication, collaboration, managing care, lifespan development, family, health as a continuum, and advocacy. Upon successful completion, the student will be able to provide safe community and acute nursing care to the family unit throughout the wellness/illness cycle. 6.00 credit hours. Prerequisite: NF 214 Nursing IV.

NF 216 Nursing VI

This course is designed to integrate previously learned concepts as well as incorporate leadership and professionalism. The nursing process focuses on complex nursing care, and emphasis is placed on collaboration, managing care, advocacy, legal issues, policy, healthcare systems, ethics, accountability, evidence-based practice, healthcare systems, and quality improvement. Upon successful completion, the student will be able to provide safe nursing care to complex clients in the acute care setting. 6.00 credit hours. Prerequisite: NF 215 Nursing V.

NF 217 Nursing VII

This course provides a clinical practicum for the application of concepts learned throughout the program. Evidence-based practice, critical thinking, teaching/learning, professional behaviors, communication, collaboration, managing care, management/leadership, skills/technology, and professional development are embodied and exhibited. The student engages in the application of the nursing process in collaboration with the RN preceptor who guides the clinical experience. Upon successful completion, the student will be able to demonstrate the knowledge, skills, and behaviors necessary to provide safe, individualized entry-level nursing care. 4.00 credit hours. Prerequisite: NF 216 Nursing VI. Corequisite NF 218 Nursing VIII.

NF 218 Nursing VIII

This course provides the student with the opportunity to assess his/her strengths and areas for improvement in preparation for the NCLEX-RN®. Utilizing critical thinking and the nursing process, integration of all previous concepts will be emphasized through the use of case studies, integrated testing, and directed study. 2.00 credit hours. Prerequisite: NF 216 Nursing VI. Corequisite NF 217 Nursing VII.

NF 310 Nursing Pathophysiology

This course focuses on alterations of selected physiological functions that occur in response to a disease process or compensate for common stressors like inflammation or pain. The content builds upon previous understanding of anatomy, physiology, microbiology, basic chemistry, and the usual manifestations of common diseases. Alterations in pathophysiological functions of cells and the interrelationships of body systems are explored. Physiological theory and treatment are discussed using case situations and discussion questions that exemplify the content. 3.00 credit hours. Prerequisites: SC 245/SC 245L Anatomy and Physiology II/Lab.

NF 317 Nursing VII

This course teaches concepts underlying professional career development in nursing. The role as a nurse manager, an integral part of a healthcare institution hierarchy, is explored. Emphasis will be placed on the role of the nurse as a frontline manager, utilizing interprofessional communication skills and collaboration. The goal of these conceptual applications is to achieve excellence in the administration of healthcare organizations and in the provision of healthcare. Concentration on the acquisition of leadership behaviors, values, and the roles of planner,

coordinator, provider, and evaluator of care are emphasized. The course focuses on concepts and tools required to provide safe care with evidence-based leadership. Focus of the nurse as educator, including principles and theories of teaching and learning, will be identified. Strategies for nurses to teach in staff development, as well as their role as a preceptor and in academic programs, will be explored. Students are introduced to quality improvement, case management, utilization review, staff development, peer review, and competency evaluation in healthcare. 6.00 credit hours. Prerequisite: NF 216 Nursing VI.

NF 318 Nursing VIII

This course analyzes the impact of educational, legal, ethical, political, and social issues on health policy and healthcare as well as rising liability insurance costs and perspectives on American healthcare delivery, past, present, and future. The emphasis is on nursing at the microsystem level. Healthcare policies at the local, regional, state, national, and global levels will be discussed, including similarities and differences. Global differences and their relationship to American healthcare practice are explored. Issues of funding methods, resource allocation, access to care, and disparities impacting the healthcare system are addressed from a policy perspective. Emphasis will be placed on evaluation of the effects of practice and healthcare laws and policies related to practice, consumer health, and the profession of nursing associated with the cultural differences, current legislation, political and religious controversy, economic constraints, and technology. Factors will be defined that may influence a proactive response to achieve safety, prevention of errors, and quality patient outcomes. 6.00 credit hours. Prerequisite: NF 317 Nursing VII.

NF 319 Nursing IX

This course analyzes public health concepts, trends, theories, and issues for advanced community health nursing practice. Aggregates, stakeholders, high-risk populations, public health functions, domestic and international healthcare delivery systems, and conceptual and scientific frameworks for community/public health nursing practice are incorporated. Guided practice in the development and refinement of specific assessment knowledge, techniques, and skills are explored to assist in recognizing normal and deviated health patterns and at-risk behaviors in multicultural clients and populations across the lifespan. 6.00 credit hours. Prerequisite: NF 318 Nursing VIII.

NF 420 Nursing X

This course will focus on healthcare information systems, database management, data quality, workload, quality improvement, resource utilization, and system design. General computer office applications and healthcare-specific technology applications are presented. Technology that supports patient care and the benefits of healthcare technology are emphasized. Students will learn about emerging information sources and communication technology and their impact on healthcare. Emphasis will be placed on trends and issues in clinical technology as well as security and the use of databases. Students collaborate with a faculty mentor to create a portfolio demonstrating the progress made toward individual and program goals and outcomes. The portfolio includes evidence of ability to conduct integral health assessments and to develop and implement service-learning projects. When completed, the portfolio will contain examples of papers, evaluations from faculty and self, and a reflective summary of the learning that occurred. The portfolio is designed to demonstrate evidence of mastery of program and course learning outcomes and serves as an assessment of student learning. 5.00 credit hours. Prerequisite: NF 319 Nursing IX.

NF 421 Nursing XI

This course introduces the methods of clinical and scientific inquiry, with a focus on research methodologies, nursing theory, and the application of an evidence-based practice approach to patient care. Emphasis is placed on the development of the decision-making skills required to critically appraise published investigations and to utilize research findings to effect positive change in healthcare through evidence-based practice. Students will utilize various databases and enhance their ability to analyze and synthesize research findings appropriate to clinical practice. 6.00 credit hours. Prerequisite: NF 420 Nursing X.

NF 422 Clinical Practicum

This is a clinical course that provides a practicum for the application of concepts learned throughout the program as the student engages in the full scope of professional nursing practice. The RN preceptor will provide the student with a guided clinical experience. Upon completion, the student should be able to demonstrate the knowledge, skills, and behaviors necessary to provide safe, individualized entry-level nursing care. 4.00 credit hours. Prerequisite: NF 421 Nursing XI. Corequisite: NF 423 Integration of Nursing Concepts.

NF 423 Integration of Nursing Concepts

This course provides the student with the opportunity to evaluate his/her strengths and weaknesses in preparation for the NCLEX-RN® exam. Utilization of the nursing process and integration of all previous concepts will be emphasized through the use of case studies, integrated testing, and directed study. 2.00 credit hours. Prerequisite: NF 421 Nursing XI. Corequisite: NF 422 Clinical Practicum.

(NM) NURSING—MINNESOTA

NM 121L Introduction to Professional Nursing

This course provides the foundation for professional nursing practice. Emphasis is placed on wellness, physiological, psychological, sociocultural, and spiritual factors which contribute to the well-being of individual patients across the lifespan. The application of the nursing process and

clinical decision-making are explored. Recognition and development of therapeutic communication within the patient-nurse relationship is introduced. This course prepares the student to perform a comprehensive health assessment of physiological, psychological, sociocultural, and spiritual variables of individual patients across the lifespan. Interviewing and documentation skills related to the comprehensive health assessment are developed. In addition to assessment, a focus on the theoretical basis for selected nursing skills and the development of the student's psychomotor ability to perform these skills is emphasized. 6.00 credit hours. Prerequisite: None. Corequisite: NM 125 The Professional Nurse of the Future.

NM 125 The Professional Nurse of the Future

This introductory course will actualize the definition of nursing to beginning students and help them understand how the profession relates to the overall healthcare system. Those concepts that formulate the metaparadigm of nursing will be presented to students in a way that students will understand why they are the framework of nursing; these concepts include person, health, environment, and the nurse. Many varied roles and responsibilities of the 21st century professional nurse will be explored. The historical and theoretical background of nursing will be introduced with the context of nursing theorists that impact practice today. Evidenced-based nursing will continue to be the foundation of the interventions for safe patient care. Those concepts which will be emphasized and reinforced throughout the program will be introduced, including health promotion, critical thinking, evidence-based practice, ethical nursing practice, the primary roles baccalaureate prepared nurses will assume, and the importance of interdisciplinary practice. 2.00 credit hours. Prerequisite: None. Corequisite: NM 121L Introduction to Professional Nursing.

NM 130 Adult Health I

This course prepares students to enter their clinical experiences by providing an understanding of the complexity of the human being and the underlying nursing knowledge and critical thinking skills required to respond to healthcare needs. The course integrates use of the nursing process along with principles of communication and basic nursing skills in order to meet the health and illness needs of clients from diverse backgrounds. Content includes basic assessment skills and knowledge plus the integral role of health promotion, risk reduction, and disease prevention within primary, secondary, and tertiary care settings. The role of the nurse as educator is introduced in this course. 4.00 credit hours. Prerequisite: NM 121L Introduction to Professional Nursing. Corequisite: NM 130L Clinical Nursing I.

NM 130L Clinical Nursing I

This clinical course builds on the Introduction to Professional Nursing and The Professional Nurse of the Future courses. This clinical course includes simulated and clinical practice sessions plus beginning interactions with individual adult clients. To develop beginning assessment skills, emphasis is placed on history-taking skills and determining normal versus abnormal clinical signs in referring patients to appropriate resources. Students complete a holistic health assessment at the completion of this course. The concepts of critical thinking in a clinical setting and culturally competent and interdisciplinary care will be introduced. 3.00 credit hours. Prerequisite: NM 121L Introduction to Professional Nursing. Corequisite: NM 130 Adult Health I.

NM 135 Pharmacology

This course introduces the student to the role of pharmacotherapeutic agents in the treatment of illness as well as the promotion, maintenance, and restoration of wellness in clients throughout the lifespan. Basic pharmacokinetic and pharmacodynamic principles are introduced. These concepts provide the basis for the study of drug actions, indications, side effects, nursing implications, and client education. All major drug groups are addressed. This course will provide a foundation for critical thinking and the utilization of the nursing process in the use of pharmacotherapeutic agents. 3.00 credit hours. Prerequisite: NM 121L Introduction to Professional Nursing.

NM 220 Adult Health II

Building on Adult Health I, this course expands the knowledge base of adult clients. It addresses the complexity of the human being and specifies the underlying nursing knowledge and critical thinking skills required to respond to healthcare needs. The focus is on specific healthcare problems and the interventions to deal with these problems. The course integrates nursing process, principles of communication, and decision-making and nursing skills necessary for applying health assessment data and pathophysiology content to the experience of health and illness of clients from diverse backgrounds. Content includes expanded assessment skills and knowledge plus the integral role of health promotion, risk reduction, and disease prevention within primary, secondary, and tertiary care settings. The roles of the nurse as educator and clinician are expanded in this course. 4.00 credit hours. Prerequisites: NM 130 Adult Health I, NM 130L Clinical Nursing, NM 135 Pharmacology, and NM 250 Applied Pathophysiology. Corequisite: NM 220L Clinical Nursing II.

NM 220L Clinical Nursing II

This clinical course focuses on complex clinical experiences related to the content in Adult Health II. Students use critical thinking processes to guide care-planning decisions for hospitalized clients. Students also have the opportunity to plan, implement, and evaluate medical and surgical nursing interventions to prepare clients for discharge following hospital care. This course integrates pharmacology and health assessment content applicable to the care of clients from diverse, ethnic, cultural, and geographic backgrounds. 4.00 credit hours. Prerequisites: NM 130 Adult Health I, NM 130L Clinical Nursing I, NM 135 Pharmacology, and NM 250 Applied Pathophysiology. Corequisite: NM 220 Adult Health II.

NM 230L Psychiatric Nursing: Contemporary Practice

This course will address mental health issues within a holistic nursing context. Specific content will include historical and stereotypical views of psychiatric nursing care, biological versus behavioral approaches, therapeutic versus non-therapeutic communication, and the role of self-esteem. Evaluation of specific psychiatric disorders and nursing interventions appropriate to these disorders will be reviewed. 4.00 credit hours. Prerequisites: NM 220 Adult Health II and NM 220L Clinical Nursing II.

NM 245 Cultural Diversity in Nursing

This course focuses on the diversity in nursing practice in our society. It examines our own cultural beliefs, values, and practices and other cultures in the healthcare system. The course is also designed to understand the concept of culture and the nurse's cultural awareness of the relationships between Westernized medicine and traditional health practices and recognition of selected cultures within the United States. Understanding of the ethical aspects associated with the professional nursing practice will be presented. The nursing process will be the guide for assessment, interventions, and evaluation of transcultural nursing care. 3.00 credit hours. Prerequisites: NM 220 Adult Health II and NM 220L Clinical Nursing II.

NM 250 Applied Pathophysiology

This course focuses on alterations of selected physiological functions that occur in response to a disease process or compensate for common stressors like inflammation or pain. The content builds upon previous understanding of anatomy, physiology, microbiology, basic chemistry, and the usual manifestations of common diseases. Alterations in pathophysiological functions of cells and in the interrelationships of body systems are explored. Physiological theory and treatment are discussed using case situations and discussion questions that exemplify the content. 3.00 credit hours. Prerequisite: NM 121L Introduction to Professional Nursing.

NM 335L Designing and Managing Nursing Care

This is the first course in the management/leadership sequence of two courses (followed by Leadership and Issues in Nursing). This course focuses on the professional nurse's role in planning and managing care for groups of clients as a staff nurse or unit manager. The second course will focus on nursing leadership at a higher level with discussion of influences beyond the healthcare facility. As healthcare providers who function autonomously and interdependently, nurses are responsible for professional identity and practice and must develop expertise in supervising, managing, and delegating nursing care within the policies and procedures of a health system. Fiscal management is an important part of this course. Additionally, the management of information and ability to assist patients in utilizing information is emphasized. 2.00 credit hours. Prerequisite: NM 125 The Professional Nurse of the Future.

NM 341L Family Nursing I

This course focuses on nursing care as it relates to the function and structure of the childbearing family, including the specific experiences of pregnancy, childbirth, postpartum, and the care of newborns. It explores the nurse's role in promoting and maintaining family health. Specific content includes reproductive and sexual health, psychological and physiologic changes of pregnancy, prenatal care, labor and delivery, postpartum, and the care of the newborn. Cultural considerations within a family context will be included. Clinical experiences will include exposure to the pregnant woman, cares associated with both prenatal and postpartum periods, and various educational modalities for the mother. 4.00 credit hours. Prerequisites: NM 135 Pharmacology, NM 220 Adult Health II, NM 220L Clinical Nursing II, and NM 250 Applied Pathophysiology. Corequisite: NM 346L Family Nursing II.

NM 346L Family Nursing II

The focus of this course is the nursing care of a child within a family context. This course addresses care of the pediatric patient from infancy through adolescence. The class examines the common stressors for the child and family throughout the growing years and evidence-based nursing interventions to help deal with these stressors. The critical nursing roles of health promotion and disease prevention within the stages of infancy through adolescence are major threads throughout this course. Developmental stages of children, including common health concerns at these stages, are examined within a family and cultural context. 4.00 credit hours. Prerequisites: NM 135 Pharmacology, NM 220 Adult Health II, NM 220L Clinical Nursing II, and NM 250 Applied Pathophysiology. Corequisite: NM 341L Family Nursing I.

NM 350L Public Health Nursing

This course provides the foundation for community-based application to examine a variety of issues in healthcare practice. Students are able to complete a community assessment and develop a community program for a population at risk. Students are able to explore dimensions of multicultural issues and the impact of health policy on the health of a community. The clinical experience in this course focuses on comprehensive management of family, group, and community clients within the context of the nursing process and public health science. Emphasis is placed on the assessment and development of nursing care systems for families, groups, and populations within communities. Interrelated classroom and clinical experiences include care of clients across the lifespan and at all levels of prevention with an emphasis on preventative health services and health promotion. 4.00 credit hours. Prerequisite: NM 460L Clinical Nursing III.

NM 410 Ethics in Nursing

This course is designed to introduce nursing students to ethical theory and practice with a view of enhancing both their understanding of value issues in healthcare and their future practice as healthcare professionals. Given their unique role in

healthcare, nurses have special ethical responsibilities. Emphasis is placed on the development of a personal values system that includes the capacity to make and act upon ethical judgments and the ability to apply decision-making in nursing practice. 2.00 credit hours. Prerequisite: NM 125 The Professional Nurse of the Future.

NM 420 Gerontological Nursing

This course provides an opportunity to explore the area of gerontological nursing, a field of nursing that focuses on the care of older adults. Normal aging processes and risk factors that affect the health and functioning of older adults are studied as well as nursing approaches to managing those needs/risks. Ethical and legal issues related to the nursing care of older adults are explored. 2.00 credit hours. Prerequisites: NM 220 Adult Health II and NM 220L Clinical Nursing II.

