Reviewed 05/07/2026, updated 5/12/2026

The course descriptions listed below provide students, faculty, and staff with comprehensive listing. All courses listed are not offered in a given academic year. For a listing of courses provided for each semester, please review the course list in J1.

Biology

BIO 102: Structure and Function of the Body

4 Credits (Lecture)

This course introduces the students to a basic understanding of anatomy and physiology of the human body. The course also describes the structural and functional relationships among the organ systems.

Prerequisite: None

BIO 104: Advanced Structure and Function of the Body

4 Credits (Lecture)

This course provides an in-depth exploration of anatomy and physiology of the human body across the lifespan. The course allows students to demonstrate an advanced knowledge of the structural and functional relationships among the organ systems.

Prerequisite(s) BIO 102 Structure and Function of the Human Body

Corequisite(s) NA

BIO 111: Anatomy and Physiology I

4 Credits (3 Lecture + 1 Lab)

This course is the first phase of a two-semester course designed to provide students with an understanding of the structure and function of human organ systems. A brief review of biological chemistry will be followed by an introduction to cells and tissues. This information will form the basis for the following course content as it relates to the integumentary, osseous (bone), muscular, and nervous systems.

Prerequisite: SCI099; *or* Biology and chemistry taken within the last 5 years (minimum grade C) and 2.75 cumulative GPA; *or* Composite TEAS test score of 70% minimum, with a minimum science sub score of 65%; pre-requisite waived for students in ABSN program

BIO 112: Anatomy and Physiology II

4 Credits (3 Lecture + 1 Lab)

BIO 112 continues to provide students with an understanding and knowledge of the structure and function of the human body. The study of the processes underlying human functioning is also

incorporated. The course includes integrated study of the autonomic nervous system, the stress response, special senses, blood, and the endocrine, cardiovascular, respiratory, immune, urinary, digestive, and reproductive systems. The course also includes an overview of heredity, development and genetics. Laboratory exercises are designed to complement topics covered in class presentations.

Prerequisite: BIO 111

BIO 121: Microbiology

4 Credits (3 Lecture + 1 Lab)

BIO 121 is designed to introduce the student to basic knowledge regarding the morphology and physiology of microorganisms relevant to healthcare settings and the living environment as a whole. While emphasis is on direct microbe-human interaction, discussion will incorporate aspects from the growing awareness of global microbial transfer and the passage of microorganisms from animals to humans (zoonoses). Methods for infection control will include study of the body's own immune response, the current spectrum of anti-microbial agents in use and public health strategies that incorporate both. Laboratory exercises will enhance and elucidate topics covered in lecture presentations.

Prerequisite: None

BIO 160: Food and Fitness

1 Credit Hour (Lecture)

Building upon principles from Human Anatomy and Physiology, this one credit one-line course will prepare students to apply critical thinking and computer-based research skills in assessing their personal food and fitness status. Course modules will advance exploration of contemporary health and wellness issues, by introducing students to Internet and social media resources in order to construct and implement an evidence-based personal food and fitness improvement plan with lifelong benefits. In conclusion, based upon their findings, students will present an informed food and fitness policy recommendation.

Prerequisite: None

BIO 180: Biology of Food

3 Credits (Lecture)

Biology of Food – focuses on nutrition and related physiological concepts as an introductory course intended to provide an overview of core principles in nutrition, including the role of nutrition in health and metabolism of the human body. Essential roles of nutrients and other dietary food components will be discussed, with attention to conditions such as pregnancy and disease. Emphasis is placed on how specific nutritional states affect the function of body systems. It will include basic nutritional assessment and appropriate nutritional therapy interventions.

Prerequisite: None

BIO 215: Core Concepts in Pharmacology

3 Credits (Lecture)

This introductory course is intended to provide an overview of core principles in pharmacology, including pharmacodynamics as it relates to the fate of drugs when they interact within the human body. It will include a clinical survey of pharmaceuticals by category with a focus on prominently profiled drugs as they pertain to specific organ systems. The course does not assume a strong background in the natural sciences. In this course, prerequisite science knowledge is reviewed prior to presenting core concepts.

Prerequisite: BIO 112

BIO 300: Pathophysiology

3 Credits (Lecture)

This course focuses on the mechanisms and concepts of selected pathological disturbances to the human body. Emphasis is placed on how the specific pathological condition affects the functioning of the system involved as well as its impact on all other body systems.

Prerequisites: BIO 112

*For students enrolled in the RN-BSN completion program, the prerequisite is waived.

Business

BUSM 201: Principles of Management

3 Credits (Lecture)

This business foundations course provides an introduction to management theory, functions, principles, values, and techniques. The course includes a discussion of best practices in planning, organizing, influencing through leadership, and exercising control within the organization.

Prerequisite: None

Chemistry

CHEM 105: Introduction to Chemistry – General, Organic, and Biological Chemistry

4 Credits (3 lecture + 1 lab)

CHEM 105 Chemistry - (General, Organic, and Biological Chemistry) provides an overview of key concepts of general, organic, and biological chemistry and how they relate to the body. Students will learn important concepts of general chemistry (including measurement; atomic structure; chemical reactions;

and acids, bases, and solutions) and be introduced to concepts of organic and biological chemistry. This course will include time in the lab performing experiments for hands-on application of the material covered in the lecture.

Prerequisite: none

Communications

COM 102: Essentials of Communication

3 Credits (Lecture)

COM 102 is designed to introduce students to the essentials of both public speaking and interpersonal communication in theory and practice. In the area of public speaking, focus is on communicating clearly and persuasively in order to be competent in making presentations. Students will learn strategies to become comfortable speaking in front of an audience, and to prepare presentations effectively. In the area of interpersonal communication, focus is on the development of communication competence.

Students will learn to understand, acquire, change, develop and/or improve interpersonal skills. Learning experiences will include reading, lecture, discussion, practice presentations other in-class activities with self-critique and feedback from other students and the instructor.

Prerequisites: None

COM 110: Introduction to Interpersonal Communication

3 Credits (Lecture)

This course is designed to introduce students to theory and practice in interpersonal (one-on-one) communication. Focus is on the development of communication competence. Students will learn to understand, acquire, change, develop and/or improve interpersonal skills. Learning experiences will include reading, lecture, discussion, and classroom activities with self-critique and feedback from other students and the instructor.

Prerequisites: None

Sonography

DMS 111: Sonography Principles and Instrumentation 1

3 Credits (lecture)

A course on principles of physics in relation to ultrasound function and instrumentation. Topics include characteristics of sound waves, pulsed wave operation, transducers, ultrasound systems operation, and Doppler.

Prerequisites: ENG 101, MAT 105, BIO 111, PHY 105 + Admission to the DMS program

DMS 112: Sonography Principles and Instrumentation 2

2 Credits (Lecture)

A continuation of DMS 111, Sonography Principles and Instrumentation 1. A course on principles of physics in relation to ultrasound imaging equipment function and instrumentation. Topics include image artifacts, ultrasound bioeffects, contrast and harmonics, quality assurance, advanced instrumentation theory and applications, focused ultrasound, speckle tracking and cardiac strain.

Prerequisite: DMS 111

DMSC 120: Intro to Cardiovascular Sonography and Patient Care

3 Credits (Lecture)

This course will introduce basic principles of sonographic imaging and the sonographer's role in patient care. Topics include history of sonography, professional aspects of sonography, ergonomics, operation of ultrasound systems, cardiovascular sonographic exams, relational anatomy, sonographic terminology, patient care and infection control.

Prerequisites: ENG 101, BIO 111, MAT 105, PHY 105 + Admission to the DMS program

DMSC 121: Cardiovascular Sonography Lab

2 Credits (Lab)

A course on developing skills in the sonographic scanning techniques and protocols related to cardiac and vascular structures. Students will practice cardiovascular scanning techniques and patient care skills in a laboratory setting. The focus will be on performance of basic normal echocardiography, carotid and lower extremity vascular exams.

Prerequisites: ENG 101, BIO 111, PHY 105, and MAT 105; Admission to DMSC Cohort

DMSC 122: Cardiovascular Lab 2

2 Credits (Lab)

A continuation of DMSC 121 developing skills in the scanning techniques and protocols related to cardiac and vascular structures. Students will practice more complex echocardiography and vascular scanning protocols and begin to incorporate scan modifications based on pathologic states.

Prerequisite: DMSC 121

DMSC 131: Vascular Sonography 1

3 Credits (Lecture)

A course on theory and principles of vascular sonography. Discussion of vascular anatomy and physiology; etiology of pathologies; imaging techniques and protocols; and detecting and differentiating

abnormalities, pathologies, and other deviations from normal development. Topics include cerebral vessels and extremity arteries.

Prerequisite: DMSC 120

DMSC 141: Cardiac Sonography 1

3 Credits (Lecture)

A course on theory and principles of adult cardiac sonography. Discussion of cardiac anatomy and physiology; cardiac electrophysiology; etiology of pathologies; imaging techniques and protocols; and detecting and differentiating abnormalities, pathologies, and other deviations from normal development. Topics include best practices of echocardiography, cardiomyopathies, tumors, pericardial disease and ischemic heart disease.

Prerequisite: DMSC 120

DMSC 223: Cardiovascular Lab 3

1 Credit (Lab)

A continuation of DMSC 122, emphasizing increased skills and experience using scanning techniques and protocols related to cardiac and vascular structures and physiology.

Prerequisite: DMSC 122

DMSC 224: Cardiovascular Lab 4

1 Credit (lab)

A continuation of DMSC 223, emphasizing increased skills and experience using scanning techniques and protocols related to cardiac and vascular structures and physiology. Students will be evaluated for proficiency in scanning protocols.

Prerequisite: DMSC 223

DMSC 232: Vascular Sonography 2

3 Credits (Lecture)

Continuation of DMSC 131 A course on theory and principles of vascular sonography. Discussion of vascular anatomy and physiology; etiology of pathologies; imaging techniques and protocols; and detecting and differentiating abnormalities, pathologies, and other deviations from normal development. Topics include extremity veins, abdominal and pelvic vessels, and current trends in vascular imaging.

Prerequisite: DMSC 131

DMSC 242: Cardiac Sonography 2

3 Credits (Lecture)

A continuation of DMSC 141, A course on theory and principles of adult cardiac sonography. Discussion of cardiac anatomy and physiology; cardiac electrophysiology; etiology of pathologies; imaging techniques and protocols; and detecting and differentiating abnormalities, pathologies, and other deviations from normal development. Topics include valvular heart disease, vascular and systemic disease and congenital heart disease.

Prerequisite: DMSC 141

DMSC 250: Cardiovascular Sonography Seminar

3 Credits (Lecture)

A course on integration of concepts and clinical applications in cardiovascular sonography. Topics include current trends and advanced cardiovascular procedures and technologies, sonography research, mock registry examinations, preparation for national credentialing examinations and foundations for life-long learning. Students will be evaluated in lab for competency using specific protocols for cardiac and vascular sonographic imaging.

Prerequisites: DMSC 224, DMSC 232, and DMSC 242

DMSC 281: Cardiovascular Internship 1

2 Credits (1 Lecture + 1 Internship)

This is the first course in a series of three clinical courses. At the end of the series, students will have completed all required clinical competency exams. Competencies required in each course will be assigned to the student by the clinical coordinator based on clinical placement. In this course, students are introduced to the clinical environment and participate in supervised practice of cardiac and vascular diagnostic ultrasound procedures in hospitals, clinics, and private physician offices. Students are evaluated on professional behavior and clinical competency performing basic normal cardiac and vascular exams. Lecture topics include Clinical Environment, Case Studies, Professionalism, Cultural Competency, and Patient Privacy and Confidentiality.

Prerequisite: DMSC 131

DMSC 282: Cardiovascular Internship 2

2 Credits (1 Lecture + 1 Internship)

Second in a series of three clinical courses. At the end of the series, students will have completed all required clinical competency exams. Competencies required in each course will be assigned to the student by the clinical coordinator based on clinical placement. In this course students continue participate in supervised practice of cardiac and vascular diagnostic ultrasound procedures in hospitals,

clinics, and private physician offices. Students are evaluated on professional behavior and clinical competency performing complete cardiac and vascular exams including normal and pathologic

states. Lecture topics include Clinical Environment, Case Studies, and Medical Law and Ethics.

Prerequisite: DMSC 281

DMC 283: Cardiovascular Internship 3

2 Credits (Internship)

Final course in a series of three clinical courses. At the end of the series, students will have completed all required clinical competency exams. Competencies required in each course will be assigned to the student by the clinical coordinator based on clinical placement. In this course students continue participate in supervised practice of cardiac and vascular diagnostic ultrasound procedures in hospitals, clinics, and private physician offices. Students are evaluated on professional behavior and clinical competency performing complete cardiac and vascular exams including normal and pathologic states. Lecture Topics: Clinical environment and Case studies, Coding and Reimbursement, Transition into the workplace.

Prerequisite: DMSC 282

Economics

ECO 201: Principles of Economics

3 Credits (Lecture)

This course introduces students to the terminology and analytic principles used in micro- and macro-economics, including the application of these conceptual tools to several policy issues. The microeconomic theories presented include economics of the firm and pricing by supply/demand analysis. Topics also cover consumer behavior, market structure, prices, and distribution and determination of wealth and income. The macroeconomic content discusses variables that impact the business cycle such as interest rates, inflation and employment. The application of economic principles emphasizes decision making in a business context.