NM 460L Clinical Nursing III

This clinical course expands on previous nursing knowledge and skills to provide care to clients with complex health stressors that have unpredictable outcomes. There is a specific focus on caring for: 1) clients in specialty settings such as critical care, cardiovascular care, respiratory care, operating room, recovery room, and emergency care; 2) clients with specific complex clinical problems such as cardiac and respiratory system problems, neurotrauma, cancer, pain management, and multi-system stressors; and 3) clients experiencing critical and unpredictable health problems or predictable terminal illness. 4.00 credit hours. Prerequisites: NM 220 Adult Health II and NM 220L Clinical Nursing II.

NM 465 Nursing Research

This course is designed as an introduction to the role of evidence-based nursing practice (EBP) within the profession. The two goals of this course are: 1) to increase the nurse's awareness, understanding, and appreciation of the principles involved in nursing research; and 2) to prepare the nurse to better understand and utilize research findings in the continued effort to improve nursing practice. Students will be prepared to read reports of nursing research and critically assess their value in practice. To make this learning more meaningful, students will be encouraged to apply the knowledge gained to their own practices. 3.00 credit hours. Prerequisite: None.

NM 470 Preceptorship Seminar

This course is the preparation for the preceptorship course, Nursing Preceptorship With NCLEX Review, for the nursing major. It provides an opportunity for synthesis of prior work and educational experiences with present learning. This knowledge is applied in a self-selected area of nursing practice that may occur in a wide variety of settings. The contract is implemented in the Nursing Preceptorship With NCLEX Review course. 1.00 credit hour. Prerequisite: None.

NM 480 Leadership and Issues in Nursing

This is the second course in the management/leadership sequence of two courses. This course provides the students with the opportunity to explore the leadership behaviors and organizational structures that enhance the delivery of client care. Specific content includes planning and evaluating care delivery systems, strategic planning, shared governance, budgeting and cost-benefit analysis, reimbursement, interdisciplinary collaboration, political action, and healthcare trends. Professional issues that are critical to the delivery of nursing care in the U.S. will be addressed. A major emphasis will be placed on the role of the interdisciplinary approach to delivering high-quality accessible healthcare and the integral role of the professional nurse on this team. 2.00 credit hours. Prerequisite: NM 335L Designing and Managing Nursing Care.

NM 485L Nursing Preceptorship With NCLEX Review

This clinical course is the capstone course for the nursing major. Focus of this course will be on integration of the professional role in various healthcare settings. Students will work with a preceptor to synthesize theory, assessment, and competence expected of BSN graduates. In a collaborative relationship with a preceptor and a faculty advisor, the student implements a learning contract that is specific to the student's learning interests and needs. An NCLEX review will take place during this course. 6.00 credit hours. Prerequisite: NM 470 Preceptorship Seminar.

(NO) NURSING—OHIO

NO 103 Health and Illness Throughout the Lifespan

This course will focus on health promotion for clients across the lifespan. Normal changes related to growth and development will be covered. Changes related to the normal aging process will be explored. The student will gather client data, identify nutritional needs, and assist with nursing care plans and reinforcing teaching plans for the healthy family, pregnant woman, newborn, and developing child. Exposure to healthy behavior patterns will allow the student to recognize maladaptive and adaptive patterns of behavior. 2.00 credit hours. Prerequisite: PS 101 Psychology.

NO 106 Fundamentals of Nursing I

This course introduces the student to the art and science of nursing care, and subsequent courses are built upon the concepts and skills learned in fundamentals and medical-surgical nursing. The science of basic nursing emphasizes health promotion, nursing process, ethical/legal aspects,

health across the life span, critical thinking, nursing skills, up-to-date clinical information, nursing care plans, risk factors, individual education, family involvement, and other related areas. 2.00 credit hours. Corequisite: NO 106L Fundamentals of Nursing I Lab.

NO 106L Fundamentals of Nursing I Lab

This is the lab portion of NO 101. 1.00 clock hour. Corequisite: NO 106 Fundamentals of Nursing.

NO 107 Fundamentals of Nursing II

Fundamental nursing care is directed toward the adult in acute and chronic settings, to include the home, hospital, assisted-living facilities, nursing centers, and veterans facilities. The role of the associate-degree nurse is stressed in physiology, pathophysiology, and psychosocial context by identifying and utilizing cognitive and technical skills as they relate to the care of the adult. 2.00 credit hours. Prerequisite: NO 106 Fundamentals of Nursing I. Corequisite: NO 107L Fundamentals of Nursing II Lab.

NO 107L Fundamentals of Nursing II Lab

This is the lab portion of NO 107. 1.00 credit hour. Corequisite: NO 107 Fundamentals of Nursing II.

NO 108 Fundamentals of Nursing II Clinical

This is the clinical portion of NO 107. 1.00 credit hour. Corequisite: NO 107 Fundamentals of Nursing II.

NO 109 Adult Nursing Systems I

This course introduces the student to the concepts of medical-surgical nursing, and subsequent courses are built upon the concepts and skills learned in medical-surgical nursing. Students are prepared for the vast opportunities in modern healthcare delivery and nursing practice. The science of adult medical-surgical nursing emphasizes health promotion, assessment, care plans, risk factors, genetics, pharmacology, ethics, patient education, and other related areas. Basic medical-surgical nursing care is directed toward the adult in acute and chronic settings. The role of the associate-degree nurse is stressed in physiology, pathophysiology, and psychosocial context as it relates to patient care. 3.00 credit hours. Prerequisite: NO 107 Fundamentals of Nursing II.

NO 110 Adult Nursing Systems I Clinical

This is the clinical portion of NO 104. 1.00 credit hour. Corequisite: NO 109 Adult Nursing Systems I.

NO 111 Therapeutic Use of Self

This course focuses on the communication process within the healthcare setting. Students are encouraged to utilize self awareness skills as they explore complex topics of diversity, culture, end-of-life issues, boundaries, and professionalism. 1.00 credit hour. Prerequisite: PS 101 Psychology. Corequisite: NO 111 Therapeutic Use of Self Lab.

NO 111L Therapeutic Use of Self Lab

This is the lab portion of NO 109. 1.00 credit hour. Corequisite: NO 111 Therapeutic Use of Self.

NO 112 Pharmacology

This course provides instruction in the study of human diseases with focus on the symptoms, signs, causes, and diagnosis of disease. Additionally, students will learn about pharmacology, drug categories, and pharmacological treatment related to human diseases. 2.00 credit hours. Prerequisite: None. Corequisites: SC 245/SC 245L Anatomy and Physiology II/Lab.

NO 208 Nursing Management

This course covers nursing management and professional issues such as healthcare economics, quality control, and legal and ethical dilemmas that the student will encounter in the professional registered nurse role. Course activities will prepare the student for the transition into the nursing practice. 2.00 credit hours. Prerequisite: NO 212 Adult Nursing Systems III.

NO 210 Adult Nursing Systems II

This course continues the concepts of medical-surgical nursing, as begun in Adult Nursing Systems I, and subsequent courses are built upon the concepts and skills learned in medical-surgical nursing. Students are prepared for the vast opportunities in modern healthcare delivery and nursing practice. The science of adult medical-surgical nursing emphasizes: health promotion; assessment; care plans; risk factors; genetics; pharmacology; ethics; patient education control and mobility; digestion and elimination; reproductive and sexual disorders; physical and mental integrity; the integration of body systems; and other related areas. Basic medical-surgical nursing care is directed toward the adult in acute and chronic settings. The role of the associate-degree nurse is stressed in physiology, pathophysiology, and psychosocial context as it relates to patient care. 2.00 credit hours. Prerequisite: NO 109 Adult Nursing Systems I.

NO 211 Adult Nursing Systems II Clinical

This is the clinical portion of NO 210. 1.00 credit hour. Corequisite: NO 210 Adult Nursing Systems II.

NO 212 Adult Nursing Systems III

This course continues with medical surgical nursing in a critical care setting. Complex patient needs are addressed. The nursing process is used to prioritize care within the scope of nursing practice. Critical thinking and managing the total care of clients that are in critical care settings are performed. 2.00 credit hours. Prerequisite: NO 210 Adult Nursing Systems II.

NO 213 Adult Nursing Systems III Clinical

This is the clinical portion of NO 212. 1.00 credit hour. Corequisite: No 212 Adult Nursing Systems III.

NO 214 Maternal/Newborn Self-Care Requisites

This course introduces the scientific basis for maternal, newborn, and women's health. It demonstrates and features the application of the nursing process. Physiological and pathophysiological processes are presented, and the reasons behind professional nursing care and the identification of problems are examined. Legal topics, including standards of care, informed consent, and refusal of treatment, are discussed early in the course along with ethical issues to facilitate quality of care. Maternal, newborn, and women's health are practiced in a variety of settings, and the methods to ease transition into these facilities and improve continuity of care are explored. There is an emphasis upon family, culture, and community as well as the support and involvement of the nurse during childbirth and child rearing and in the maintenance of female health. 1.00 credit hour. Prerequisite: NO 210 Adult Nursing Systems II.

NO 215 Maternal/Newborn Self-Care Requisites Clinical

This is the clinical portion of NO 214 1.00 credit hour. Corequisite: NO 214 Maternal/Newborn Self-Care Requisites.

NO 216 Psychosocial Self-Care Requisites

This course assists students in defining the principles and concepts of mental health and in refining communication skills applicable to this area of nursing. Psychopathology and treatment modalities related to the nursing care of clients and their families are studied. This area of nursing is built upon previous nursing courses and on social and behavioral sciences. Therapeutic problem-solving and clinical decision-making for clients, with alterations in psychosocial integrity, are experienced by students in mental health acute-care facilities, community mental health centers, and selected community mental health agencies. 2.00 credit hours. Prerequisite: NO 111 Therapeutic Use of Self.

NO 217 Psychosocial Self-Care Requisites Clinical

This is the clinical portion of NO 216. 1.00 credit hour. Corequisite: NO 216 Psychosocial Self-Care Requisites.

NO 218 Health Deviations in Childhood

This course introduces the student to the concepts of pediatric nursing, and subsequent courses are built upon the concepts and skills learned in previous nursing courses. Students prepare for the vast opportunities in modern healthcare delivery and nursing practice. The science of pediatric nursing emphasizes health promotion, assessment, care plans, risk factors, genetics, pharmacology, ethics, patient education, family involvement, and other related areas. Basic pediatric nursing care is directed toward the child and adolescent in acute and chronic settings. The role of the associate-degree nurse is stressed in physiology, pathophysiology, and psychosocial context as it relates to care of the child. 1.00 credit hour. Prerequisite: NO 210 Adult Nursing Systems II.

NO 219 Health Deviations in Childhood Clinical

This is the clinical portion of NO 218. 1.00 credit hour. Corequisite: NO 218 Health Deviations in Childhood.

NO 220 Health Deviations in Older Adulthood

This course introduces the older adult on a continuum from normal aging to health deviations, defines and identifies the diversity of the older client, and studies the characteristics of this population as seen in the United States. The student learns to develop critical thinking skills, utilize educational resources, and investigate biological, sociological, and psychological theories applicable to the aging client. The family unit is emphasized, and alternatives are explored. Legal and ethical concerns, to include elder law and abuse, are considered. Nursing assessment, diagnosis, interventions, evaluations, and documentation are applied through this course. 2.00 credit hours. Prerequisite: NO 212 Adult Nursing Systems III.

NO 221 Health Deviations in Older Adulthood Clinical

This is the clinical portion of NO 220. 1.00 credit hour. Corequisite: NO 220 Health Deviations in Older Adulthood.

NO 222 Directed Clinical Practicum

This course is a clinical preceptorship in an acute and chronic setting, where the student will synthesize nursing skills and critical thinking to perform safe patient care. The role of the associate-degree nurse is stressed in physiology, pathophysiology, and psychosocial context as it relates to the care of patients. 2.00 credit hours. Prerequisite: NO 212 Adult Nursing Systems III.

(NT) NETWORKING AND SECURITY TECHNOLOGY

NT 120 Emerging Operating Systems

This course is designed to give the student a foundational skill set for new and emerging operating systems being introduced to the computer industry. The course will cover the features, capabilities, and functional details involved with the understanding and implementation of the latest operating systems available today. The student will receive classroom and hands-on experience with the most recent OSs. The course includes topics such as installation, networking, system utilities, disk management, user management, security features, performance tuning, disaster recovery, and troubleshooting. 4.00 credit hours. Prerequisite: IS 112 Computer Networks.

NT 160 Network Operating Systems

This course provides instruction in current Windows network operating systems. Topics include: installing the Windows system; implementing and conducting administration of resources; implementing, managing, and troubleshooting hardware devices and drivers; monitoring and optimizing performance and reliability; configuring and troubleshooting the desktop environment; implementing, managing, and troubleshooting network protocols; and implementing, monitoring, and troubleshooting security. 4.00 credit hours. Prerequisite: IS 185 Computer Architecture and Troubleshooting I.

NT 170 Server Operating Systems

This is a course in the installation and operation of current Windows servers. Topics include: installation of the Windows server; installing, configuring, and troubleshooting access to resources; configuring and troubleshooting hardware devices and drivers; managing, monitoring, and optimizing system performance, reliability, and availability; managing, configuring, and troubleshooting storage use; configuring and troubleshooting Windows network connections; and implementing, monitoring, and troubleshooting security. 4.00 credit hours. Prerequisite: NT 160 Network Operating Systems.

NT 180 Network and Server Operating Systems

This course develops knowledge and skills in Microsoft Windows client and server operating systems. Topics include: installing the client and server operating systems; planning, installing, managing, and troubleshooting server roles, features, and network services; implementing and conducting administration of resources; implementing, managing, and troubleshooting hardware devices and drivers; monitoring and optimizing performance, reliability and availability; managing, configuring, and troubleshooting storage use; configuring and troubleshooting the desktop environment and network connections; implementing, managing, and troubleshooting network protocols; and implementing, monitoring, and troubleshooting security. 4.00 credit hours. Prerequisite: IS 112 Computer Networks or IS 186 Computer Architecture and Troubleshooting II.

NT 200 Network Infrastructure Administration

This course is designed to provide instruction in implementing and administering a modern network infrastructure. Topics include: installing, configuring, managing, monitoring, and troubleshooting domain name services; network protocols; Windows Internet Name Services (WINS); Internet Protocol Routing; network address translation (NAT); and Certificate Services. 4.00 credit hours. Prerequisite: NT 180 Network and Server Operating Systems (or NT 160 Network Operating Systems and NT 170 Server Operating Systems).

NT 210 Directory Services Administration

This course provides instruction in implementing and administering a directory services infrastructure. Topics include: installing, configuring, and troubleshooting industry-standard directory services; installing, configuring, managing, monitoring, and troubleshooting naming services (such as DNS) to support directory services; change control and configuration management and their relation to the reliable operation of directory services; managing, monitoring, and optimizing the components of directory services; and configuring, managing, monitoring, and troubleshooting directory service security solutions. 4.00 credit hours. Prerequisite: NT 180 Network and Server Operating Systems (or NT 160 Network Operating Systems and NT 170 Server Operating Systems).

NT 215 Routers and Switches

This course introduces the concepts and procedures required to configure switches and routers in multi-protocol internetworks. Topics include the operating system of the router and switch; the Opens Systems Interconnection (OSI) reference model and layered communication; LAN design, technologies, and virtual LANs; bridging, switching, and Spanning Tree Protocol (STP); the TCP, IP protocol suite and IP addressing, subnetting, and configuration; routing basics, protocols, and configuration; access list security and configuration; and Wide Area Network (WAN) design, protocols, and technologies. 4.00 credit hours. Prerequisite: IS 112 Computer Networks.

NT 230 Building Scalable Internetworks

This course is a continuation of Routers and Switches. It is designed to introduce the advanced routing architecture and protocols with a focus on the management of large multiprotocol networks. Topics include: advanced IP addressing management; CIDR; NAT; the key characteristics of scalable internetworks; route summarization; route optimization; and advanced routing protocols such as EIGRP, multi-area OSPF, integrated IS-IS, and Border Gateway Protocol (BGP). 4.00 credit hours. Prerequisite: IS 286 Routers and Switches II or NT 215 Routers and Switches.

NT 305 Virtualization

This course provides instruction in computer operating system virtualization concepts and practices. Topics include: business and performance benefits of virtualization; local and network storage management; creating and managing stand-alone virtual machines; cloning virtual machines; virtualization in the network operations center; software and network testing using virtualization; virtualization as a disaster recovery tool; and managing and tuning virtual machine and virtual infrastructure performance. Emphasis is placed on learning several virtualization environments and approaches, both proprietary and open-source. Concepts will be illustrated and enforced with a variety of actual installations and practical projects. 4.00 credit hours. Prerequisite: IS 112 Computers and Application Software.

NT 315 Designing Network Security

This course provides instruction in the analysis of business requirements for resource security and the designing of security solutions that meet business requirements in a network system. Topics include: analyzing business requirements; analyzing security requirements; and designing network security solutions for access between networks and communication channels. 4.00 credit hours. Prerequisite: NT 200 Network Infrastructure Administration.