Prerequisite: STAT 201

English

ENG 101: English Composition

3 Credits (Lecture)

English Composition 101 fosters development of critical reading, writing and thinking skills that are important to academic and professional success and satisfaction. Through reading, discussing and

writing about rich and complex texts (mainly nonfiction prose), students will learn how critical reading, open and unbiased discussion, and effective writing are closely interrelated skills, strengthening each and experiencing the value of each for the other. Students will become more perceptive readers and more articulate and aware thinkers and writers, able to apply these strengths in any academic or professional situation. Students will participate in conversations about texts, ideas and writing projects to foster critical thinking and effective expression. Students will learn and practice all the stages of an effective writing process and will become able to write high-quality papers that follow the conventions and meet the logical and stylistic expectations of formal academic and professional prose.

Prerequisite: None

ENG 315: Advanced Composition: Evidence-Based Writing

3 Credits (Lecture)

This course provides students with training and practice in writing for bachelor-level study and professional practice. Students will practice improved composition strategies in revision and editing appropriate to proficient and polished communication. This course prepares students for current academic responsibilities and establishes a foundation for future academic and professional excellence in communication.

Prerequisite: ENG 101

First Year Experience

FS 102: Foundations for Success

2 Credits (Lecture)

Foundations for Success will provide a challenging environment to promote academic excellence and personal growth through the establishment of effective faculty and student partnerships. This course will provide an arena to develop knowledge, skills, attitudes, and behaviors consistent with the college's mission of lifelong learning through the exploration of positive psychology and cognitive science.

Prerequisite: None

Health Sciences

HLSC 104: Patient Care

2 credits (Lecture)

Discussion, demonstration and practice of patient care skills and practical application of basic medical techniques in a lab setting. Introducing principles of patient care including sterile techniques, safe

transferring skills, assessing and attending to patient needs, infection control and cardiac electrophysiology.

Prerequisite: None

HLSC106: Healthcare Professionalism and Ethics

2 credits (Lecture)

Course emphasizing basic definitions, concepts and issues of professionalism, ethics, and clinical law for health care professionals.

Prerequisite: None

Health Care Administration

HCA 201 Introduction to Healthcare Accounting and Finance

3 Credits (Lecture)

This course introduces students to fundamental concepts in accounting and finance that support decision-making in healthcare. Emphasis is placed on healthcare reimbursement, working capital, financial statements, and accounting/monetary control of the healthcare industry.

HCA 210: Introduction to Integrated Health Care Delivery Systems

3 Credits (Lecture)

This course explores all the major health professions, with emphasis on the U.S. healthcare delivery system. Students will be introduced to the concepts of managed care, health care financing, reimbursement, insurance coverage, Medicare, Medicaid, and the impact of new technology on healthcare services. Students will also research healthcare careers and how the various providers work together to administer health care.

Prerequisite: None

HCA 310: Transformational Management in Health Care

3 Credits (Lecture)

This course examines the structure of healthcare organizations and their management. Through a foundation in management theory and applied studies, students will understand the healthcare workplace and roles within it. Emphasis is placed upon the changes in healthcare delivery models and the implications for organizational structure and the management of people and services.

Prerequisite: BUSM 201, HCA 210

HCA 320: Information Systems for Evidence-based Management

3 Credits (Lecture)

This is an introductory course in the field of Health Information Management (HIM). Topics include: Electronic Health Records (EHRs); general healthcare computer systems; common software applications; system selection and implementation; data quality, storage and retrieval; security and privacy; and other essential topics. This course focuses on how these systems and issues affect health care delivery and the use of Evidence-Based Practice (EBP) models.

Prerequisite: BUSM 201, HCA 210

HCA 330: Human Resource Management

3 Credits (Lecture)

This course provides an introduction of human resource management in the healthcare setting. The course explores the practical knowledge needed for the roles and functions of the human resource department. The focus is to deliver skills and knowledge to healthcare administrators related to: Equal Employment Opportunity, staffing, assessment and evaluation; development of personnel policies; training; benefits; and safety and health in the workplace.

Prerequisite: BUSM 201, HCA 210

HCA 340: Marketing Techniques in Health Care

3 Credits (Lecture)

The course covers the fundamental marketing topics such as market research, strategy, and the strategic marking process. Students will learn how to effectively apply marketing principles, develop marketing strategies, and conduct analyses in a health care setting. Marketing principles will be explored through practical, hands-on application in the healthcare industry.

Prerequisite: HCA 210

HCA 350: Financial Management of Health Care Institutions

3 Credits (Lecture)

This course applies the concepts of financial management within health care organizations. It examines how organizations are financed, both from external as well as internal sources. Topics include financial planning principles, reimbursement procedures, and governmental regulation and legal restraints.

Prerequisite: HCA 210

HCA 360: Health Care Law

3 Credits (Lecture)

The course is an overview of health law issues. Court cases, state and federal statues, and common-law principles are used to help students understand the practical application of the concepts learned.

Government regulation topics including legal constraints, liability, negligence, patient rights, confidentiality, and corporate/administrative responsibility are examined.

Prerequisite: HCA 210

HCA 365: Consumer Engagement in Health Care

3 Credits (Lecture)

There is an emerging consensus that informed and engaged consumers have a vital role to play in reducing costs, improving quality of care and thereby improving health outcomes. With this end in mind, this course will explore the current research in practices and interventions aimed at improving consumer engagement. Students will evaluate the evidence and will adapt a proven strategy for proposed implementation.

Prerequisite: None

HCA 390: HCA Professional Development

1 Credit (Lecture)

In HCA 390 students will apply the knowledge and skills gained in the HCA major to prepare for the culminating HCA 450 Administrative Leadership Capstone Course, or HCA 460 Internship, and a career in health care administration. Topics include: Laying a Foundation for Success; Building and Maintaining a Forward-Moving Career; and Identifying and Seeking Career Opportunities. Students will also explore HCA professional societies and learn the value of networking, continuing education and life-long professional development.

Pre-requisites: HCA 310, HCA 340, HCA 350, and HCA 360

Co-Requisite: HCA 320, HCA 330

HCA 410: Health Care Policy

3 Credits (Lecture)

This course describes the current structure of the American healthcare system at federal and state levels and examines the role of historical and political contexts to current policies and institutional structures. Federal organizations such as CMS, ONC, HRSA, and their relationship to state institutions such as Medicaid and public health are examined. Healthcare policies, including the Affordable Care Act and payment reform are appraised within the framework of public and private stakeholders including providers, payers, trade organizations and public agencies.

Prerequisite: HCA 210

HCA 415: Ethical Issues in Health Care

3 Credits (Lecture)

The course investigates the ethical principles that apply to businesses and other organizations that are connected to the healthcare field. Students will strengthen their ethics knowledge base and relate ethics to patient issues across the lifespan, ethics within organization, and issues of ethics in broader cultural contexts.

Prerequisite: HCA 210

HCA 420: Health Care Quality and Performance Excellence

3 Credits (Lecture)

Acquaint students with the principles of quality assessment, health status, and how to improve value in health care under policies supporting continuous quality improvement. This includes two components: clinical improvements and process improvements.

Prerequisite: HCA 310, HCA 350

Co-Requisite: HCA 320, HCA 330

HCA 430: Health Care Strategic Planning

3 Credits (Lecture)

This course introduces concepts of strategic planning and management of healthcare systems as an essential part of healthcare administration. Concepts throughout the course include modern business approaches to strategy, involvement of stakeholders in decision making, and issues facing dynamic healthcare environments.

Prerequisite: HCA 310, HCA 320, HCA 330, HCA 340, HCA 350

HCA 435 Social Determinants of Community Health

3 Credits (Lecture)

The purpose of this course is to introduce you to the science and art of maintaining, protecting, and improving the health of people through organized community efforts within the public health context. Students will develop an understanding of historical and theoretical foundations of community health and major societal health concerns, and will explore the ways communities are affected by and affect health.

Prerequisite: HCA 210

HCA 440: Economic Applications of Operational Excellence

3 Credits (Lecture)

This course provides an introduction to the study of health care economics. HCA 440 will cover the basic economic concepts important to the field of health economics and learn why health is different from other goods and services. The course will focus on the historical evolution of health care markets, current legislative changes and public policy implications. Topics include the definition and determinants of health, socioeconomic status and inequality, demand for health care, health care provision, technology and pharmaceuticals, private and public insurance, and health and the labor market.

Prerequisite: ECO 201, HCA 210

HCA 445: Leadership for Health Care Administrators

3 Credits (Lecture)

This course focuses on developing and understanding leadership skills and concepts. Students explore a variety of theories related to leadership, management, and change. Analysis of leadership styles, behaviors, and communication techniques assists with the development of skills necessary to lead within a healthcare system.

Prerequisite: BUSM 201, HCA 210

HCA 450c: Administrative Leadership Capstone Project

3 Credits (Lecture)

The purpose of this course is to provide a “real-world” application of the student’s classroom experience, with focus on transition to health care administrator as a professional. Through a culminating project, students will apply their knowledge and skills in management, reimbursement, financing and the nature of health care. Students will practice creating a collaborative environment that will support various providers working together to administer health care. Students will also revisit and refine their personal career plan.

Prerequisite: HCA 390, HCA 410, HCA 420

HCA 460i: Health Care Administration Internship

3 Credits (Field Work)

Students in this Internship opportunity will gain invaluable hands-on experience in the health care field. This is a student-driven endeavor that is assisted by faculty consultation. The focus of this internship is to foster the development of professional skills needed in preparing students for the workforce.

Prerequisite: HCA 390, HCA 410, HCA 420

Humanities

Interdisciplinary

IS 300: Wellness and Health Promotion

3 Credits (Lecture)

In this course, we will discuss wellness and health promotion for all people, and we must begin with an appreciative curiosity about the differences in people. Establishing an understanding about how individual's perceptions of wellness are influenced by values and beliefs, will enable you to assist individuals, families, and communities to recognize the significance of health and wellness. We will also discuss alternative theories of health and wellness. We will explore holistic care, nutrition, activity and exercise, stress and coping, and preventative medicine as strategies to promote health and wellness.

Prerequisites: SOPS 101 or equivalent. SOPS 105 and PSY 210 or equivalents are recommended.

*For students enrolled in the RN-BSN completion program, the prerequisite is waived.

Mathematics

MAT 105: College Algebra

3 Credits (Lecture)

MAT 105 is designed to study the basic concepts of arithmetic and algebra, the real numbers, linear equations, inequalities, quadratic equations, graphing, rational expressions, functions, exponents, radicals, exponential functions, logarithmic functions, and systems of linear equations.

Prerequisite: None

Medical Assisting

MA 104: Foundations for Clinical for Medical Assisting Professionals

4 Credits (3 Lecture + 1 Lab)

This course provides the student with the fundamental competencies, skills, and techniques for professional medical assisting. Patient care, assessment, education, nutrition, health promotion as well as scientific rationale provide the basis for this course. A skills laboratory practicum reinforces the application of theory to practice settings.

Prerequisite: None

MA 200: Diagnostic Procedures for Medical Assisting Professionals

4 Credits (3 Lecture + 1 Lab)

This course introduces the concepts and techniques necessary for the professional medical assistant to participate in collecting, completing, and analyzing laboratory diagnostic procedures routinely performed in medical offices and clinics. Students will demonstrate course competencies in the laboratory component of this course.

Prerequisite: None

MA 206: Clinical Review & Medical Emergency Procedures for the Medical Assistant

3 credits (2 Lecture; 1 Lab)

This course introduces the concepts and skills necessary for the professional medical assistant to effectively perform basic emergency procedures within the physician's office and ambulatory care setting. The course also reviews all clinical skills prior to the student entering their practicum experience in order to become proficient in patient care skills.

Prerequisite: None

Medical Terminology

MT 101: Medical Terminology

3 Credits (Lecture)

This course provides a foundation for understanding the origin, form and meaning for the vocabulary of healthcare. This includes the prefixes, suffixes and word roots used in the field of medicine. Topics include medical vocabulary and terms related to anatomy, physiology, pathological conditions, and medical treatments.

Prerequisite: None

Nursing

NUR 201: Introduction to the Essentials of Professional Nursing Practice

3 Credits (Lecture)

This course utilizes the AACN Essentials as guiding competencies, to introduce students to the knowledge and values of the discipline of nursing and guides students to practice from a disciplinary perspective. Students are introduced to principles of professionalism including but not limited to the ANA code of ethics, theoretical perspectives, nurse-patient relationships, and therapeutic

communication. Emphasis is placed on professionalism as it encompasses the development of the nursing identity.

PRE-REQUISITES: BIO 112, COM 102, CHEM 105, FS 102.

CO-REQUISITES: NUR 210, NUR 225

NUR 210: Health Assessment Across the Lifespan

3 Credits (2 Lecture + 1 Lab)

This course provides the opportunity for students to utilize critical thinking as a process to gain the knowledge and skills required to conduct and analyze data obtained from a comprehensive nursing health assessment and health history. Variations in assessment, health promotion, and patient-centered care of diverse individuals are explored. Laboratory experiences allow the opportunity for students to demonstrate cognitive and psychomotor competencies of therapeutic interventions and assessment of the individual patient across the life span.

PRE-REQUISITES: BIO 112, COM 102, CHEM 105, FS 102; CO-REQUISITES: NUR 225, NUR 201.

NUR 225: Nursing Foundations and Principles 1

3 Credits (3 Lecture)

This course introduces the student to the foundational principles and basic skills of nursing care across the lifespan. Students will explore general nursing principles that underline the nursing profession.

Students are introduced to the nursing process, clinical judgment, principles of safety, health promotion, concepts of well-being along with the role of the nurse as health care professional.