NT 320 Wireless Networking Fundamentals

This course provides instruction on both general and specific wireless technologies. Topics include wireless theory, including radio frequency and infrared transmissions. It also covers wireless topologies, access points, wireless bridges, antenna theory, wireless security, site surveys, and troubleshooting techniques. 4.00 credit hours. Prerequisite: IS 282 Network Security.

NT 325 System Administration Scripting

This course provides an introduction to automating administrative tasks using scripts. Students will design and implement scripts of moderate complexity that automate administrative tasks such as the creation of user accounts, the administration of disk drive and printer, and the management of system services and event logs. Scripts may be written using languages such as: Bourne, C, and Korn shells and JScript, VBScript, and Perl. Topics include: tools and utilities; interactive command line programs; shell programming using constructs, variables, commands, and functions; and debugging processes. 4.00 credit hours Prerequisite: IS 103 Programming Logic.

NT 341 Mail Servers

This course provides instruction in the implementation, administration, and troubleshooting of e-mail messaging systems. Topics include: the architecture and communication abilities of mail servers; installation of mail servers; backward integration and compatibility; client support and configuration; real-time collaboration; foreign mail system connectors; SMTP and Internet-based client access; security techniques; performance monitoring; maintenance procedures; and troubleshooting issues. 4.00 credit hours. Prerequisites: IS 191 Linux Administration and NT 210 Directory Services Administration.

NT 343 Computer and Network Forensics

This course will provide the student with instruction in computer and network forensics. Computer and network forensics is simply the application of computer and network device investigation and analysis techniques in the interests of determining potential legal evidence. Evidence might be sought in a wide range of computer crimes or misuse including, but not limited to, theft of trade secrets, theft of or destruction of intellectual property, and fraud. This may range from tracing the tracks of a hacker through a client's system to tracing the originator of defamatory e-mails and recovering signs of fraud. Topics covered in this course will include an overview of the field including components of PCs, information storage and retrieval, varieties of computer-related crimes, and securing and analyzing electronic evidence. 4.00 credit hours. Prerequisite: IS 282 Network Security.

NT 350 Designing Network Infrastructure

This course provides instruction in analyzing business requirements for network infrastructures and designing network infrastructures that meet business requirements. Topics include: analyzing business requirements; analyzing technical requirements; designing network infrastructures; Internet connectivity solutions; wide-area network infrastructures; and designing management and implementation strategies for networking. 4.00 credit hours. Prerequisite: NT 200 Network Infrastructure Administration.

NT 353 Network Defense

This class will immerse the student into an interactive environment where they will be shown how to scan, test, hack, and secure their own systems. The lab-intensive environment gives each student in-depth knowledge and practical experience with the current essential security systems. Students will begin by understanding how perimeter defenses work and then be led into scanning and attacking their own networks; no real network is harmed. Students then learn how intruders escalate privileges and what steps can be taken to secure a system. Students will also learn about intrusion detection, policy creation, social engineering, open-source intelligence, incident handling and log interpretation. 4.00 credit hours. Prerequisite: IS 282 Network Security.

NT 360 Supporting Enterprise Applications

This course is designed to provide internetworked application management and support skills that typically are demanded by large enterprise networks and Internet/Intranet application environments. It extends the client/server model and analyzes the requirements and implementation

of applications in n-tier enterprise environments running business-critical applications and Intranet/Internet solutions. Topics include: messaging and e-mail applications; calendaring; groupware; database and web server applications; application hosting and installation; server and client configuration; middleware integration; server clustering; client-side interface management; server-side security and access; communication and delivery protocols; and client/server platforms. 4.00 credit hours. Prerequisite: NT 200 Network Infrastructure Administration.

NT 370 Web Server Installation and Administration

This course provides an in-depth study of the knowledge and skills required to install and administer web servers that support Internet-based application, data, and information services. Topics include: web server technology; selecting a web server platform establishing server services such as HTTP, FTP, SMTP, and NNTP; supporting server-side technologies (CGI, servlets, server-side includes, ASP, and JSP); supporting web client technologies (Java applets, ActiveX, and plug-ins); client configuration and browser support; indexing and index servers; virtual directories and content; web server security and host access; SSL and certificate authorities; supporting intranets with web servers; web server performance and troubleshooting; integrating proxy and web servers; handling of different protocols by proxies; proxy caching, filtering, monitoring, and access control; and proxy security, performance, capacity planning, and load balancing. 4.00 credit hours. Prerequisite: NT 200 Network Infrastructure Administration.

NT 382 Multilayer Switching

This course is a study of intermediate to advanced topics regarding switching concepts. Topics include: switching roles; configuration and troubleshooting of switches; VLAN technology; spanning tree protocol; multilayer switching; multicasting; IP telephony; layer 2 and 3 configuration; and SANs. 4.00 credit hours. Prerequisite: IS 112 Computer Networks.

NT 400 Internetwork Troubleshooting

This course is a study of intermediate to advanced topics regarding network troubleshooting. It is focused on providing real-world application, skill enhancement, and troubleshooting methodologies. Topics include: the OSI model; IOS troubleshooting commands; trouble tickets; and troubleshooting IP and IPX, switches, VLANs, frame relay, and WAN interfaces. 4.00 credit hours. Prerequisite: IS 112 Computer Networks.

NT 401 Voice-Over IP

Voice-over IP is an emerging technology which allows the transmission of voice signals over a data network. This course teaches the student how to install and configure the voice-over IP telephony technology. Topics include: installing and configuring voice and data network routers; configuring voice-over frame relay, ATM, and IP; configuring voice ports and dial peers; voice traffic analysis; and QoS. 4.00 credit hours. Prerequisite: IS 112 Computer Networks.

(NW) NURSING—WISCONSIN

NW 101 Fundamentals of Nursing With Lab

This course introduces the student to basic nursing concepts and skills as defined by Orem. Students will learn the basic tenets of the self-care deficit nursing theory that includes the theory of self-care, the theory of self-care deficit and the theory of nursing system. Subsequent courses are built upon the content of this course. Emphasis is placed on understanding the standards and scope of nursing practice. The nursing process is introduced and will be combined with an understanding of basic human needs (self-care requisites) to explore select clients with special and psychosocial needs (self-care deficits). In the lab, students will learn various basic nursing skills, vital signs, gathering client health data, and medication administration and safety. 5.00 credit hours. Corequisites: SC 142 Body Structure and Function and NW 105 Pharmacology for Nurses.

NW 102 Clinical Practice I

In this beginning clinical, the student will utilize the nursing process and nursing standards to meet the basic self-care requisites of a variety of clients. While in the clinical environment, students will perform basic nursing skills, collect health histories, gather physical data, and administer medications that will help them determine self-care deficits and the role of a nurse as nursing agency. They will assist with formulating teaching, and learning plans are also covered. Toward the completion of the clinical, the student will be expected to care for clients with multi-system self-care deficits by reinforcing and adapting nursing care plans, gathering data, and performing basic nursing skills. 3.00 credit hours. Corequisites: NW 101 Fundamentals of Nursing with Lab and NW 103 Health and Illness Throughout the Life Span.

NW 103 Health and Illness Throughout the Life Span

This course will focus on health and illness for clients across the lifespan. The student will gather client data, identify nutritional and nursing care needs, and review teaching plans for the pregnant woman, newborn, developing child, adult, and older adult. Exposure to healthy self-care agency patterns will allow the student to recognize self-care deficits and self-care capabilities of behavior. 3.00 credit hours. Corequisites: PS 101 Psychology and SC 142 Body Structure and Function.

NW 105 Pharmacology for Nurses

This course introduces the core concepts of pharmacology into the nursing curriculum, and subsequent courses are built upon the concepts and skills learned in fundamentals. Students are introduced to medications, affects of drugs on the body, toxic effects, dosage calculations,

modern drug therapy, and nursing management as they relate to pharmacology. While basic drug concepts are essential, annual updates are necessary due to the rapid changes that occur in the area of drug therapy. This course reviews and integrates the knowledge of physiology, chemistry, nursing fundamentals, calculations, and interpretation of medication orders as well as the knowledge and ability to administer medications safely. Awareness of drug therapy side effects, nursing interventions interactions, and pharmacokinetics is stressed. 2.00 credit hours. Corequisite: SC 142 Body Structure and Function.

NW 201 Alterations in Adult Health

In this course, the student will begin exploring medical conditions in adult clients with a variety of self-care deficits. By relating health examination, client data, and physical examination findings, the student will use the nursing process to assist with the development of nursing care plans for clients. The role of the nurse as self-care agent will be explored with special attention to recognizing the nurse's scope of practice as a practical nurse working collaboratively as a member of the healthcare team. 3.00 credit hours. Prerequisite: NW 102 Clinical Practice I.

NW 202 Clinical Practice II

This clinical will require that the student apply the theory taught in the Alterations in Adult Health course regarding simple, self-care deficits with a variety of clients. With supervision, the student will use the nursing process to help develop nursing care plans for a diverse group of clients and apply nursing skills learned in NW 201. The student will collaborate with members of the healthcare team in order to coordinate client care. 4.00 credit hours. Corequisite: NW 201 Alterations in Adult Health.

NW 210 Medical/Surgical Nursing

In this course, the student will incorporate knowledge gained from previous classes to continue exploring medical conditions and surgical procedures in adult clients with a variety of self-care deficits. By comparing health examination data and physical examination findings, the student will develop nursing care plans for more complex clients. The student will also use the nursing process to plan and provide caring therapeutic interventions and gain a deeper understanding of the nurse agent. In the laboratory setting, students will learn to manage advanced nursing skills. 4.00 credit hours. Corequisite: SC 243 Anatomy and Physiology for Nursing. Prerequisite: NW 202 Clinical Practice II.

NW 211 Clinical Practice III

With assistance, the student will incorporate knowledge gained from previous classes to carry out nursing care plans for multiple complex adult clients with various self-care deficits. While in the clinical environment, the student will manage advanced nursing skills, develop nursing care plans using the nursing process, provide for therapeutic interventions, and evaluate outcomes of the interventions. The student will also begin to develop client teaching plans. Emphasis is placed on development of professional nursing behaviors and recognition of the nurse's scope of practice. 4.00 credit hours. Corequisites: NW 210 Medical/Surgical Nursing and NW 214 Mental Health and Community Nursing.

NW 214 Mental Health and Community Nursing

This course will expose the student to the role of the nurse in both the community and mental health settings. Using the nursing process, the student will assess various community settings, health practices, health risks, and potential crises. Exploration of different mental health disorders and self-care deficits will allow the student to plan and manage nursing care plans based on specific client self-care requisites. 2.00 credit hours. Prerequisite: NW 202 Clinical Practice II. Corequisite: SC 243 Anatomy and Physiology for Nursing.

NW 215 Nursing Management

This course will cover nursing management and professional issues such as healthcare economics, continuous quality improvement, and legal and ethical dilemmas that the student will encounter in the nurse agent role. Course activities will prepare the student for the transition into the nursing practice. 2.00 credit hours. Corequisite: NW 211 Clinical Practice III.

NW 231 OB/Pediatrics/Geriatrics

This course builds on concepts covered in previous courses to prepare the student for management of nursing care for the pregnant woman, newborn, perinatal, pediatric, and older adult client. Using the nursing process, the student will develop and modify nursing care plans based on changes in client assessments and nutritional, physical, emotional, or learning self-care requisites. 2.00 credit hours. Corequisite: NW 210 Medical/Surgical Nursing.

NW 232 Clinical Practice IV

With supervision, the student will apply concepts covered in the OB/Pediatrics/Geriatrics course in the delivery of nursing care for a complex pregnant woman, newborn, perinatal, and pediatric client. Students will develop or adapt nursing care plans based on altered client assessments. Emphasis will be placed on the application of professional nursing behaviors in the clinical setting. 2.00 credit hours. Prerequisite: NW 231 OB/Pediatrics/Geriatrics.

NW 252 Clinical Internship

In this clinical, the student will incorporate knowledge gained from all previous classes in developing and managing nursing care plans for groups of clients with a variety of self-care deficits. The student is encouraged to manage complex situations by enacting independent clinical decisions with supervision in the provision of client care. A preceptor model will be used to support the teaching and mentoring of the student. The student will be expected to demonstrate professional nursing behaviors, provide therapeutic interventions, and plan client teaching plans using the nursing process and acting as nurse agent. This capstone course culminates in the student transition to graduate nurse. 5.00 credit hours. Prerequisite: NW 211 Clinical Practice III. Corequisite: NW 215 Nursing Management.

(OT) OCCUPATIONAL THERAPY ASSISTANT

OT 100 Lifespan Development

This course presents the sequence and stages of normal growth and development throughout the life cycle, from infancy through adulthood, by using lecture, small group discussions, projects, and classroom activities. The course is designed to provide a frame of reference for normal development, which is necessary to assess a client's developmental level and determine appropriate life tasks for treatment programs. The student will gain experience in observing and interviewing individuals in various developmental stages and by exploring age-appropriate life tasks. Physical, perceptual, cognitive, social, and emotional components will be explored, with particular focus on normal motor development. Multi-cultural considerations and ethical concerns will be embedded throughout the course. 3.00 credit hours. Prerequisite: None. Corequisite: OT 130 Level 1A Fieldwork.

OT 110 Principles of Occupational Therapy

This course provides comprehensive information addressing the history, theories, practice, and professional issues in occupational therapy. Occupational science and theoretical frames of reference are introduced. The treatment process, from evaluation to discharge, is explored with emphasis on COTA role delineation, the use of purposeful activity and occupation to enhance role function, and environmental, community, and cultural influences. Treatment approaches for occupational performance areas and major occupational performance components are explored. 3.00 credit hours. Prerequisite: None.

OT 120 Human Occupations

This course will introduce students to the basic process of activity analysis using various forms of media with specific diagnosis and age groups. The course will focus on the observations, analysis, and performance of human occupations in work, self-care, play, and leisure throughout the life span. Special attention to cultural diversity and ethical concerns are embedded throughout the course. Discussion, presentations, and lab are used to demonstrate how occupations provide individuals with a sense of purpose and daily structure, thus creating meaningful and healthier lives. Clinical reasoning in occupational therapy is embedded throughout this course. 2.00 credit hours. Prerequisite: None.

OT 125 Documentation and Computer Technologies in Occupational Therapy

This writing-intensive course covers various types of documentation used in the rehabilitation field and documentation specific to the field of OT. Examples include SOAP notes, narrative note writing, evaluation and re-evaluation reports, and treatment, progress, and discharge notes. The student will become familiar with the APA format for use in manuscript writings. Students will also become familiar with common computer operations used in healthcare including, but not limited to, Microsoft Office operations and medical billing and reimbursement programs. 2.00 credit hours. Prerequisite: None.

OT 130 Level 1A Fieldwork

An integral part of the training to become a certified occupational therapy assistant (COTA) is fieldwork experiences designed to develop skills that underlie practice. As the first in a series of four Level I Fieldworks, students will spend a minimum of 38 hours observing and volunteering in a variety of healthcare settings and community organizations. This class will offer the student the opportunity to apply classroom information to observed human behavior. The focus is on normal development and exploration of OT treatment settings. In addition, the student will be introduced to the exploration of diverse cultures in a variety of healthcare settings. Some of the skills evaluated will be observational skills, interpersonal communication skills, good work habits, professional behaviors, patient observation, client confidentiality, effective problem-solving, and understanding of clinical practices. 1.00 credit hour. Corequisite: OT 100 Lifespan Development.

OT 140 Level 1B Fieldwork

This second Level I Fieldwork experience is designed to develop skills that underlie practice. This class will offer the student the opportunity to apply classroom information to observed human behavior. The focus is on physical disabilities and exploration of OT treatment settings involving the pediatric population. In addition, the student will be introduced to diverse cultures in a variety of healthcare settings. Some of the skills evaluated will be observational skills, interpersonal communication skills, good work habits, professional behaviors, patient observation, client confidentiality, effective problem-solving, and understanding of clinical practices. This course is designed to facilitate participation, discussions, and guided faculty instruction. 1.00 credit hour. Prerequisites: OT 100 Lifespan Development and OT 110 Principles of Occupational Therapy. Corequisite: OT 120 Human Occupations.

OT 201 Theory of Pediatric Occupations

This course offers instruction and practice in conditions commonly seen in children and adolescents, with emphasis on the occupational performance of typical and atypical individuals. Examples include mental retardation, learning disabilities, cerebral palsy, spina bifida, and other disabilities commonly found in children. Topics will include theory and application, the occupational therapy process, frames of reference, evidence-based practice, and the roles of the COTA and OTR in various practice settings. Clinical reasoning for the OT and multi-cultural concerns are embedded throughout this course. 3.00 credit hours. Prerequisites: OT 100 Lifespan Development and OT 120 Human Occupations. Corequisite: OT 140 Level 1B Fieldwork.