PRE-REQUISITES: BIO 112, COM 102, CHEM 105, FS 102; CO-REQUISITES: NUR 201, NUR 210

NUR 226: Nursing Foundations and Principles II

4 Credits (3 Lecture + 1 Lab)

This course builds on the foundational principles and basic skills introduced in Nursing Foundations and Principles I while expanding the general nursing principles and skills underlying the nursing profession. Students will explore the basic physiologic and psychosocial needs and responses related to common health concerns. Students will continue to build clinical judgment and professional nursing competencies to provide compassionate care. Emphasis on competencies will include but not limited to utilizing informatics and technology, diversity, and ethical considerations as well as legal responsibilities.

PRE-REQUISITES: NUR 201, NUR 210, NUR 225; CO-REQUISITES: NUR CL 226.

NUR 226CL: Nursing Foundations and Principles II: Clinical

2 Credits (Clinical)

Nursing Foundations and Principles II: Clinical - This clinical course expands on prior knowledge and competencies obtained from Nursing Foundations and Principles I. Students will utilize general nursing principles and skills to plan for and provide person-centered, compassionate care based on the best evidence across diverse settings. Emphasis is placed on developing the nurse-patient relationship and utilizing foundational competencies to provide safe and effective person-centered care.

PRE-REQUISITES: NUR 201, NUR 210, NUR 225, BIO 121, PSY 110; CO-REQUISITE: NUR 226

NUR 251: Nursing Foundations and Principles & Introduction to Medical Surgical I

4 Credits (3 Lecture + 1 Lab)

This course introduces the student to the foundational principles and basic skills of nursing care across the lifespan. Students will investigate general nursing principles that underline the nursing profession. Students will examine the nursing process, clinical judgement, principles of safety, health promotion, compassionate care, concepts of well-being along with the role of the nurse as health care professional. Students will explore the basic physiologic and psychosocial needs and responses related to common health concerns. Emphasis on competencies will include but not limited to utilizing informatics and technology, diversity, and ethical considerations as well as legal responsibilities.

PRE-REQUISITES: CHEM 105, BIO 121, BIO 300. CO-REQUISITE: NUR 201, NUR 210, NUR CL 251

NUR 251CL: Nursing Foundations and Principles & Introduction to Medical Surgical I Clinical

2 Credits (Clinical)

This clinical course provides the opportunity to gain knowledge and competencies in nursing foundations and principles. Students will utilize general nursing principles and skills to plan for and provide person-centered, compassionate care based on the best evidence across diverse settings. Emphasis is placed on developing the nurse-patient relationship and utilizing foundational competencies to provide safe and effective person-centered care.

PRE-REQUISITES: CHEM 105, BIO 121, BIO 300. CO-REQUISITE: NUR 251.

NUR 315: Pharmacological Principles for Nursing Practice

3 Credits (Lecture)

This course incorporates prerequisite coursework to facilitate critical thinking and examine physiological variations in health and pharmacological therapies used to prevent and treat illness across the lifespan while utilizing the nursing process. Students will explore the principles of pathophysiology and pharmacology in an integrated manner to study selected medications that are used to treat or manage diseases with an application to nursing practice. The relationship between biophysical, sociocultural,

behavioral, and pharmacological responses are examined. Students will understand the principles of safe and effective medication administration to promote wellness and quality, person-centered care.

PRE-REQUISITES: NUR 226, NUR CL 226, BIO 300, BIO 215. CO-REQUISITE: NUR 331, NUR CL

331, NUR 342, NUR CL 342

NUR 320: Nursing Informatics

3 Credits (Lecture)

This course will provide students with a knowledge base of healthcare information systems and technologies utilized in nursing practice and nursing education. The focus of this course is to explore information management systems to improve healthcare outcomes related to safety, quality, cost-effectiveness, and coordination of healthcare services along with ethical, legal, and regulatory issues. Consumer health information sources are explored and analyzed.

Prerequisite: None

NUR 331: Medical-Surgical Nursing Across the Healthcare Continuum I

4 Credits (Lecture)

This course builds on foundational knowledge and competencies while emphasizing health promotion, disease prevention, and illness management. Restorative and supportive care related to common chronic conditions with minor acute care needs will be explored. Students will utilize the nursing process and clinical judgment to identify evidence-based nursing interventions to plan for safe and effective, person-centered care.

PRE-REQUISITES: NUR 226, NUR CL 226, BIO 300, BIO 215, BIO 280. CO-REQUISITE: NUR CL

331, NUR 315.

NUR 331CL: Medical-Surgical Nursing Across the Healthcare Continuum I Clinical

2 Credits (Clinical)

This clinical course builds on foundational knowledge and competencies while emphasizing health promotion, disease prevention and illness management. Restorative and supportive care related to common chronic conditions with minor acute care needs will be explored. Students will plan for and provide person-centered, compassionate care based on the best-evidence and clinical judgment across diverse settings, while utilizing informatics and technology. Cultural differences, ethical considerations, and legal responsibilities are explored. Students will begin to understand partnerships and collaborative team-based care as elements of safe and effective, person-centered care.

PRE-REQUISITES: NUR 280, NUR 226, NUR CL226, BIO 300, BIO 215, BIO 280. CO-REQUISITE: NUR 331,

NUR 315.

NUR 332: Medical-Surgical Nursing Across the Healthcare Continuum II

4 Credits (Lecture)

This course builds on the knowledge and competencies obtained from Medical-Surgical Nursing I, while emphasizing health promotion, disease prevention and illness management. Restorative and supportive care related chronic conditions with increasing complexity and acute care needs will be explored.

Students will utilize the nursing process and clinical judgment to identify evidence-based nursing interventions to plan for safe and effective, person-centered care.

PRE-REQUISITES: NUR 331, NUR 331CL, NUR 315. CO-REQUISITE: NUR 332 CL.

NUR 332CL: Medical-Surgical Nursing Across the Healthcare Continuum II Clinical

2 Credits (Clinical)

This clinical course builds on the knowledge and competencies obtained from Medical-Surgical Nursing I, while emphasizing health promotion, disease prevention and illness management. Restorative and supportive care related to chronic conditions with increasing complexity and acute care needs will be explored. Students will plan for and provide person-centered, compassionate care based on the best-evidence and clinical judgment across settings, while utilizing informatics and technology. Cultural differences, ethical considerations, and legal responsibilities are explored. Students will recognize effective partnerships and collaborative team-based care as elements of safe and effective, person-centered care.
PRE-REQUISITES: NUR 331, NUR 331CL, NUR 315. CO-REQUISITE: NUR 332CL.

NUR 335: Introduction to Research and Evidence-Based Practice

3 Credits (Lecture)

This course will provide students with a foundational understanding of research and evidence-based practice. A basic understanding of research terminology and process will be explored. Introduction to evidence-based practice will emphasize identification of a clinical issue, formulation of a researchable question, performing an effective search for sound evidence, and changing practice based on evidence. The basic understanding of research and evidence-based practice will serve as a foundation for improving patient outcomes.

Prerequisite: STAT 201

NUR 338: Family-Centered, Pediatric, and Maternity Nursing

2 Credits (Lecture)

This course provides students opportunities to utilize foundational knowledge and competencies with a focus on caring for individuals and families with maternal, pediatric, and reproductive health care needs while emphasizing health promotion and disease prevention. Restorative and supportive care related to common childbearing, pediatric conditions, and reproductive health will be explored. Students will

utilize the nursing process and clinical judgment to identify evidence-based nursing interventions to plan for safe and effective, person-centered care.

PRE-REQUISITES: NUR 331, NUR 331CL, NUR 315. CO-REQUISITE: NUR 338CL.

NUR 338CL: Family-Centered, Pediatric, and Maternity Nursing Clinical

2 Credits (Clinical)

Family-Centered, Pediatric, and Maternity Nursing Clinical - This clinical course provides students with the opportunities to utilize knowledge and competencies with a focus on caring for individuals and families with maternal, pediatric, and reproductive health care needs while emphasizing health promotion, disease prevention and illness management. Restorative and supportive care related to common childbearing, reproductive health, and pediatric conditions will be explored. Students will plan for and provide person-centered, compassionate care based on the best evidence and clinical judgment across settings, while utilizing informatics and technology. Cultural differences, ethical considerations, and legal responsibilities are explored. Students will recognize effective partnerships and collaborative team-based care as elements of safe and effective, person-centered care.

PRE-REQUISITES: NUR 331, NUR 331CL, NUR 315. CO-REQUISITE: NUR 338.

NUR 339: Evidence Based Practice and Research Principles in Nursing

3 Credits (Lecture)

This course introduces students to the basic principles of the research process and evidence-based practice. Students will develop the ability to critically appraise research within the context of ethical research guidelines and determine its applicability to nursing's body of knowledge. Students will utilize professional databases to access credible and reliable sources to inform safe and effective, person-centered care. Students will gain an understanding of evidence-based practice as an intentional/purposely problem-solving approach incorporating evidence, patient values and preferences and clinical expertise.

PRE-REQUISITES: NUR 331, NUR 331CL, PHI 103, STAT 201, ENG 315. CO-REQUISITE: NUR 340.

NUR 340: Quality Improvement & Information Technologies in Nursing Practice

3 Credits (Lecture)

This course introduces students to continuous quality improvement concepts and provides students opportunities to explore the connections among healthcare teams, patients, and families across diverse technology-rich environments. Students will examine the nurses' role as essential members of the healthcare team, by exploring the use of quality improvement processes, and information and communication technologies. Students will understand the impact of ethical, legal, professional, and regulatory standards, along with workplace policies on quality care.

PRE-REQUISITES: NUR 331, NUR 331CL, PHI 103, STAT 201 CO-REQUISITE: NUR 339.

NUR 342: Mental Health Nursing Across the Lifespan

2 Credits (Lecture)

This course provides students opportunities to utilize foundational knowledge and competencies with a focus on caring for individuals and families with mental health needs. Restorative and supportive care related to common mental health conditions will be explored. Students will utilize the nursing process and clinical judgment to identify evidence-based nursing interventions to plan for safe and effective, person-centered care. Students will explore health promotion concepts to promote wellness and resilience in self, individuals, families, and healthcare providers.

PRE-REQUISITES: NUR 280, NUR 226, NUR CL 226, BIO 300, BIO 215, BIO 280. CO-REQUISITE: NUR CL

342, NUR 315.

NUR 342CL: Mental Health Nursing Across the Lifespan Clinical

2 Credits (Clinical)

This clinical course provides students opportunities to utilize foundational knowledge and competencies with a focus on caring for individuals and families with mental health needs, while promoting wellness and resilience. Restorative and supportive care related to common mental health conditions will be explored. Students will plan for and provide person-centered, compassionate care based on the best-evidence and clinical judgment across diverse settings, while utilizing informatics and technology.

Cultural differences, ethical considerations, legal responsibilities are explored. Students will begin to understand the importance of therapeutic communication and collaborative team-based care as elements of safe and effective, person-centered care.

PRE-REQUISITES: NUR 280, NUR 226, NUR 226CL, BIO 300, BIO 215, BIO 280. CO-REQUISITE: NUR 342,

NUR 315

NUR 350: Nursing Theories and Foundational Concepts

3 Credits (Lecture)

This course focuses on nursing theory, philosophy and conceptual frameworks as a foundation of nursing practice. Students will explore the impact of nursing theory, philosophy, and conceptual frameworks as they relate to the profession and the role of the nurse. An understanding of these concepts will be the foundation for professional growth and advancement.

Prerequisite: None

NUR 363: Medical-Surgical Nursing Across the Healthcare Continuum II

6 Credits (Lecture)

This course builds on foundational knowledge and competencies while emphasizing health promotion, disease prevention and illness management. Restorative and supportive care related to common chronic

conditions with acute care needs will be explored. Students will utilize the nursing process and clinical judgment to identify evidence-based nursing interventions to plan for safe and effective, person-centered care.

PRE-REQUISITES: NUR 251. CO-REQUISITE: NUR 363, NUR 342, NUR 315.

NUR 363CL: Medical-Surgical Nursing Across the Healthcare Continuum II Clinical

3 Credits (Clinical)

This clinical course builds on foundational knowledge and competencies while emphasizing health promotion, disease prevention and illness management. Restorative and supportive care related to common chronic conditions with acute care needs will be explored. Students will plan for and provide person-centered, compassionate care based on the best-evidence and clinical judgment across diverse settings, while utilizing informatics and technology. Cultural differences, ethical considerations, and legal responsibilities are explored. Students will begin to understand partnerships and collaborative team-based care as elements of safe and effective, person-centered care.

PRE-REQUISITES: NUR 251. CO-REQUISITE: NUR 363.

NUR 365: Legal and Ethical Issues in Nursing

3 Credits (Lecture)

This course explores legal and ethical issues in the delivery of healthcare. The nurse's role in ethical clinical practice is examined. The student examines personal and professional values in relation to ethical and legal issues occurring in the practice of professional nursing. Appraising basic principles of current legal concepts and professional ethical codes provides a foundation for professional practice. Sociocultural influences on ethical and legal concepts are explored.

Prerequisite: None

NUR 420: Health Care Policy

3 Credits (Lecture)

This course provides students with the knowledge and skills to influence policy in a dynamic healthcare environment. Financial and regulatory environments are investigated to determine the impact on patient outcomes and the role of healthcare professionals. Advocacy as a healthcare professional to promote social justice of vulnerable populations is discussed.