OT 210 Occupational Therapy in Physical Disabilities I

This course is designed to provide the occupational therapy assistant student basic knowledge of theories used to treat individuals with various clinical conditions that are commonly referred to in OT. The impairment of body functions on participation in occupation in context will be addressed. Topics will include the effects of disease, trauma, and congenital conditions on occupational performance. Emphasis will be placed on occupational therapy interventions appropriate to specific populations. Ethical, critical, and clinical reasoning, along with cultural and environmental considerations, will be embedded throughout the course. Procedures for client and caregiver safety will also be addressed. 3.00 credit hours. Prerequisites: OT 100 Lifespan Development and OT 110 Principles of Occupational Therapy. Corequisite: OT 120 Human Occupations.

OT 225 Functional Kinesiology

This course reviews neuromusculoskeletal and movement-related functions in the context of occupation. Basic principles of biomechanics and kinesiology, muscle function, muscle strength, muscle endurance, functions of bones and joints, innervations, and movement during occupation will be discussed. Students will examine the types of muscle contractions that occur during activities through muscle activity analysis. Analysis of functional movement required for work, self-care, and play will allow students to demonstrate understanding of these concepts. 2.00 credit hours. Prerequisites: SC 145 Anatomy and Physiology I, SC 145L Anatomy and Physiology I Lab, SC 245 anatomy and Physiology II, and SC 245L Anatomy and Physiology II Lab.

OT 235 Occupational Therapy in Physical Disabilities II

This second course in a series of two will continue to address physical disabilities in a variety of settings. Students will explore community and functional mobility, work-hardening techniques, hand and finger splinting, therapeutic modalities, and disabilities related to traumatic brain injury, cerebrovascular accidents, and other diseases. 3.00 credit hours. Prerequisite: OT 210 Occupational Therapy in Physical Disabilities I.

OT 240 Psychosocial Dysfunction and Group Dynamics

This course is a lecture and experiential course that deals with therapeutic techniques and principles as applied to psychosocial and cognitive dysfunction. Special emphasis will be placed on the evaluation process, the role of the environment and culture, group process, and therapeutic use of self. These principles will be applied to a variety of treatment settings. The use of ethical and clinical reasoning skills will be emphasized. 3.00 credit hours. Corequisite: OT 245 Level 1C Fieldwork.

OT 245 Level 1C Fieldwork

During this continuation of Level I Fieldwork rotations, students will spend a minimum of 38 contact hours in various settings to observe individuals with conditions and diagnosis that interfere with human function and occupation in the area of mental health. These contact hours will be obtained through local fieldwork experiences, field trips, service-learning projects, or a mandatory week-long clerkship. Along with the contact hours, students will participate in labs and lectures throughout the semester to help process the information. These classes are to be completed sequentially. 1.00 credit hour. Prerequisites: OT 130 Level 1A Fieldwork and OT 140 Level 1B Fieldwork. Corequisite: OT 240 Psychosocial Dysfunction and Group Dynamics.

OT 250 Occupational Therapy in Geriatrics and Community Settings

Occupational Therapy in Geriatric Practice is designed to provide the student with the skills necessary for entry-level competence in the treatment of the geriatric population. Conditions found in the geriatric population and the role of occupational therapy are discussed. This course focuses on the practical application of theories of rehabilitation in the older population. 3.00 credit hours. Prerequisite: OT 100 Lifespan Development. Corequisite: OT 255 Level 1D Fieldwork.

OT 255 Level 1D Fieldwork

During this final Level I Fieldwork rotation, students will spend a minimum of 38 contact hours in various settings to observe geriatric and community settings. These contact hours will be obtained through local fieldwork experiences, field trips, or a mandatory week-long clerkship. Along with the contact hours, students will participate in labs and lectures throughout the semester to help process the information. These classes are to be completed sequentially. Only one Level 1 Fieldwork class may be repeated one time. 1.00 credit hour. Prerequisites: OT 130 Level 1A Fieldwork, OT 140 Level 1B Fieldwork, and OT 245 Level 1C Fieldwork.

OT 260 Occupational Therapy in Program Development

Basic management tasks relevant to the OTA will be examined, along with funding reimbursements, regulatory agencies, and ethical principles in the workplace. Students will investigate the process and methods of program development and are given the opportunity to develop a

program for a need that they have observed in the community. Clinical reasoning for the OT is embedded throughout this course. 2.00 credit hours. Prerequisite: OT 110 Principles of Occupational Therapy.

OT 265 Assistive Technology

Topics include computer programs, switches, low-vision adaptations, and other assistive devices. Ethical, critical, and clinical reasoning, along with cultural and environmental considerations, will be embedded throughout the course. 1.00 credit hour. Prerequisites: OT 201 Theory of Pediatric Occupations, OT 210 Occupational Therapy in Physical Disabilities I, and OT 235 Occupational Therapy in Physical Disabilities II.

OT 270 Level 2A Fieldwork

Upon successful completion of all didactic coursework and the four Level I Fieldwork sequences, students will spend 16 weeks (2 months for each Level II assignment) under the supervision of an OTR, OT/L, or experienced COTA in at least two different settings to gain skill in the practice of occupational therapy. Five credits for each placement will be awarded. Both Level 2A Fieldwork and Level 2B Fieldwork must be completed within 18 months of completion of the academic portion of the program. Only one of the Level II Fieldwork classes may be repeated one time only. 5.00 credit hours. Prerequisites: OT 130 Level 1A Fieldwork, OT 140 Level 1B Fieldwork, OT 245 Level 1C Fieldwork, and OT 255 Level 1D Fieldwork.

OT 275 Level 2B Fieldwork

Upon successful completion of all didactic coursework and the four Level I Fieldwork sequences, students will spend 16 weeks (2 months for each Level II assignment) under the supervision of an OTR, OT/L, or experienced COTA in at least two different settings to gain skill in the practice of occupational therapy. Five credits for each placement will be awarded. Both Level 2A Fieldwork and Level 2B Fieldwork must be completed within 18 months from completion of the academic portion of the program. Only one of the Level II Fieldwork classes may be repeated one time only. 5.00 credit hours. Prerequisites: OT 130 Level 1A Fieldwork, OT 140 Level 1B Fieldwork, OT 245 Level 1C Fieldwork, and OT 255 Level 1D Fieldwork.

(PD) PERSONAL DEVELOPMENT

PD 090 Student Success Skills

This course provides instruction in both theory and practice of personal and academic growth that can lead to success. Topics include, but are not limited to: time management; note-taking; and study skills. 0.00 credit hour. Prerequisite: None.

PD 120 Personal Financial Management

This course deals with concepts of personal financial planning and financial responsibility. Topics include critical self examination of student planning techniques, checking accounts and banking services, income tax procedures, savings methods, credit records, credit obligations, and the cost of borrowing. 1.00 credit hour. Prerequisite: None.

PD 155 Customer Services

This course provides a critical examination of issues embedded in the practice of providing customer service. Topics include research about best practice in customer service and communication techniques, psychologically based methods for dealing with the management of customer complaints, and the roles of a customer service employee and supervisor within ethical boundaries and common business practice. 1.00 credit hour. Prerequisite: None.

PD 200 Career Development Seminar

This seminar provides an opportunity for students to critically examine their skills and develop a plan to further their career. Students will be encouraged to develop a plan for maintaining life-long learning skills. Topics include research, job searching, developing career documents, creating personal budgets, and refining interview and communication skills. 1.00 credit hour. Prerequisite: None.

PD 211 Medical Assisting Externship Preparation

The purpose of this non-credit course is to ensure that all the administrative arrangements for an externship have been completed prior to the term in which a student will go out on an externship experience. Completion of these arrangements is a prerequisite for enrolling a student in an externship experience in the medical assisting field. 0.00 credit hours. Prerequisite: None.

PD 212 Medical Billing and Insurance Coding Internship Preparation

The purpose of this non-credit course is to ensure that all the administrative arrangements for an internship have been completed prior to the term in which a student will go out on an internship experience. Completion of these arrangements is a prerequisite for enrolling a student in an internship experience in the medical insurance billing and coding field. 0.00 credit hours. Prerequisite: None.

PD 213 Health Information Management Internship Preparation

The purpose of this non-credit course is to ensure that all the administrative arrangements for an internship have been completed prior to the term in which a student will go out on an internship experience. Completion of these arrangements is a prerequisite for enrolling a student in an internship experience in the health information management field. 0.00 credit hours. Prerequisite: None.

PD 214 AS/AAS/BS/Diploma Internship Preparation

The purpose of this non-credit course is to ensure that all the administrative arrangements for an internship have been completed prior to the term in which a student will go out on an internship experience. Completion of these arrangements is a prerequisite for enrolling a student in an internship experience that correlates to their field of study. 0.00 credit hours. Prerequisite: None.

PD 215 Medical Office Administration Internship Preparation

The purpose of this non-credit course is to ensure that all the administrative arrangements for an internship have been completed prior to the term in which a student will go out on an internship experience. Completion of these arrangements is a prerequisite for enrolling a student in an internship experience in the medical office environment. 0.00 credit hours. Prerequisite: None.

PD 216 Proctor Preparation

This non-credit course will assist students in finding and securing the proctor site for the medical assisting program. Students must pass this course in order to be approved to start working with their proctor. Students will discover ways to approach a facility about sponsoring them and will learn how to access the tools they will need to successfully get a proctor site approved. *Note: PD 216 is only for students taking the program online.* 0.00 credit hours. Prerequisite: None.

(PH) PUBLIC HEALTH AND SAFETY

PH 100 Public Event Planning and Emergency Management

This course covers the basics on public event planning and the security involved before, during, and after the event. Scheduling and coordination is explained in depth. 3.00 credit hours. Prerequisite: None.

PH 200 Community Health

This course is designed to assist practitioners in effectively communicating messages as well as impacting the norms and behaviors of both individuals and communities. 3.00 credit hours. Prerequisite: None.

(PL) PARALEGAL

PL 100 Introduction to Legal Assisting

This course provides an overview of the paralegal profession and an introduction to the law and legal procedures. Topics include: paralegal duties and responsibilities; ethical issues in legal assisting; sources of American law and legal concepts; the court system and government regulations; corporate law; civil litigation and trial procedures; criminal and administrative law and procedures; conducting interviews and investigations; and legal research and analysis. 3.00 credit hours. Prerequisite: None.

PL 106 Legal Research

This course is a practical introduction to the law library and its resources and the fundamentals of traditional and electronic legal research. Emphasis is placed on the paralegal's practical role and skill in assisting the attorney in legal research. Topics include: the various research tools, including codes, reporters, digests, Shepard's, and legal encyclopedias; treaties; law reviews; practice manuals; Westlaw; and CD ROM and Internet research. 3 credit hours. Prerequisite: PL 100 Introduction to Legal Assisting.

PL 131 Torts

The purpose of this course is to provide the student with the basic legal terms of torts and personal injury law, help the student identify the various types of torts and the defenses a defendant may raise to each, and to provide a practical, hands-on learning experience in related terminology and in drafting the documents necessary to practice in this area of the law. 3.00 credit hours. Prerequisite: PL 106 Legal Research.

PL 132 Family Law

This course is intended to provide the student with a thorough working knowledge of family law. Along with in-depth topical knowledge, the course addresses the important skills required of a paralegal in family law including interviewing and legal drafting. 3.00 credit hours. Prerequisite: PL 106 Legal Research.

PL 139 Wills, Trusts and Estates

This course covers the study and practice of wills, trusts, and estates, stressing the need for understanding the concepts, uses, and forms involved in this ever-changing area of the law. 3.00 credit hours. Prerequisite: PL 106 Legal Research.

PL 140 Ethics and Paralegal Professionalism

This course presents an in-depth study of the Codes of Professional Responsibility from the ABA and NALA to the Code of Judicial Conduct, existing guidelines, and case law involving paralegals. 3.00 credit hours. Prerequisite: PL 100 Introduction to Legal Assisting.

PL 180 Law Office Procedures

This course presents a study of the operation of a private law firm from the perspective of a legal assistant/paralegal. Topics include: personnel and their responsibilities; managerial concepts; the various systems and procedures in the law office including timekeeping and billing systems; word processing; file organization and management; accounting/bookkeeping systems; trust accounts; docket control; tickler systems; conflicts checks; client development and case management; and current legal office software. 3.00 credit hours. Corequisite: PL 106 Legal Research.

PL 215 Civil Litigation

This course provides an intensive examination of the role of the paralegal in civil litigation. Topics include: litigation and the paralegal's role; the courts and their jurisdiction; ethical considerations; investigation and evidence procedures; the initial pleadings and response to the initial pleading; motion practice; discovery procedures and requests; settlements and alternative dispute resolution; and trial techniques and post-trial practices. 3.00 credit hours. Prerequisite: PL 106 Legal Research.

PL 220 Bankruptcy

This course provides instruction in bankruptcy law and the documents required to meet that law. Topics include: bankruptcy law and the Bankruptcy Code; filing the case; liquidation bankruptcy; reorganization procedures and adjustment of debts of various individuals; the role of trustees and creditors; and notices and proofs of claim. The student will be introduced to the basic steps and documents involved in conducting the processes and the computer software commonly used by bankruptcy attorneys. Emphasis is placed on the role of the paralegal under the supervision of a licensed attorney. 3.00 credit hours. Prerequisite: None.

PL 225 Criminal Law

This course explores the basic concepts of both substantive and procedural criminal law. Topics include: the legal system and criminal law; the study of crimes against a person, property, habitation, and the public; the examination of factual, statutory, and constitutional defenses; and the constitutional aspects of criminal procedures including the pretrial, the trial, sentencing, and appeal processes. 3.00 credit hours. Prerequisite: PL 106 Legal Research.

PL 235 Property Law and Intellectual Property Law

This course provides the basics of property law, real and personal, as well as tangible and intangible. The topic of real estate is presented and includes sales, financing, zoning, and the legal acts that govern. Mortgages, liens, surveying, and servitudes are included in this study. The second half of the course covers intellectual property including trademarks, copyrights, patents, and trade secrets. Topics also include the application, possession, protection, violation, and transfer of rights in intellectual property. 3.00 credit hours. Prerequisites: PL 100 Introduction to Legal Assisting and PL 106 Legal Research.

PL 246 Environmental Law and Administrative Agencies

This course begins with exposure of the student to the topic of administrative law. The need for, function of, and importance of the administrative agency in the government are outlined and explained. As paralegals are today allowed limited practice before these agencies, this course is most important. Environmental law and the role of this vital administrative agency are then presented. Topics include: state and federal government regulation of the environment as well as superfund sites; and pollution and all matters that affect air, ground, and water resources. 3.00 credit hours. Prerequisites: PL 100 Introduction to Legal Assisting and PL 106 Legal Research.

PL 250 Legal Writing

This course allows the student to apply practical legal research skills to the drafting and preparation of typical documents that the paralegal will be expected to prepare by their supervising attorney. Topics include: research memoranda; client correspondence, demand letters, appellate briefs, incorporation documents, and partnership agreements; wills, leaves, and promissory notes; and medical record summaries. 3.00 credit hours. Prerequisites: PL 106 Legal Research and EN 104 English Composition I.

PL 275 Law and Medicine

This course provides an intensive study of the nurse paralegal specialty, with a focus on litigation of medical cases and medical malpractice. Topics include: medical record research; medical literature analysis; life care planning and damages assessment; independent medical examinations; and the insurance industry and risk management. 3.00 credit hours. Prerequisite: PL 106 Legal Research.

PL 294 Career Internship

This is an elective course in the associate's degree program that students take in their final semester. The career internship course is designed for students interested in pursuing a career in legal studies. The outcome of the internship is an informed student fully apprised of the opportunities his/her degree program offers for professional growth. During the internship phase of training, the student will experience various aspects of working in the actual field in which they have been educated. The internship is designed to provide the student with the opportunity to experience and participate in duties typical of a contemporary workplace setting. Student learning will center on observing experienced personnel as well as participating in actual hands-on procedures under close supervision of trained professionals. 4.00 credit hours. Prerequisites: Final semester, program GPA of 2.50, and PD 214 AS/AAS/BS/Diploma Internship Preparation.

PL 300 Legal Office Administration

This course is a study of the administration of a private law firm from the perspective of a paralegal office manager. Topics include: supervision of paralegal personnel; managing timekeeping and billing systems; document control; client development; and case management. 3.00 credit hours. Prerequisites: PL 106 Legal Research and PL 180 Law Office Procedures.

PL 425 Business Organizations

This course provides an overview of the nine most common ways of doing business in this country. Emphasis is placed on the corporate form, beginning with the formation of a corporation as well as the financial structure, corporate management, dividends, and termination of corporate existence. 3.00 credit hours. Prerequisites: BU 206 Business Law I, PL 100 Introduction to Legal Assisting, and PL 106 Legal Research.

PL 450 Advanced Legal Research

This course is designed to build on the basic skills of the student in legal research and other information by using the computer. By searching Internet resources and legal databases, the student performs exercises in researching topics in business, bankruptcy, taxes, trademarks, employment law, environmental law, and other topics. 3.00 credit hours. Prerequisites: PL 100 Introduction to Legal Assisting, PL 106 Legal Research, and PL 250 Legal Writing.