Prerequisite: None

NUR 421: Medical-Surgical Nursing Across the Healthcare Continuum III

3 Credits (Lecture)

This course builds on the knowledge and competencies obtained from Medical-Surgical Nursing II, while emphasizing health promotion, disease prevention and illness management. Restorative and supportive

care related to complex conditions with complications often requiring hospitalization or emergent care will be explored. Students will utilize the nursing process and clinical judgment to identify evidence-based nursing interventions to plan for safe and effective, person-centered nursing care.

PREQUISITES: NUR 332 OR 363, NUR 332CL OR NUR 363CL, NUR 338, NUR-CL 338, NUR 339, NUR 340. CO-REQUISITE: NUR-CL421 OR NUR 447CL, NUR 422, NUR 423, NUR-CL 423

NUR 421CL: Medical-Surgical Nursing Across the Healthcare Continuum III

3 Credits (Clinical)

This clinical course builds on the knowledge and competencies obtained from Medical-Surgical Nursing II, while emphasizing health promotion, disease prevention and management. Restorative and supportive care related to complex conditions with complications often requiring hospitalization or emergent care will be explored. Students will plan for and provide person-centered, compassionate care based on the best-evidence and clinical judgment across settings, while using informatics and technology. Cultural differences, ethical considerations, and legal responsibilities are explored. Students will understand partnerships and collaborative team-based care as elements of safe and effective, patient-centered care.

PRE-REQUISITES: NUR 332, NUR 332CL, NUR 338, NUR 338CL, NUR 339, NUR 340. CO-REQUISITE: NUR 421.

NUR 422: Leadership & Management Development in Nursing Practice

3 Credits (Lecture)

Leadership & Management Development in Nursing Practice - This course provides students with the opportunities to examine leadership and management principles across diverse settings while exploring one’s own personal leadership capacity. Students will consider the cost-effectiveness of care while applying knowledge of healthcare systems as it is affected by healthcare economics, policy, and law.

Cultural differences, ethical considerations, legal responsibilities are explored within the context of leadership and management development.

PRE-REQUISITES: NUR 332 OR NUR 363, NUR 332-CL OR NUR 363-CL, NUR 338, NUR-CL 338, NUR 339, NUR 340. CO-REQUISITE: none.

NUR 423: Population Health in Nursing

2 Credits (Lecture)

This course provides students opportunities to utilize foundational knowledge and competencies with a focus on population, community, public, and global health needs. Students will explore the range of determinants of health including personal, social, economic, and environmental. Students will understand the nurse's role in assessing public health data to inform collaborative efforts such as advocacy, development of health promotion interventions, and policies to improve population outcomes

and health equity. Cultural differences, ethical considerations, legal responsibilities, political factors, determinants of health and economic impacts are explored within the context of population health.

PRE-REQUISITES: NUR 332, NUR-CL 332, NUR 338, NUR-CL 338, NUR 339, NUR 340. CO-REQUISITE: NUR 423CL.

NUR 423CL: Population Health in Nursing Clinical

2 Credits (Clinical)

This clinical course provides students opportunities to utilize foundational knowledge and competencies with a focus on population, community, public, and global health needs. Health promotion, disease prevention, illness management, restorative and supportive care related to individuals, families, groups within communities, or populations are examined. Cultural differences, ethical considerations, legal responsibilities, political factors, social determinants of health and economic impacts are explored within the context of population health. Students will explore general principles and practices for the clinical management of populations across the continuum of care. Students will recognize effective partnerships and collaborative team-based care as elements of safe and effective, person-centered care.

PRE-REQUISITES: NUR 332, NUR-CL 332, NUR 338, NUR-CL 338, NUR 339, NUR 340. CO-REQUISITE: NUR

423

NUR 435: Population Health and Community-Based Nursing

5 Credits (3 Lecture + 2 Clinical)

This course introduces students to current concepts in community-based nursing and population – focused care. Building upon previous nursing education, students engage in the process of conceptualizing individuals, families, groups and communities as populations in which lifestyle, environmental, and genetic factors are major determinants of health. Comprehensive assessment of community and population characteristics is emphasized as a basis for population-focused interventions aimed at health promotion, disease, and injury prevention across the lifespan. Using principles of evidence-based practice through a community clinical practicum, students assess the economic, sociocultural, and environmental influences and develop interventions to meet community-based and population-focused needs.

Prerequisite: None

NUR 441: Role Transition and Trends in Nursing Practice

3 Credits (Lecture)

This course is a synthesis of personal development and professional principles of nursing care. Students will explore trends and examine competencies necessary to transition into the practice of nursing. Students will discuss the impact of lifelong learning and self-reflection on the development of the nurse as a professional. Students will recognize the impact of multiple experiences, diverse backgrounds, and personal uniqueness in the development of a professional identity.

PRE-REQUISITES: NUR 421, NUR-CL 421, NUR 422, NUR 423, NUR-CL 423. CO-REQUISITE: NUR-CL 441,

NUR 443

NUR 441CL: Role Transition and Trends in Nursing Practice Clinical

6 Credits (Clinical)

This clinical course promotes a successful transition from nursing education into the practice of nursing. Students will demonstrate competencies necessary to engage in intentional partnerships and interprofessional collaborations to manage diverse health care needs across the continuum of care.

Students will plan for, provide, and coordinate safe, quality, and effective patient-centered care for multiple patients throughout the healthcare systems.

PRE-REQUISITES: NUR 421, NUR-CL 421, NUR 422, NUR 423, NUR-CL 423. CO-REQUISITE: NUR 441, NUR

443

NUR 443: Clinical Judgement for Nursing Practice

3 Credits (Lecture)

This course provides students with the opportunity to utilize culminating clinical judgment, acquired competencies, technologies, and client care activities necessary for evidence-based nursing practice. Students will focus on NCLEX-RN® readiness by applying the client needs categories and integrated processes (caring, communication and documentation, teaching/learning, and culture & spirituality) fundamental to the practice of nursing. Complex thought processing is reinforced by solving clinical nursing practice scenarios at the application or higher cognitive level.

PRE-REQUISITES: NUR 421, NUR- CL 421, NUR 422, NUR 423, NUR-CL 423. CO-REQUISITE: NUR 441,

NUR-CL 441

NUR 447CL: Medical-Surgical Nursing Across the Healthcare Continuum III: Clinical

2 Credits (Clinical)

This clinical course expands on knowledge and competencies obtained from Nursing Foundations and Intro to Medical Surgical 1 and Medical-Surgical Nursing II, while emphasizing health promotion, disease prevention and management. Restorative and supportive care related to complex conditions with complications often requiring hospitalization or emergent care will be explored. Students

will continue to plan for and provide person-centered, compassionate care based on the best-evidence and clinical judgment across settings while using informatics and technology. Cultural differences, ethical considerations, and legal responsibilities are explored. Students will understand partnerships and collaborative team-based care as elements of safe and effective, patient-centered care.