(PN) PRACTICAL NURSING (ALABAMA)

PN 105 Anatomy and Physiology I for Nursing

This is the first course in a two-course sequence which examines the structure and function of the human body and the mechanisms of homeostasis. Topics include: cells; tissues; the integumentary, skeletal, muscular, and nervous systems; and special senses. 4.00 credit hours. Corequisite: PN 105L Anatomy and Physiology for Nursing I Lab.

PN 105L Anatomy and Physiology I for Nursing Lab

This is the lab to portion of Anatomy and Physiology I for Nursing. Laboratory exercises are conducted that support and enhance lecture topics. 1.00 credit hour. Corequisite: PN 105 Anatomy and Physiology I for Nursing.

PN 108 Foundations of Nursing

This course provides the basis upon which all other nursing courses are built. The history of nursing introduces the student to the origin and development of nursing practice and the theories and scientific principles upon which the profession is built. Concepts integrated throughout the course include: cultural diversity; nutrition; critical thinking; physiological and psychosocial needs of the individual; legal and ethical issues; and communication. Focus is placed on the nursing process, nursing principles in disease, wellness, and safety with emphasis placed on patient goals and outcomes. 6.00 credit hours. Prerequisites: PN 105 Anatomy and Physiology I for Nursing, PN 111 Patient Assessment, and PN 112 Pharmacology.

PN 109 Foundations of Nursing Clinical

The students will begin their orientation in caring for adult (elderly) clients. They will actively participate in the daily care for the client including bed-making, assisting with hygiene, and assisting in providing nutrition, ambulation, and companionship in the lonely patient population. 1.00 credit hours. Corequisite: PN 108 Foundations of Nursing.

PN 111 Patient Assessment

This course provides students with the opportunity to learn content and skills related to taking histories and providing physical examinations. Students have the opportunity to practice communication techniques related to taking histories and skills required to perform accurate physical examinations. Learning opportunities are directed toward all age groups with a focus on the adult population. Emphasis is placed on the identification, clustering, and analysis of symptoms. Assessment will focus on physical and psychosocial aspects of functioning as well as the process of growth and development. Emphasis is placed on critical thinking skills in relation to the identification and analysis of health alterations. Formulation of pertinent nursing diagnoses and related documentation will be stressed. 1.5 credit hours. Corequisite: PN 105 Anatomy and Physiology I for Nursing.

PN 112 Pharmacology

This course introduces students to the science of pharmacology. Emphasis is placed on the basic pharmacologic concepts related to the delivery of medications, dosage calculations, forms and techniques of administration, and safe practice. Learning activities are designed to ensure competence in both oral and written communication regarding drugs and their administration. 1.5 credit hours. Prerequisite: MA 107 College Algebra.

PN 212 Medical Surgical Nursing

This course provides content instruction on the care of adults experiencing alterations in health, using a body systems approach. Focus is placed on recognizing and performing appropriate nursing interventions and developing critical thinking skills required to provide effective nursing

care in a safe manner. Concepts of nutrition, communication, cultural diversity, legal/ethical issues, and psychosocial concerns are suitably integrated throughout the course. Content also includes health promotion and patient teaching, with emphasis on the nursing process, nursing evaluation and interventions, and pharmacology and therapeutic communication. 6.00 credit hours. Prerequisites: PN 108 Foundations of Nursing and PN 109 Foundations of Nursing Clinical.

PN 213 Medical Surgical Nursing Clinical

This medical surgical nursing clinical allows the student a hands-on experience in caring for patients with different disease processes and undergoing different surgical procedures. Students will recognize and apply appropriate nursing interventions to care for specific clients in these populations, both pre-operatively and post-operatively. The student will demonstrate knowledge in regards to normal versus abnormal findings and intervene appropriately according to hospital policy and procedure protocols. 2.00 credit hours. Prerequisite: PN 109 Foundations of Nursing Clinical. Corequisite: PN 212 Medical Surgical Nursing.

PN 222 Maternal and Child Nursing

This course focuses on content related to the practical nurse to meet physiological, psychosocial, cultural and developmental needs of maternal and child clients. Antepartum, intrapartum, and postpartum care are emphasized. Content related to complications of pregnancy, newborn care, growth and development, pediatric care, and health alterations of the pediatric client are presented. Nutritional and pharmacological needs, as well as content related to cultural diversity, are presented. Healthcare technology, communication, anatomy and physiology, medical terminology, critical thinking, and the nursing process are integrated throughout course content. Students will utilize the nursing process and develop and implement nursing care plans to provide nursing care for maternal and newborn clients. 3.00 credit hours. Prerequisites: PN 212 Medical Surgical Nursing and PN 213 Medical Surgical Nursing Clinical.

PN 223 Maternal and Child Nursing Clinical

Maternal child clinical nursing provides the student with an active hands-on approach to providing care for the “gravida” pregnant patient through her labor, delivery, and postpartum course. It also involves her partner, family, and newborn until discharge from the hospital. 1.00 credit hours. Prerequisite: PN 213 Medical Surgical Nursing Clinical. Corequisite: PN 222 Maternal/Child Nursing.

PN 228 Adult/Child Nursing

This course emphasizes care of the client throughout the life span. The course is designed to assist the student in addressing complex alterations in health. Additional content is provided on care of the client experiencing burns, cancer, and emergent conditions. Care of the adult and child are integrated throughout the course. 4.00 credit hours. Prerequisites: PN 212 Medical Surgical Nursing and PN 213 Medical Surgical Nursing Clinical.

PN 229 Adult/Child Nursing Clinical

The student will observe, assess, and participate in the care of the adult client who has experienced traumatic life situations. The clients who have fallen victim to emergent life crises, as well as those diagnosed with cancer, will be the main focus of this part of clinical. The pediatric client will receive most attention during the clinical course. Students will assess the pediatric client in both tertiary and primary care settings. Through observation and participation the student will become familiar with common childhood illnesses and their treatment. 3.00 credit hours. Prerequisite: PN 213 Medical Surgical Nursing Clinical. Corequisite: PN 228 Adult/Child Nursing.

PN 246 Mental Health/Geriatric Nursing

The mental health component of this course discusses the care of adults and the elderly with disorders requiring psychiatric management. Topics include therapeutic communication skills, normal and abnormal behaviors, treatment modalities, and developmental needs across the life span. The geriatric component presents the theories and concepts of aging, the physiologic and psychosocial changes and problems associated with the process, and appropriate nursing interventions. Additional content includes appropriate communication techniques, nutritional needs, legal and ethical issues, and end-of-life care. 2.00 credit hours. Prerequisites: PN 212 Medical Surgical Nursing and PN 213 Medical Surgical Nursing Clinical.

PN 247 Mental Health/Geriatric Nursing Clinical

The clinical portion of this course exposes students to adults suffering from psychiatric disorders. The student will observe and participate in various therapeutic modalities used in the treatment of such illnesses. The student will concentrate on using appropriate interpersonal relationship skills as well as identifying and actively participating in care of patients with various mental disorders. 1.00 credit hours. Prerequisite: PN 213 Medical Surgical Nursing Clinical. Corequisite: PN 246 Mental Health/Geriatric Nursing.

PN 255 NCLEX-PN Review

This course provides the student with knowledge to make the transition from student to practical nurse. The course covers essential nursing content from all core clinical areas, the nursing process, and client needs categories. Students will have the opportunity to develop and improve their test-taking skills through computer simulations and practice tests. Extensive student performance evaluation is provided throughout the course to aid in identifying and strengthening necessary content areas. 4.00 credit hours. Prerequisite: Final course.

(PS) PSYCHOLOGY

PS 101 Psychology

This course introduces psychology with a focus on understanding human behavior. Topics include: the scope of psychology; biological foundations and the brain; the concepts of sensation, perception, conditioning, and learning; the nature of memory; motivation and emotion; states of consciousness; personality theories; social psychology; dealing with health and stress; and developing coping strategies. 3.00 credit hours. Prerequisite: None.

PS 310 Industrial Psychology

This course will survey the issues related to proactively adapting to a world of accelerating change and increasing complexity within organizational management. The principles of industrial psychology will be utilized to examine the practical application of personnel selection, training, and placement in organizations and industries. Topics will include: the application of psychological theory and research to these organizational issues, including criterion measurement of success and performance; issues related to human factors such as allocating human resources, working conditions and safety; stress and employee well-being; and motivational factors in change management. 3.00 credit hours. Prerequisite: PS 101 Psychology.

(PT) PHYSICAL THERAPIST ASSISTANT

PT 101 Introduction to Physical Therapy

Synopsis of the historical, philosophical, and organizational context of physical therapy profession within the healthcare delivery system will be given. Students will be instructed on how to establish therapeutic communication, business practices, and personal professional development. The course will introduce professional ethics and healthcare literature and investigate the scope and practice of physical therapist assistants and their role within the physical therapy profession. Students will discuss the personal and professional qualities of the healthcare provider, communication needs, professional ethics, cultural diversity, and the psychological aspects of treatment. The student will be introduced to the common conditions in physical therapy practice. 3.00 credit hours. Prerequisites: SC 145/ SC 145L Anatomy and Physiology I/Lab. Corequisites: SC 245/SC 245L Anatomy and Physiology II/Lab.

PT 110 Functional Kinesiology

Through integrated laboratory and lecture, this course will instruct students on the science of movement. Functional anatomy and physiology will be reviewed. Students will be instructed on descriptive terminology as it relates to kinesiology. Biomechanical principles will be discussed and applied. The relationship of these principles to the hip, knee, ankle, elbow, forearm, wrist, hand, lower extremity, head, neck, and trunk will be explored in detail. Students will be introduced to range of motion and palpation of bony prominences, joints, and muscles. An in-depth analysis of human movement with emphasis on typical gait and posture will be incorporated into the course. 4.00 credit hours. Prerequisites: PT 101 Introduction to Physical Therapy, SC 245/SC 245L Anatomy and Physiology II/Lab. Corequisites: PT 115 Pathophysiology for Physical Therapist Assistants and PT 120 Fundamentals of PTA Practice.

PT 115 Pathophysiology for Physical Therapist Assistants

Pathophysiology includes the study of diseases and disorders commonly seen in physical therapy practice. An overview of etiology, manifestations, and treatment of significant diseases, with emphasis on the musculoskeletal, nervous, and cardiopulmonary systems will be provided. The pharmacological interventions for common system dysfunctions treated in the physical therapy profession will be discussed and presented. 2.00 credit hours. Prerequisites: PT 101 Introduction to Physical Therapy and SC 245/SC 245L Anatomy and Physiology I/Lab. Corequisites: PT 110 Functional Kinesiology and PT 120 Fundamentals of PTA Practice.

PT 120 Fundamentals of Physical Therapist Assistant Practice

This course is an overview of observation, interviewing, and medical note-writing techniques. Subject matter includes: medical terminology; review of various assessments and formats for treatment plans; progress notes; and discharge summaries. Emphasis on writing style, reimbursement guidelines, and legal aspects of note writing. The course discusses topics related to written communication and behavioral expectations within the physical therapy profession, including psycho-emotional aspects of caring for the patient, psychosocial problems of the ill and disabled, aging, medical ethics, and professional ethics. 2.00 credit hours. Prerequisites: PT 101 Introduction to Physical Therapy and SC 245/SC 245L Anatomy and Physiology II/Lab. Corequisites: PT 110 Functional Kinesiology and PT 115 Pathophysiology for Physical Therapy Assistants.

PT 130 Basic Patient Care

Through integrated lecture and laboratory experiences, students will be instructed on basic healthcare skills used in physical therapy including practice in wheelchair management, body mechanics, transfers, gait training, infection control, and first aid skills. Students will be introduced to issues involving the physical environment and architectural barriers. They will also be introduced to the measurement of anthropometrical characteristics, vital signs, range of motion, and pain. This course includes identification of anatomical structures as well as therapeutic

intervention using adaptive, assistive devices, soft tissue manipulation, massage, stretches, and joint range of motion techniques. 3.00 credit hours. Prerequisites: PT 110 Functional Kinesiology, PT 115 Pathophysiology for PTAs, and PT 120 Fundamentals of PTA Practice. Corequisites: PT 140 Therapeutic Modalities and PT 150 Therapeutic Exercise.

PT 140 Therapeutic Modalities

Students will participate in lectures and integrated laboratory experiences to explore therapeutic intervention utilizing physical agents including heat, cold, light, sound, water, electricity, and electromagnetic waves in the treatment of acute and chronic diseases and injuries. Students will be introduced to wound care, burn care, and infection control. Emphasis will be on the application and safe, appropriate use of treatment modalities. 3.00 credit hours. Prerequisites: PT 110 Functional Kinesiology, PT 115 Pathophysiology for PTAs and PT 120 Fundamentals of PTA Practice. Corequisites: PT 130 Basic Patient Care and PT 150 Therapeutic Exercise.

PT 150 Therapeutic Exercise

Through integrated lab and lecture, this course will instruct students on therapeutic exercise including basic principles of exercise and basic assessment skills pertaining to joint and muscle function. Emphasis will be on the implementation and progression of exercise programs for correction of specific conditions, muscle weakness, and joint limitations as well as goniometric and manual muscle-testing assessment. The laboratory experience will give students hands-on experience with the techniques being taught (e.g., strengthening, range of motion, stretching, or conditioning exercises) as well as balance, coordination, posture, or training. Students will also have hands-on experience with measuring vital signs, pain, muscle strength, muscle length, and range of motion. They will have an opportunity to practice and master the skills necessary prior to a clinical education setting. 2.00 credit hours. Prerequisites: PT 110 Functional Kinesiology, PT 115 Pathophysiology for PTAs and PT 120 Fundamentals of PTA Practice. Corequisites: PT 130 Basic Patient Care and PT 140 Therapeutic Modalities.

PT 210 Clinical Practicum Preparation

This practicum provides preparation for clinical experiences with topics such as the roles and responsibilities of the physical therapist assistant (PTA), review of patient charts, and confidentiality. Students will be accompanied by faculty to clinical sites for observation and tours. 1.00 credit hours. Prerequisite: PT 150 Therapeutic Exercise. Corequisites: PT 220 Orthopedic Patient Care and PT 230 Clinical Practicum I.

PT 220 Orthopedic Patient Care

Through integrated lecture and laboratory experiences, students will be instructed on physical therapy techniques used in the assessment and intervention of patients with orthopedic disorders, including post-operative care and appropriate therapeutic intervention. Students will continue to study therapeutic exercise as intervention for specific orthopedics cases. Focus will be on principles and application of progressive-resistive exercise, taping techniques, orthotics, prosthetics, and exercise progression. 3.00 credit hours. Prerequisites: PT 130 Basic Patient Care, PT 140 Therapeutic Modalities, and PT 150 Therapeutic Exercise. Corequisites: PT 210 Clinical Practicum Preparation and PT 230 Clinical Practicum I.

PT 230 Clinical Practicum I

This course provides an initial opportunity to implement a variety of physical therapy treatment plans. Students will be oriented to the roles and responsibilities of the physical therapist assistant (PTA) and will have their initial supervised contact with clients having physical dysfunction. 4.00 credit hours. Prerequisites: PT 130 Basic Patient Care, PT 140 Therapeutic Modalities, and PT 150 Therapeutic Exercise. Corequisites: PT 210 Clinical Practicum Preparation and PT 220 Orthopedic Patient Care.

PT 240 Patient Care for Special Populations

Through integrated lecture and laboratory experiences, students will be instructed on physical therapy techniques used in the assessment and intervention for special patient populations including cardiovascular, pulmonary, geriatrics, amputees, bariatrics, lymphedema, women's health, and incontinence. Students will discuss pathology, impairments, functional limitations, and the corresponding disability related to the patient populations. The role of physical therapist assistants within special populations will also be discussed. 3.00 credit hours. Prerequisites: PT 210 Clinical Practicum Preparation, PT 220 Orthopedic Patient Care, and PT 230 Clinical Practicum I. Corequisite: PT 250 Neurological Patient Care.

PT 250 Neurological Patient Care

Through integrated lecture and laboratory experiences, students will be instructed on physical therapy techniques used in the assessment and intervention of adult and pediatric patients with congenital and acquired neurological disorders. Students will discuss pathology, impairments, functional limitations, and the corresponding disability-related patient populations, such as cerebrovascular accident (CVA), spinal cord injury (SCI), traumatic brain injury (TBI), muscular dystrophy (MD), cerebral palsy (CP), spina bifida, and other neurological disorders, including neurodegenerative disorders. 3.00 credit hours. Prerequisites: PT 210 Clinical Practicum Preparation, PT 220 Orthopedic Patient Care, and PT 230 Clinical Practicum I. Corequisite: PT 240 Patient Care for Special Populations.

PT 260 Professional Issues

Discussion of topics related to the physical therapy profession, including current healthcare and physical therapy trends, Medicare Prospective Payment System (PPS), research, evidence-based practice, licensure, and other legal and ethical aspects that influence current physical

therapist assistant practice will be covered. 2.00 credit hours. Prerequisites: PT 230 Clinical Practicum I, PT 240 Patient Care for Special Populations, and PT 250 Neurological Patient Care.

PT 270 Clinical Practicum II

This clinical experience provides students with opportunities to further improve their intervention skills, reinforce their intervention techniques, and reinforce concepts of proper body mechanics, therapist safety, and client safety. The student will learn how to further improve communication skills, including documentation of goals, intervention plans, and patient progress. 5.00 credit hours. Prerequisite: PT 260 Professional Issues.

PT 280 Clinical Practicum III

This course is the final clinical experience and provides students with opportunities to further improve their intervention skills, reinforce their intervention techniques, and reinforce concepts of proper body mechanics, therapist safety, and client safety. Students will further improve communication skills including documentation of goals, intervention plans, and patient progress. 6.00 credit hours. Prerequisite: PT 270 Clinical Practicum II.

(RT) RADIOLOGIC TECHNOLOGY

RT 102 Introduction to Radiography

This course is an overview of radiography and its place in the delivery of healthcare. It presents an orientation to the academic and administrative structure of the overall profession, including ethical and legal responsibilities, patient care and consent, facility policies, and basic principles of radiation protection. Students will be oriented in the basic operation of equipment used in the field. 3.00 credit hours. Prerequisites: SC 245/SC 245L Anatomy and Physiology II/Lab.

RT 106 Methods of Patient Care

This course is an introduction to basic skills and techniques of quality patient care. Communication, assessment, aseptic technique, venipuncture, and drug administration, as related to radiography, are emphasized. 2.00 credit hours. Prerequisite: SC 245/SC 245L Anatomy and Physiology II/Lab.

RT 110 Principles of Radiography I

This course is the study of the physics behind the production of radiation. Also covered is the study of physical forces involved in the production of quality images, which includes prime and geometric factors, quality factors, and the practical manipulation of exposure techniques, filtration, attenuation, as well as the use of grids, receptors systems, and automatic exposure control. 3.00 credit hours. Prerequisites: RT 102 Introduction to Radiography and RT 106 Methods of Patient Care.

RT 115 Radiographic Procedures I

This course is the study of patient habitus, positioning, equipment manipulation, evaluation of radiographic quality for the thoracic cavity, abdominal cavity, and contrast examinations of the gastrointestinal and urinary tracts. Critical thinking and communication skills, as related to procedure performance, patient care, and radiation protection, are emphasized. 2.00 credit hours. Prerequisites: SC 245/SC 245L Anatomy and Physiology II/Lab. Corequisite: RT 115L Radiographic Procedures I Lab.

RT 115L Radiographic Procedures I Lab

This lab is a demonstration of procedures utilizing the energized, static lab on campus in conjunction with RT 115. Procedures practiced will comprise those of the thoracic and abdominal cavities, including contrast examinations of the gastrointestinal and urinary tracts. 1.00 credit hour. Corequisite: RT 115 Radiographic Procedures I.

RT 121 Principles of Radiography II

This course is a continuation of the concepts of physics and provides an overview of electromagnetism, the x-ray circuit, film processing, digital imaging, quality assurance, and radiation biology. 3.00 credit hours. Prerequisite: RT 110 Principles of Radiography I.

RT 131 Radiographic Procedures II

This course is a continuation of Radiographic Procedures I, with evaluation of radiographs of the body's extremities, cervical, thoracic and lumbar spine, sacrum, and coccyx and bony thorax (sternum and ribs) emphasized. 3.00 credit hours. Prerequisites: RT 102 Introduction to Radiography and RT 115 Radiographic Procedures I. Corequisites: RT 106 Methods of Patient Care and RT 131L Radiographic Procedures II Lab.

RT 131L Radiographic Procedures II Lab

This lab is a demonstration and application of subjects covered in Radiographic Procedures II. 1.00 credit hour. Corequisite: RT 131 Radiographic Procedures II.

RT 135 Radiologic Clinical Education I

This course is a continuation of supervised clinical experience and competency evaluation. Emphasis is placed on radiation protection, patient care, equipment manipulation, radiographic technique, image processing, and image quality evaluation. 3.00 credit hours. Prerequisite: RT 115 Radiographic Procedures I.

RT 146 Radiological Clinical Education II

This course is a continuation of supervised clinical experience and competency evaluation. Emphasis is placed on radiation protection, patient care, equipment manipulation, radiographic technique, image processing and image quality evaluation. 3.00 credit hours. Prerequisite: RT 135 Radiologic Clinical Education I.

RT 156 Radiological Clinical Education III

This course is a continuation of supervised clinical experience. The concentration is on fluoroscopy and special procedures. 3.00 credit hours. Prerequisite: RT 146 Radiological Clinical Education II.

RT 211 Computed Tomography Theory I

This course is an overview of computed tomography fundamentals and specifics. It provides the student with a review of CT patient care, contrast administration, CT radiation safety, and related anatomy. 3.00 credit hours. Prerequisite: None.

RT 212 Magnetic Resonance Imaging Theory I

This course is an overview of magnetic resonance imaging fundamentals and specifics. It provides the student with a review of MRI safety, patient care, and related anatomy. 3.00 credit hours. Prerequisite: None.

RT 216 Computed Tomography Clinical Practice I

This is a supervised actual clinical experience on computed tomography equipment. Students demonstrate patient care skills, CTI equipment operation, image acquisition, and image quality evaluation.. 4.00 credit hours. Prerequisite: RT 260 Cross-Sectional Anatomy.

RT 217 Magnetic Resonance Clinical Practice I

This is a supervised actual clinical experience on magnetic resonance imaging equipment. Students demonstrate patient care skills, MRI equipment operation, image acquisition, and image quality evaluation. 4.00 credit hours. Prerequisite: RT 260 Cross-Sectional Anatomy.

RT 222 Computed Tomography Theory II

This course is an overview of computed tomography fundamentals and specifics. It provides the student with a review of CT physics and instrumentation, image production, post-processing techniques, and CT image quality assurance. 3.00 credit hours. Prerequisite: RT 211 Computed Tomography Theory I.

RT 223 Magnetic Resonance Imaging Theory II

This course is an overview of magnetic resonance imaging fundamentals and specifics. It provides the student with a review of MRI image acquisition, imaging parameters, and principles of image formation. 3.00 credit hours. Prerequisite: RT 212 Magnetic Resonance Imaging Theory I.

RT 230 Radiographic Procedures III

This course is a continuation of Radiographic Procedures II and covers evaluation of radiographs of the skull and facial bones, angiography, interventional procedures, trauma, mobile and surgical radiography, pediatric radiography, and additional diagnostic and therapeutic modalities. 3.00 credit hours. Prerequisite: RT 131 Radiographic Procedures II. Corequisite RT 230L Radiographic Procedures III Lab.

RT 230L Radiographic Procedures III Lab

This lab is a demonstration and application of radiographic procedures covered in Radiographic Procedures III. It utilizes the on-campus energized, static lab, including evaluation of radiographs of the skull and facial bones, angiography, interventional procedures, trauma, mobile and surgical radiography, pediatric radiography, and additional diagnostic and therapeutic modalities. 1.00 credit hour. Corequisite: RT 230 Radiographic Procedures III.

RT 232 Computed Tomography Clinical Practice II

This is a continuation of supervised actual clinical experience on computed tomography equipment. Students demonstrate patient care skills, CT equipment operation, image acquisition, and image quality evaluation. 4.00 credit hours. Prerequisites: RT 216 Computed Tomography Clinical Practice I and RT 260 Cross-Sectional Anatomy.

RT 233 Magnetic Resonance Clinical Practice II

This is a continuation of supervised actual clinical experience on magnetic resonance imaging equipment. Students demonstrate patient care skills, MRI equipment operation, image acquisition, and image quality evaluation. 4.00 credit hours. Prerequisites: RT 217 Magnetic Resonance Clinical Practice I and RT 260 Cross-Sectional Anatomy.

RT 255 Radiologic Pathology

This course is an introduction to the concept of disease and injury processes through the systems of the body and their appearance radiographically. 3.00 credit hours. Prerequisites: RT 121 Principles of Radiography II and RT 230 Radiographic Procedures III.

RT 260 Cross-Sectional Anatomy

This course is a presentation of anatomy in cross-sectional slices, as used in advanced imaging modalities rather than flat, as in standard radiography. It provides the student views of the entire body based on slices prepared from cadavers in transverse, sagittal, and coronal planes. 2.00 credit hours. Prerequisites: RT 102 Introduction to Radiography and RT 121 Principles of Radiography II.

RT 266 Radiologic Clinical Education IV

This is a continuation of supervised clinical experience. Students are provided opportunities to observe advanced imaging modalities which could include CT, MRI, mammography, ultrasound, nuclear medicine, and PET imaging. 4.00 credit hours. Prerequisite: RT 156 Radiologic Clinical Education III.

RT 276 Radiologic Clinical Education V

This is a continuation of supervised clinical experience. As senior students, they should be completing the majority of basic competencies and concentrating on obtaining independence with non-trauma patients. 4.00 credit hours. Prerequisite: RT 266 Radiologic Clinical Education IV.

RT 295 Radiography Review

This course is a study tool in preparation for the ARRT registry exam. A review of the entire radiography program, to include mock registry exams and post-test reviews, is completed. 3.00 credit hours. Prerequisite: All core courses except RT 297 Radiologic Clinical Education VI.

RT 297 Radiologic Clinical Education VI

This course is a continuation of supervised clinical experience and is the final clinical rotation for completion of the program. Students must perform any unfinished competencies and complete any areas on which additional practice is required. 3.00 credit hours. Prerequisite: RT 276 Radiologic Clinical Education V.

(SC) NATURAL SCIENCE

SC 125 Anatomy and Physiology for Therapeutic Massage I

This course will provide students with information about the structure and function of the human body related to each of the following body systems: integumentary, skeletal, muscular, nervous, and special senses with relations to therapeutic massage. Biochemistry, cellular biology, and histology will be integrated into each body system. 3.00 credit hours. Prerequisite: None. Corequisite: SC 125L Anatomy and Physiology for Therapeutic Massage I Lab.

SC 125L Anatomy and Physiology for Therapeutic Massage I Lab

This is the lab portion of SC 125 Anatomy and Physiology for Therapeutic Massage I. 1.00 credit hour. Prerequisite: None. Corequisite: SC 125 Anatomy and Physiology for Therapeutic Massage I.

SC 129 Fundamentals of Anatomy and Physiology I

This course introduces students to each of the following body systems: integumentary, skeletal, muscular, joints, nervous, and special senses. Biochemistry, cellular biology, and histology will be integrated into each body system. 3.00 credit hours. Prerequisite: None.

SC 142 Body Structure and Function

This course will provide students with information regarding body structure and function relating to each of the 11 body systems: integumentary, skeletal, muscular, nervous, circulatory, respiratory, lymphatic, endocrine, digestive, urinary, and reproductive. Classroom experiences provide learning in the following topics: the major body systems; how the body systems work together to provide homeostasis; and body functions in the healthy and diseased states. 3.00 credit hours. Corequisite: SC 142L Body Structure and Function Lab.

SC 142L Body Structure and Function Lab

This is the lab portion of SC 142. 1.00 credit hour. Corequisite: SC 142 Body Structure and Function.

SC 145 Anatomy and Physiology I

This course will provide students with information about the structure and function of the body related to each of the following body systems: integumentary, skeletal, muscular, nervous, and special senses. Biochemistry, cellular biology, and histology will be integrated into each body system. 3.00 credit hours. Corequisite: SC 145L Anatomy and Physiology I Lab.

SC 145L Anatomy and Physiology I Lab

This is the lab portion of SC 145. 1.00 credit hour. Corequisite: SC 145 Anatomy and Physiology I.

SC 150 Principles of Nutrition

This course provides students with basic knowledge in human nutrition. The course focuses on structure, role, and function of macronutrients and micronutrients and the processes whereby the human body digests, absorbs and transports nutrients. 2.00 credit hour. Prerequisite: None.

SC 165 General Microbiology

This course provides an introduction to the study of microorganisms in our world. It covers normal flora and pathogenic microbial structure and function, metabolism, genetics, growth, and the relationship to humans and the environment. This course examines human infectious diseases including transmission, host defense mechanisms, and processes used to control the growth and spread of infectious agents. 2.00 credit hours. Prerequisite: None. Corequisite: SC 165L General Microbiology Lab.

SC 165L General Microbiology Lab

This course provides an introduction to the methods used to study microorganisms in our world by introducing standard techniques and procedures used in the microbiology laboratory. 1.00 credit hour. Prerequisite: None. Corequisite: SC 165 General Microbiology.

SC 170 General Biology

This course is an introduction to the principles that lay the foundations for the biological sciences. Topics include the nature of science and the scientific method and the relationships between metabolism, genetics, cell biology, and evolution. 3.00 credit hours. Prerequisite: None. Corequisite: SC 170L General Biology Lab.

SC 170L General Biology Lab

This is the lab portion of SC 170. 1.00 credit hour. Prerequisite: None. Corequisite: SC 170 General Biology.

SC 185 General Chemistry

This course presents the basic concepts of chemistry. Topics to be presented include: matter, atoms, molecules, and atomic structure; how and why atoms interact (covalent and ionic bonding and covalent and multiple bonds); molecular shapes and properties; writing chemical equations; the conservation of matter in chemical reactions; oxidation and reduction reactions; pH and acid-based chemistry; buffer, water, and solutions; and equilibrium. 2.00 credit hours. Prerequisite: None. Corequisite: SC 185L General Chemistry Lab.

SC 185L General Chemistry Lab

This is the lab portion of SC 185. 1.00 credit hour. Prerequisite: None. Corequisite: SC 185 General Chemistry.

SC 190 Fundamentals of Chemistry

This course presents the basic concepts of chemistry. Topics to be presented include: matter, atoms, molecules, and atomic structure; how and why atoms interact (covalent and ionic bonding and covalent and multiple bonds); molecular shapes and properties; writing chemical equations; the conservation of matter in chemical reactions; oxidation and reduction reactions; pH and acid-based chemistry; buffer, water, and solutions; and equilibrium. 3.00 credit hours. Prerequisite: None. Corequisite: SC 190L Fundamentals of Chemistry Lab.

SC 190L Fundamentals of Chemistry Lab

This is the lab portion of SC 190. 1.00 credit hour. Prerequisite: None. Corequisite: SC 190 Fundamentals of Chemistry.

SC 220 Organic Chemistry

This course is a detailed study of aliphatic and aromatic compounds approached through the study of structure, functional groups, reactions, and mechanisms. 3.00 credit hours. Prerequisite: None. Corequisite: SC 220L Organic Chemistry Lab.

SC 220L Organic Chemistry Lab

This is the lab portion of SC 220. 1.00 credit hour. Prerequisite: None. Corequisite: SC 220 Organic Chemistry.

SC 225 Anatomy and Physiology for Therapeutic Massage II

This course will provide students with information about human anatomy and physiology relating to each of the following body systems: endocrine, circulatory, lymphatic, respiratory, digestive, urinary, and the male and female reproductive systems. Biochemistry, cell biology, and histology will be integrated into each body system. 3.00 credit hours. Prerequisites: SC 125/L Anatomy and Physiology for Therapeutic Massage I/Lab. Corequisite: SC 225L Anatomy and Physiology for Therapeutic Massage II Lab.

SC 225L Anatomy and Physiology for Therapeutic Massage II Lab

This is the lab portion of SC 225 Anatomy and Physiology for Therapeutic Massage II. 1.00 credit hour. Prerequisites: SC 125/L Anatomy and Physiology for Therapeutic Massage I/Lab. Corequisite: SC 225 Anatomy and Physiology for Therapeutic Massage II.

SC 229 Fundamentals of Anatomy and Physiology II

This course introduces students to each of the following body systems: cardiovascular, lymphatic, respiratory, digestive, endocrine, urinary, and the male and female reproductive systems. Biochemistry, cell biology, and histology will be integrated into each body system. 3.00 credit hours. Prerequisite: SC 129 Fundamentals of Anatomy and Physiology I.

SC 235 General Biochemistry

Biochemistry explores the roles of essential biological molecules focusing on protein chemistry while covering lipids and carbohydrates. It provides a systematic and methodical application of general and organic chemistry principles. Students examine the structure of proteins, their function, their binding to other molecules, and the methodologies for the purification and characterization of proteins. Enzymes and their kinetics and mechanisms are covered in detail. Metabolic pathways are examined from thermodynamic and regulatory perspectives. This course provides the linkage between the inanimate world of chemistry and the living world of biology. Other topics include mechanisms of enzyme action, nutrition and metabolism, membrane structure and receptor signaling, cell cycle regulation DNA and RNA structure and function, and regulation of gene expression. 3.00 credit hours. Prerequisite: None. Corequisite: SC 235L General Biochemistry Lab.

SC 235L General Biochemistry Lab

This is the lab component that accompanies SC 235 General Biochemistry. This course presents the basic concepts of general biochemistry as they apply to various experiments in the laboratory. 1.00 credit hour. Prerequisite: None. Corequisite: SC 235 General Biochemistry.

SC 242 Anatomy for Artists

This course examines the organization and structure of the body. Topics include the skeletal, muscular, and respiratory systems. Anatomical knowledge is important for professionals hoping to enter the interactive graphics and gaming field from the creative side. These topics, in combination, will form a strong base of knowledge for the beginning professional. 3.00 credit hours. Corequisite: SC 242L Anatomy for Artists Lab.

SC 242L Anatomy for Artists Lab

This is the lab portion of SC 242. 1.00 credit hour. Corequisite: SC 242 Anatomy for Artists.

SC 243 Anatomy and Physiology for Nursing

This course will build upon the Body Structure and Function course and will provide students with information about anatomy and physiology relating to each of the 11 body systems: integumentary, skeletal, muscular, nervous, circulatory, respiratory, lymphatic, endocrine, digestive, urinary and reproductive. Biochemistry, cell biology, and histology will be integrated into each body system. 3.00 credit hours. Prerequisites: SC 142/SC 142L Body Structure and Function/Lab. Corequisite: SC 243L Anatomy and Physiology for Nursing Lab.

SC 243L Anatomy and Physiology for Nursing Lab

This is the lab portion of SC 243. 1.00 credit hour. Prerequisites: SC 142/SC 142L Body Structure and Function/Lab. Corequisite: SC 243 Anatomy and Physiology for Nursing.

SC 245 Anatomy and Physiology II

This course will provide students with information about anatomy and physiology relating to each of the following body systems: endocrine, circulatory, lymphatic, respiratory, digestive, urinary, and the male and female reproductive systems. Biochemistry, cell biology, and histology will be integrated into each body system. 3.00 credit hours. Prerequisites: SC 145/SC 145L Anatomy and Physiology I/Lab. Corequisite: SC 245L Anatomy and Physiology II Lab.

SC 245L Anatomy and Physiology II Lab

This is the lab portion of SC 245. 1.00 credit hour. Prerequisites: SC 145/SC 145L Anatomy and Physiology I/Lab. Corequisite: SC 245 Anatomy and Physiology II.

SC 358 Physics

This course presents concepts of physics as they apply to mechanics, temperature, heat, light, and wave motion. 3.00 credit hours. Prerequisite: MA 204 Trigonometry or MA 225 Trigonometry and Pre-Calculus. Corequisite: SC 358L Physics Lab.

SC 358L Physics Lab

This is the lab portion of SC 358 Physics. 1.00 credit hour. Prerequisites: MA 204 Trigonometry or MA 225 Trigonometry and Pre-Calculus. Corequisite: SC 358 Physics.

SC 370 Environmental Science

This course explores the environmental science issues of societies that affect the natural environment. Topics include how ecosystems work, the impact of population, renewable resources, energy and power, the impact of pollution, and public policy issues. 3.00 credit hours. Prerequisites: EN 104 English Composition I and MA 107 College Algebra. Corequisite: SC 370L Environmental Science Lab.

SC 370L Environmental Science Lab

This is the lab portion of SC 370 Environmental Science. 1.00 credit hour. Prerequisites: EN 104 English Composition I and MA 107 College Algebra. Corequisite: SC 370 Environmental Science.

(SS) SOCIAL SCIENCES

SS 120 Introduction to Sociology

This course will provide a critical survey of contemporary social, political, and economic problems facing American society. Emphasis will include the urban crises, military-industrial complex, racism, and distribution of income. Topics will include society, social life, social groups, social control, social inequality, social institutions, social dynamics, and social change. 3.00 credit hours. Prerequisite: None.

SS 310 Cultural Diversity

This course provides students with an overview of diversity by exploring issues of race and ethnicity, sources of conflict, and patterns of dominance in the United States. Students will be provided tools to explore attitudes and create an awareness that is important to developing and maintaining effective personal and professional relationships. Students will complete several activities that allow them to examine their own values in relation to the values of various other racial and ethnic communities. 3.00 credit hours. Prerequisite: None.

SS 340 Social Structure and Culture in the United States

This course examines contemporary American culture, values, social institutions, and stratification systems in a social context. Students will gain an understanding of how America's social institutions (including law, medicine, economics, family and politics), systems of stratification (including race, class, age and gender), and culture influence life chances (how, where, with whom, and how long people live) for Americans and recent immigrants. 3.00 credit hours. Prerequisite: None.

SS 350 Social Issues and Technology

This course examines the influence of technology on American society through analyses of economic, societal evolution or structure, cognitive, and environmental change. Topics may include: energy technologies; the influence of technologies on (a) the ecosystem, (b) the rate of human population growth, (c) warfare, law enforcement, and corrections, and (d) personal privacy standards; the roles technology plays in social responsibility; social networking and business; and the ethical issues raised by changes in medical technology and the challenge using our cognitive surplus. 3.00 credit hours. Prerequisite: None.

(ST) SURGICAL TECHNOLOGY

ST 102 Introduction to Surgical Technology

This course teaches students to recognize the role and responsibility of a surgical technologist. Key concepts include the fundamentals of aseptic and sterile techniques. 2.00 credit hours. Prerequisites: HC 115 Medical Terminology for Healthcare Professionals, SC 145/145L Anatomy and Physiology I/Lab, SC 165/SC 165L General Microbiology/Lab, and SC 245/SC 245L Anatomy and Physiology II/Lab. Corequisites: ST 102L Introduction to Surgical Technology Lab and ST 111 Surgical Pharmacology.

ST 102L Introduction to Surgical Technology Lab

This course teaches student to apply the principles presented in Introduction to Surgical Technology. Students are introduced to basic equipment and supplies and the purpose of a sterile environment. Key concepts include the preparation of instruments and supplies. 2.00 credit hours. Prerequisites: HC 115 Medical Terminology for Healthcare Professionals, SC 145/145L Anatomy and Physiology I/Lab, SC 165/SC 165L General Microbiology/Lab, and SC 245/SC 245L Anatomy and Physiology II/Lab. Corequisites: ST 102 Introduction to Surgical Technology and ST 111 Surgical Pharmacology.

ST 111 Surgical Pharmacology

This course covers basic principles of pharmacology as they relate to operating room practice. Key concepts include fundamentals of pharmacology as well as the fundamental concepts of regional and general anesthesia, blood and fluid replacement and emergency situations. 2.00 credit hours. Prerequisites: HC 115 Medical Terminology for Healthcare Professionals, SC 145/145L Anatomy and Physiology I/Lab, SC 165/SC 165L General Microbiology/Lab, and SC 245/SC 245L Anatomy and Physiology II/Lab. Corequisites: ST 102/ST 102L Introduction to Surgical Technology/Lab.

ST 211L Surgical Principles and Practice I

This course teaches students the interactions of surgical team members and their participation in the operating room 2.00 credit hours. Prerequisites: ST 102/ST 102L Introduction to Surgical Technology/Lab and ST 111 Surgical Pharmacology. Corequisite: ST 220 Surgical Procedures I.

ST 220 Surgical Procedures I

This course provides a comprehensive study of basic, intermediate, and advanced core surgical procedures, as described in the core curriculum. 4.00 credit hours. Prerequisites: ST 102/ST 102L Introduction to Surgical Technology/Lab and ST 111 Surgical Pharmacology. Corequisite: ST 211L Surgical Principles and Practice I.

ST 231L Surgical Principles and Practice II

This course is designed to teach students the knowledge and skills necessary to provide patient care in the surgical setting and focuses on perioperative case management. Students will be competent in the level of transferring patients, positioning, prepping, monitoring, and performing vital signs. 2.00 credit hours. Prerequisites: ST 211L Surgical Principles and Practice I and ST 220 Surgical Procedures I. Corequisite: ST 240 Surgical Procedures II.

ST 240 Surgical Procedures II

This course provides a comprehensive study of basic, intermediate, and advanced specialty surgical procedures as described in the core curriculum. 4.00 credit hours. Prerequisites: ST 211L Surgical Principles and Practice I and ST 220 Surgical Procedures I. Corequisite: ST 231L Surgical Principles and Practice II.

ST 251 Clinical Practicum I

In this course, students will begin a clinical externship. While under the supervision of the surgical team, the student will observe cases and begin to scrub and assist team members when directed. Students become familiar with the operating room, procedures, and practices of the working surgical environment. 6.00 credit hours. Prerequisites: ST 231L Surgical Principles and Practice II and ST 240 Surgical Procedures II.

ST 261 Clinical Practicum II

This course is a continuation of Clinical Practicum I. In this final phase of externship, the student will exhibit a more independent role while under the continued supervision of the surgical team. Students are expected to actively participate in the perioperative process. 6.00 credit hours. Prerequisite: ST 251 Clinical Practicum I. Corequisite: ST 270 Surgical Technology Examination Preparation.

ST 270 Surgical Technology Examination Preparation

This course will provide the surgical technology student with the needed preparation to complete the certification exam process. It reinforces academic knowledge, professional accountability, independent decision-making, and the critical nature of self-assessment. The national certification examination for surgical technologists (CST), provided by the National Board of Surgical Technology and Surgical Assisting (NBSTSA), will be administered in this course. 3.00 credit hours. Prerequisite: ST 251 Clinical Practicum I. Corequisite: ST 261 Clinical Practicum II.

(TN) THERAPEUTIC MASSAGE

TN 081 Subjective, Objective, Assessment and Plan I

This course will provide the opportunity for the student to develop better writing skills in the Subjective, Objective, Assessment, Plan (SOAP) finding format for the clients. This course is in conjunction with Massage Therapy Clinic. Non-credit course. Corequisite: TN 244 Massage Therapy Clinic I.

TN 082 Subjective, Objective, Assessment and Plan II

This course will provide the opportunity for the student to develop better writing skills in the Subjective, Objective, Assessment, Plan (SOAP) finding format for the clients. This course is in conjunction with Massage Therapy Clinic. Non-credit course. Corequisite: TN 245 Massage Therapy Clinic II.

TN 083 Subjective, Objective, Assessment and Plan III

This course will provide the opportunity for the student to develop better writing skills in the Subjective, Objective, Assessment, Plan (SOAP) finding format for the clients. This course is in conjunction with Massage Therapy Clinic. Non-credit course. Corequisite: TN 246 Massage Therapy Clinic III.

TN 084 Subjective, Objective, Assessment and Plan IV

This course will provide the opportunity for the student to develop better writing skills in the Subjective, Objective, Assessment, Plan (SOAP) finding format for the clients. This course is in conjunction with Massage Therapy Clinic. Non-credit course. Corequisite: TN 247 Massage Therapy Clinic IV.

TN 091 Pathology Care Plan Project

During this course, the student will be required to write 12 care plans related to a specific client injuries, diseases, condition come upon in massage therapy clinic. This care plan format is an extended version of SOAP notes. The care plan project will be done in conjunction with Massage Therapy Clinic I, II and III. Non-credit course. Corequisite: TN 210 Pathology for the Massage Therapist.

TN 095 Eastern Wellness Project

This project is done in conjunction with the Eastern Wellness class. The Eastern Wellness Project will focus on creating a research paper and presentation on different massage techniques and/or bodywork modalities. Non-credit course. Corequisite TN 250 Eastern Wellness.

TN 096 Hydrotherapy Project

This project is done in conjunction with the Hydrotherapy class. The Hydrotherapy Project will focus on creating a research paper and presentation on a student-selected condition or disease. The student will have to relate that condition or disease to how massage, bodywork, and hydrotherapy can benefit or not benefit the condition. Non-credit course. Corequisite: TN 260 Hydrotherapy.

TN 120 Massage Theory and Practice I

This course primarily consists of learning a Swedish massage full-body routine along with the history of massage. Indications, contraindications of massage, the use of oil and creams, client draping, and grounding and centering will also be taught. Proper body mechanic techniques and self care for the massage therapist will be covered during this course. Massage terms, directional terms, and medical terminology will be covered to better understand the SOAP noting procedures. 4.00 credit hours. Prerequisite: None.

TN 121 Massage Theory and Practice II

This course consists of practicing the massage therapy skills gained in Massage Theory and Practice I. It will help prepare the student for the Massage Therapy Clinics. Preparation involves learning OSMT clinic protocol and ethics, as well as role-playing various client scenarios within a "mock" clinic setting. The student will also learn effective seated chair massage routine, side-lying massage routine, and pregnancy massage routine as well as the addition of other techniques or modalities to enhance the experience of Swedish massage. Students will continue to practice the SOAP noting procedure. 4.00 credit hours. Prerequisite: TN 120 Massage Theory and Practice I.

TN 130 Cardiopulmonary Resuscitation (CPR) and First Aid

This course will prepare the student with the knowledge and skills necessary to prevent, recognize, and provide basic care for injuries and sudden illnesses until advanced medical personnel arrive and take over. This course covers first aid and adult CPR training. This is a required course before the student can enter Massage Therapy Clinic. 0.5 credit hours. Prerequisite: None.

TN 146 Integrative Reflexology

This is the first of six elective choices. The student will be able to choose from a list of modalities ranging from, but limited to: reflexology, hot stone massage, thai massage, active isolated stretching, neuromuscular therapy, sports massage, myofascial release and many more. The purpose of the electives is to give the student a deeper understanding and exposure to modalities of interest. 1.00 credit hour. Prerequisites: SC 225/SC 225L Anatomy and Physiology for Therapeutic Massage II/Lab, TN 120 Massage Theory and Practice I, TN 121 Massage Theory and Practice II, and TN 130 Cardiopulmonary Resuscitation (CPR) and First Aid.

TN 147 Reiki

This is the second of six elective choices. The student will be able to choose from a list of modalities ranging from, but limited to: reflexology, hot stone massage, thai massage, active isolated stretching, neuromuscular therapy, sports massage, myofascial release and many more. The purpose of the electives is to give the student a deeper understanding and exposure to modalities of interest. 1.00 credit hour. Prerequisites: SC 225/SC 225L Anatomy and Physiology for Therapeutic Massage II/Lab, TN 120 Massage Theory and Practice I, TN 121 Massage Theory and Practice II, and TN 130 Cardiopulmonary Resuscitation (CPR) and First Aid.

TN 148 Hot Stone Massage

This is the third of six elective choices. The student will be able to choose from a list of modalities ranging from, but limited to: reflexology, hot stone massage, thai massage, active isolated stretching, neuromuscular therapy, sports massage, myofascial release and many more. The purpose of the electives is to give the student a deeper understanding and exposure to modalities of interest. 1.00 credit hour. Prerequisites: SC 225/SC 225L Anatomy and Physiology for Therapeutic Massage II/Lab, TN 120 Massage Theory and Practice I, TN 121 Massage Theory and Practice II, and TN 130 Cardiopulmonary Resuscitation (CPR) and First Aid.

TN 149 Neuromuscular and Deep Tissue Therapy Massage

This is the fourth of six elective choices. The student will be able to choose from a list of modalities ranging from, but limited to: reflexology, hot stone massage, thai massage, active isolated stretching, neuromuscular therapy, sports massage, myofascial release and many more. The purpose of the electives is to give the student a deeper understanding and exposure to modalities of interest. 1.00 credit hour. Prerequisites: SC 225/SC 225L Anatomy and Physiology for Therapeutic Massage II/Lab, TN 120 Massage Theory and Practice I, TN 121 Massage Theory and Practice II, and TN 130 Cardiopulmonary Resuscitation (CPR) and First Aid.

TN 150 Thai Massage

This is the fifth of six elective choices. The student will be able to choose from a list of modalities ranging from, but limited to: reflexology, hot stone massage, thai massage, active isolated stretching, neuromuscular therapy, sports massage, myofascial release and many more. The purpose of the electives is to give the student a deeper understanding and exposure to modalities of interest. 1.00 credit hour. Prerequisites: SC 225/SC 225L Anatomy and Physiology for Therapeutic Massage II/Lab, TN 120 Massage Theory and Practice I, TN 121 Massage Theory and Practice II, and TN 130 Cardiopulmonary Resuscitation (CPR) and First Aid.

TN 151 Sports Massage

This is the sixth of six elective choices. The student will be able to choose from a list of modalities ranging from, but limited to: reflexology, hot stone massage, thai massage, active isolated stretching, neuromuscular therapy, sports massage, myofascial release and many more. The purpose of the electives is to give the student a deeper understanding and exposure to modalities of interest. 1.00 credit hour. Prerequisites: SC 225/SC 225L Anatomy and Physiology for Therapeutic Massage II/Lab, TN 120 Massage Theory and Practice I, TN 121 Massage Theory and Practice II, and TN 130 Cardiopulmonary Resuscitation (CPR) and First Aid.

TN 210 Pathology for the Massage Therapist

Pathology is devoted to the definition, etiology, signs, and symptoms of conditions commonly encountered by a licensed massage therapist. The purpose of this course is to help the beginning massage student build a knowledge base upon which he or she can begin to practice. This knowledge base will enable a therapist to deal with clients in whom such conditions may exist and provide a basis for communication with other health professionals. 4.00 credit hours. Prerequisite: SC 225/SC 225L Anatomy and Physiology for Therapeutic Massage II/Lab. Corequisite: TN 091 Pathology Care Plan Project (Nebraska only).

TN 220 Business Principles and Health Service Management

Basic business principles that will be covered in this course include: how to find a job; how to start your own business; promoting and marketing massage therapy; legalities of a massage practice; professional ethics; and financial management. The course information is tailored to the massage therapy profession and will offer food for thought about what it means to be a professional massage therapist, the benefits of involvement in a professional association, the need for continuing education, and growing opportunities in massage therapy. 4.00 credit hours. Prerequisite: None.

TN 231 Kinesiology: Upper Body

Kinesiology is the scientific study of muscular activity, anatomy, physiology, and the mechanics of the movement of the body and its parts. This course offers an in-depth study of the muscular/skeletal system and other associated structures. This information is devoted to enhancing the skills and knowledge base for the massage therapists. Exploring the various actions of a muscle or muscle groups will further develop the skills for bodywork and better meet the needs of the client. We will utilize lecture, movies, review, demonstration, palpation, testing, and sculpting with clay for this class. 4.00 credit hours. Prerequisites: SC 225/SC 225L Anatomy and Physiology for Therapeutic Massage II/Lab and TN 121 Massage Theory and Practice II.

TN 232 Kinesiology: Lower Body

Kinesiology is the scientific study of muscular activity, anatomy, physiology, and the mechanics of the movement of the body and its parts. This course offers an in-depth study of the muscular/skeletal system and other associated structures. This information is devoted to enhancing the skills and knowledge base for massage therapists. Exploring the various actions of a muscle or muscle groups will further develop the skills for bodywork and better meet the needs of the client. We will utilize lecture, movies, review, demonstration, palpation, testing, and sculpting with clay for this class. 4.00 credit hours. Prerequisites: SC 225/SC 225L Anatomy and Physiology for Therapeutic Massage II/Lab and TN 121 Massage Theory and Practice II.

TN 244 Massage Therapy Clinic I

This is the first of four blocks. It is the hands-on application of massage therapy to clients. Clinic hours will be set up in a flexible schedule to accommodate the student and clinic needs. Each student will be required to maintain a certain number of clinic hours each week and follow the SOAP finding procedures in order to track the progress of clients. Each student will need to complete 180 hours of massage therapy clinic. 1.00 credit hour. Prerequisites: SC 225/SC 225L Anatomy and Physiology for Therapeutic Massage II/Lab, TN 121 Massage Theory and Practice II, and TN 130 Cardiopulmonary Resuscitation (CPR) and First Aid. Corequisite: TN 081 Subjective, Objective, Assessment and Plan I. (Nebraska only).

TN 245 Massage Therapy Clinic II

This course is the second of four blocks. It is the hands-on application of massage therapy to clients. Clinic hours will be set up in a flexible schedule to accommodate the student and clinic needs. Each student will be required to maintain a certain number of clinic hours each week and follow the SOAP finding procedures in order to track the progress of clients. Each student will need to complete 180 hours of massage therapy clinic. 1.00 credit hour. Prerequisites: SC 225/SC 225L Anatomy and Physiology for Therapeutic Massage II/Lab, TN 121 Massage Theory and Practice II, and TN 130 Cardiopulmonary Resuscitation (CPR) and First Aid. Corequisite: TN 082 Subjective, Objective, Assessment and Plan II. (Nebraska only).

TN 246 Massage Therapy Clinic III

This course is the third of four blocks. It is the hands-on application of massage therapy to clients. Clinic hours will be set up in a flexible schedule to accommodate the student and clinic needs. Each student will be required to maintain a certain number of clinic hours each week and follow the SOAP finding procedures in order to track the progress of clients. Each student will need to complete 180 hours of massage therapy clinic. 1.00 credit hour. Prerequisites: SC 225/SC 225L Anatomy and Physiology for Therapeutic Massage II/Lab, TN 121 Massage

Theory and Practice II, and TN 130 Cardiopulmonary Resuscitation (CPR) and First Aid. Corequisite: TN 083 Subjective, Objective, Assessment and Plan III. (Nebraska only).

TN 247 Massage Therapy Clinic IV

This course is the fourth of four blocks. It is the hands-on application of massage therapy to clients. Clinic hours will be set up in a flexible schedule to accommodate the student and clinic needs. Each student will be required to maintain a certain number of clinic hours each week and follow the SOAP finding procedures in order to track the progress of clients. Each student will need to complete 180 hours of massage therapy clinic. 1.00 credit hour. Prerequisites: SC 225/SC 225L Anatomy and Physiology for Therapeutic Massage II/Lab, TN 121 Massage Theory and Practice II, and TN 130 Cardiopulmonary Resuscitation (CPR) and First Aid. Corequisite: TN 084 Subjective, Objective, Assessment and Plan IV.

TN 250 Eastern Wellness

This course focuses on the concept of wellness from the combined views of traditional Chinese and Westernized medicine. The course is devoted to examining what it means to live by following a healthy lifestyle based off of philosophies from these two traditions. The student will also learn the basic theories and practices of eastern medicine as they apply to both massage practice and client evaluation. Topics will include Chinese medical theory, the basics of the five elements, treatments including acupuncture, acupressure, Ayurveda, and other modalities. The course is intended as a survey of general topics associated with Eastern medicine; certain underlying concepts will be covered in more depth. 4.00 credit hours. Prerequisites: SC 225/SC 225L Anatomy and Physiology for Therapeutic Massage II/Lab, TN 121 Massage Theory and Practice II, and TN 130 Cardiopulmonary Resuscitation (CPR) and First Aid. Corequisite: TN 095 Eastern Wellness Project (Nebraska only).

TN 260 Hydrotherapy

Hydrotherapy is the study of water as a therapeutic agent, used both internally and externally. Thermotherapy (heat) and cryotherapy (cold) will be incorporated into this class to include steam, sauna, whirlpool, hot packs, sinus packs, aromatherapy, body wraps, polishes, etc. This course will cover the indications and contraindications of each spa treatment. This spa treatment class is intended to extend the choice of treatment modalities available to the massage therapist besides basic full body massage. This class will extend their scope of practice and knowledge base of the spa industry while allowing them to offer these treatments to their clients. 4.00 credit hours. Prerequisites: SC 225/SC 225L Anatomy and Physiology for Therapeutic Massage II/Lab, TN 121 Massage Theory and Practice II, and TN 130 CPR and First Aid. Corequisite: TN 096 Hydrotherapy Project.

CHANGES FROM PREVIOUS CATALOG (SEPTEMBER 2011)

New Programs

- ◆ Bachelor of Science in Business Management With a Concentration in Leadership (BSBML)
- ◆ Bachelor of Science in Nursing (Orlando Campus) (BSNF)
- ◆ Associate of Applied Science in Clinical Medical Assisting (AASCMA)

Programs No Longer Offered

- ◆ Bachelor of Science in Accounting and Finance (BSAF)
- ◆ Bachelor of Science in Business Administration With No Declared Minor or Concentration (BSBANM)
- ◆ Bachelor of Science in Business Administration With a Concentration in Business Management (BSBABM)
- ◆ Bachelor of Science in Business Management With a Concentration in E-Marketing (BSBMEM)
- ◆ Bachelor of Science in Business Management With a Concentration in Meeting and Event Planning (BSBMMEP)
- ◆ Bachelor of Science in Business Management With a Concentration in Sustainable Management (BSBMSM)
- ◆ Bachelor of Science in Forensic Accounting (BSFA)
- ◆ Associate of Science/Applied Science in Computer Networking and Security Technology (ASCNST/AASCNST)
- ◆ Associate of Science/Applied Science in Computer Science (ASCS/AASCS)
- ◆ Associate of Science/Applied Science in Medical Billing and Insurance Coding (ASMBIC/AASMBIC)
- ◆ Associate of Science/Applied Science in Sustainable Management (ASSM/AASSM)
- ◆ Diploma/Certificate in Business Support (DBS/CBS)
- ◆ Diploma in Computer Networking and Security Technology (DCNST)
- ◆ Diploma in Computer Science (DCS)
- ◆ Diploma in Drafting and Design Technology (DDDTN)
- ◆ Diploma in Electronics Engineering Technology (DEET)
- ◆ Diploma/Certificate in Forensic Accounting (DFA/CFA)
- ◆ Diploma/Certificate in Legal Assisting (DLAP/CLAP)
- ◆ Diploma in Medical Assisting (DMA)
- ◆ Diploma in Medical Billing and Insurance Coding (DMBIC)

Revised Programs

- ◆ Bachelor of Science in Information Technology With a Concentration in Network Management (BSITNM)
- ◆ Bachelor of Science in Information Technology With a Concentration in Security Technology (BSITST)

- ◆ Bachelor of Science in Software Development With No Declared Minor or Concentration (BSSDNM)
- ◆ Bachelor of Science in Software Development With a Concentration in Computer Programming (BSSDCP)
- ◆ Associate of Science/Applied Science in Accounting (ASA/AASAOH)
- ◆ Associate of Applied Science in Dental Assisting (AASDA)
- ◆ Associate of Science/Applied Science in Legal Studies (ASLS/AASLS)
- ◆ Associate of Science/Applied Science in Medical Office Administration (ASMOA/AASMOAD)
- ◆ Associate of Applied Science in Nursing (AASNOH)
- ◆ Associate of Science in Therapeutic Massage (ASTMNE/ASTMWI)
- ◆ Diploma in Dental Assisting (DDA)
- ◆ Diploma in Medical Office Administration (DMOA)
- ◆ Diploma in Therapeutic Massage (DTMNE/DTMWI)

Programs With Name Changes

None

New Courses

- ◆ BU 210 Organizational Communications
- ◆ BU 306 Organizational Learning and Knowledge Management
- ◆ BU 303 Leadership in Competencies for Global Managers
- ◆ BU 408 Learning and Transformation in Sustainable Organizations
- ◆ BU 417 Designing Winning Organizations
- ◆ CA 100 Introduction to the Professional Medical Assistant
- ◆ CA 102 Healthcare Law and Ethics
- ◆ CA 110 Medical Administrative Procedures
- ◆ CA 125 X-Ray Technologies for the Medical Assistant I
- ◆ CA 135 X-Ray Technologies for the Medical Assistant II
- ◆ CA 150 Clinical Skills I
- ◆ CA 200 Clinical Skills II
- ◆ CA 225 Medical Laboratory Procedures
- ◆ CA 225L Medical Laboratory Procedures Lab
- ◆ CA 255 Clinical Medical Assistant Review Seminar
- ◆ CA 294 Clinical Medical Assisting Externship
- ◆ DS 152 Chairside Assisting II
- ◆ DS 204 Dental Management
- ◆ MO 270 Case Study Research Project

- ◆ MO 295 Medical Office Administration Internship
- ◆ NB 117/NB 117L Introduction to Clinical Nursing/Lab
- ◆ NB 126/NB 126L Basic Health Assessment/Lab
- ◆ NB 140/140C Health Assessment and Promotion Across the Lifespan/Clinical
- ◆ NB 146/C/L Adult Health I/Clinical/Lab
- ◆ NB 246/C/L Adult Health II/Clinical/Lab
- ◆ NB 256/C Mental Health Nursing/Clinical
- ◆ NB 351/C/L Family Nursing/Clinical/Lab
- ◆ NB 356/C/L Adult health III/Clinical/Lab
- ◆ NB 416/C Designing and Managing Nursing Care/Clinical
- ◆ NB 460C Community Nursing Clinical
- ◆ NB 476C/L Nursing Preceptorship Clinical/Lab
- ◆ NF 310 Nursing Pathophysiology
- ◆ NF 317 Nursing VII
- ◆ NF 318 Nursing VIII
- ◆ NF 319 Nursing IX
- ◆ NF 420 Nursing X
- ◆ NF 421 Nursing XI
- ◆ NF 422 Clinical Practicum
- ◆ NF 423 Integration of Nursing Concepts
- ◆ SC 125/L Anatomy and Physiology for Therapeutic Massage I/Lab
- ◆ SC 225/L Anatomy and Physiology for Therapeutic Massage II/Lab
- ◆ SS 340 Social Structure and Culture in the United States

Courses With Revised Prerequisites or Corequisites

- ◆ DH 229 Local Anesthesia and Pain Management
- ◆ DH 229L Local Anesthesia and Pain Management Lab
- ◆ IS 124 Database Applications
- ◆ NB 135 Pharmacology
- ◆ NB 345 Health Assessment and Promotion Across the Lifespan
- ◆ NB 420 Nursing Informatics
- ◆ NB 431 Evidence-Based Nursing Research and Practice
- ◆ NB 440 National and Global Health and Policy Issues
- ◆ NB 460 Community Nursing
- ◆ TN 146 Integrative Reflexology
- ◆ TN 147 Reiki
- ◆ TN 148 Hot Stone Massage
- ◆ TN 149 Neuromuscular and Deep Tissue Therapy Massage
- ◆ TN 150 Thai Massage

- ◆ TN 151 Sports Massage
- ◆ TN 210 Pathology for the Massage Therapist
- ◆ TN 231 Kinesiology: Upper Body
- ◆ TN 232 Kinesiology: Lower Body
- ◆ TN 244/TN 245/TN 246/TN 247 Massage Therapy Clinic I/II/III/IV
- ◆ TN 250 Eastern Wellness
- ◆ TN 260 Hydrotherapy

Courses No Longer Offered/Removed From the Catalog

- ◆ AC 436 Forensic Accounting
- ◆ BU 115 Basic Merchandising
- ◆ BU 135 Introduction to the Gaming Industry
- ◆ BU 217 Introduction to Operations
- ◆ BU 218 Logistics
- ◆ BU 219 Introduction to Retail Management
- ◆ BU 221 Value Stream Management
- ◆ BU 222 Gaming and the Law
- ◆ BU 223 Retail Promotions
- ◆ BU 227 Stability Operations Planning
- ◆ BU 231 Hospitality and Gaming
- ◆ BU 237 Lean Enterprise
- ◆ BU 256 Business Intelligence and Data Analysis
- ◆ BU 263 Business Resource Planning Fundamentals
- ◆ BU 266 Database Design
- ◆ BU 267 Data Manipulation
- ◆ BU 306 Leadership, Change, and Operational Excellence
- ◆ BU 308 Resource Planning
- ◆ BU 311 Regulatory Issues in Gaming
- ◆ BU 312 Data Analysis
- ◆ BU 313 Procurement and Sourcing
- ◆ BU 314 Electronic Translation Language (ETL)
- ◆ BU 316 Merchandise Planning and Control
- ◆ BU 333 Business Web Design
- ◆ BU 338 Supply Chain Management Principles
- ◆ BU 344 Poverty and Discrimination
- ◆ BU 347 Metadata Architecture for Reporting
- ◆ BU 352 Monetary Policies
- ◆ BU 354 Report Development and Design
- ◆ BU 362 Competition Between Businesses
- ◆ BU 376 Logistical Supply Chain Planning

- ◆ BU 408 Current Gaming Strategies
- ◆ BU 411 Six Sigma Principles
- ◆ BU 424 The Global Economy
- ◆ BU 427 Economic Development
- ◆ BU 431 Supply Chain and Operations Analysis
- ◆ BU 433 Quality and Productivity Management
- ◆ BU 448 Supply Chain Resources
- ◆ BU 449 International Logistics
- ◆ BU 451 Current Retail Strategies
- ◆ BU 454 Lean Operations Strategies
- ◆ DS 151 Chairside Assisting II
- ◆ DS 206 Dental Management
- ◆ EC 311 Contemporary Microeconomics
- ◆ EC 321 Contemporary Macroeconomics
- ◆ HC 100 Medical Office Management
- ◆ IS 219 Requirements Gathering and Testing
- ◆ IS 236 Systems Implementation and Training
- ◆ IS 309 Online Analytic Processing (OLAP)
- ◆ IS 310 Unix Shell Programming
- ◆ IS 311 XML Programming
- ◆ IS 415 Server Side Web Development
- ◆ MO 294 Internship
- ◆ NB 116 Introduction to Clinical Nursing
- ◆ NB 125 Basic Health Assessment
- ◆ NB 145 Adult Health I
- ◆ NB 245 Adult Health II
- ◆ NB 255 Mental Health Nursing
- ◆ NB 350 Family Nursing
- ◆ NB 355 Adult Health II
- ◆ NB 415 Designing and Managing Nursing Care
- ◆ NB 475 Nursing Preceptorship
- ◆ NT 355 Platform Integration
- ◆ PL 130 Family and Tort Law
- ◆ PL 138 Wills, Estates and Bankruptcy
- ◆ Financial Information: Withdrawal From University
- ◆ Program Offerings: Addition of Madison West Learning Center and changes to campus offerings

Other Changes

- ◆ University Information: Changes to Key System Administrators, Campus Administrators, and Undergraduate Faculty
- ◆ Academic Information—Developmental Studies: Passing grade of 70% or above now required.
- ◆ Academic Information—Undergraduate Standards of Satisfactory Progress