PRE-REQUISITES: NUR 363. CO-REQUISITE: NUR 421

NUR 450: Caring for the Older Adult

5 Credits (3 Lecture + 2 clinical)

This course focuses on the highly complex needs of the older adult and their families. Students will explore socioeconomic, physical, psychological, safety, ethical, and legal issues of the older adult. Evidence regarding health promotion, health maintenance, and acute/chronic disease management is examined to develop patient-centered care for the older adult. A clinical practicum will address the needs of the independent older adult living in the community.

Prerequisite: None

NUR 463: Family-Centered, Pediatric, Maternity Nursing and Population Health Nursing

3 Credits (Lecture)

This course provides opportunities to utilize foundational knowledge and competencies in common specialty areas of nursing. Students will focus on caring for individuals and families with maternal, pediatric, and reproductive health care needs while incorporating aspects of population, community, public, and global health. Students will discover the nurse's role in assessing public health data to inform collaborative efforts such as advocacy, development of health promotion interventions, and policies to improve population outcomes and health equity. The nursing process and clinical judgment will be utilized to identify evidence-based nursing interventions to plan for safe and effective, and person-centered care. Cultural differences, ethical considerations, legal responsibilities, political factors, determinants of health and economic impacts are explored within the context of population health and family centered care.

PRE-REQUISITES: NUR 363. CO-REQUISITE: NUR 463-CL

NUR 463CL: Family-Centered, Pediatric, Maternity Nursing and Population Health Nursing Clinical

2 Credits (Clinical)

This clinical course provides opportunities to utilize foundational knowledge and competencies in common specialty areas of nursing. Students will focus on caring for individuals and families with maternal, pediatric, and reproductive health care needs while incorporating aspects of population, community, public, and global health. Students will plan for and deliver person-centered, compassionate care based on the best evidence and clinical judgment focusing on health promotion, disease prevention and illness management related to individuals, families and groups within communities or populations. Students will explore general principles and practices for the clinical management of populations across the continuum of care. Cultural differences, ethical considerations, and legal responsibilities are

explored. Students will recognize effective partnerships and collaborative team-based care as elements of safe and effective, person-centered care.

PRE-REQUISITES: NUR 363. CO-REQUISITE: NUR 463

NUR 465: Leadership and Management in Nursing

4 Credits (3 Lecture + 1 Lab)

This course focuses on developing and understanding leadership skills and concepts. Students explore a variety of theories related to leadership, management, and change. Analysis of leadership styles, behaviors, and communication techniques assist with the development of skills necessary to lead at the bedside and within a healthcare system. Students examine evidence-based quality improvement and patient safety strategies to improve healthcare outcomes. A capstone project involving quality improvement change in either acute care or community setting will be initiated.

Prerequisite: None

NUR 466: Synthesis and Application of Professional Nursing

1 credit

This course, taken in the last 7 weeks of enrollment in the RN-BSN program, focuses on developing a project involving quality improvement in an acute care or community healthcare environment. The course will combine all of the previously learned topics within the project, allowing the student to demonstrate mastery of the competencies expected in a baccalaureate-prepared nurse.

Prerequisites: NUR 320, NUR 335, NUR 350, NUR 365, NUR 420, NUR 435, NUR 450, NUR 465, ENG 315, IS 300, BIO 300, STAT 201

Note: This class must be taken in the last semester enrolled.

Philosophy

PHI 103: Introduction to Ethics

3 Credits (Lecture)

Introduction to Ethics will assist students in coming to understand the various theoretical, conceptual frameworks, and application models of moral reasoning. Such applications of theoretical models and frameworks will expose the student to different approaches to moral competence and decision-making in complex life situations. This course aims to be holistic in its approach; hence ethics-related issues involving medical/health issues will be minimized and a broad humanities-based approach will be incorporated.

Prerequisite: None

Psychology

PSY 110: Lifespan Development

3 Credits (Lecture)

Students will learn about the psychological theories/conceptual frameworks and research that inform the study of cognitive, personality, and social development across the lifespan.

Prerequisite: None

Physics

PHY 105: Introductory Physics

3 Credits (Lecture)

COURSE DESCRIPTION: PHY 105 Introductory Physics- Exploration of the fundamental laws, theories, and mathematical concepts as they relate to a college-level survey of physics. Course content includes classical mechanics, electricity and magnetism, and modern physics. Specific topics include basics of science, kinematics, dynamics, energy, momentum, waves, electricity, magnetism, quantum mechanics and relativity. PRE-REQUISITES: none

Radiography

RAD 114: Introduction to Radiography

2 Credits (1 Lecture, 1 Lab)

This course introduces students to the role of radiography in health care. Topics include radiologic profession and organizations, radiologic terminology, ethics and laws in radiology, isolation techniques, safe equipment usage, radiology processes, procedures and documentation, radiation protection in the clinical areas, pharmacology, drug administration, assessment of vital signs, and venipuncture. Students apply legal and ethical considerations to patient care and pharmacology in the radiologic sciences.

Prerequisite(s) Current CPR certification and Admission to the program

Corequisite(s) RAD 116 Radiographic Anatomy and Positioning I; RAD 116CL Radiography Clinical Practicum I

RAD 116: Radiographic Anatomy and Positioning I

2 Credits (1 Lecture, 1 Lab)

Radiographic terminology, positioning and procedures will be introduced and practiced in a laboratory setting. Image evaluation includes anatomy, positioning and radiation protection will be included. This course prepares radiography students to perform routine radiologic procedures on various parts of the

body including the upper and lower extremities, and chest. Students apply knowledge of human anatomy to position the patient correctly to achieve the desired result.

Prerequisite(s) Current CPR certification and Admission to the program

Corequisite(s) RAD 114 Introduction to Radiography; RAD 116CL Radiography Clinical Practicum I

RAD 116CL: Radiography Clinical Practicum 1

1 Credit (1 clinical)

This beginning level clinical course prepares radiography students to perform radiographic imaging procedures on patients with extensive supervision and direction. Students apply radiation protection and standard precautions in the production of radiographic images in a health care setting while adhering to legal and ethical guidelines. An emphasis of the course is the development of communication and critical thinking skills appropriate to the clinical setting. Introduces students to the hospital clinical setting and provides an opportunity to participate in or observe radiographic imaging procedures. Activities of students are under direct supervision until competency is achieved; indirect supervision once competency is attained.

Prerequisite(s) Admission to the program; Current CPR certification

Corequisite(s) RAD 114 Introduction to Radiography; RAD 116 Radiographic Anatomy and Positioning I

RAD 123: Radiographic Anatomy and Positioning 2

3 Credits (2 Lecture, 1 Lab)

A continuation of radiographic terminology, positioning, and procedures. New radiologic procedures will be introduced and practiced in a laboratory setting. Image evaluation includes anatomy, positioning and radiation protection will be included. Prepares radiography students to perform routine radiologic procedures on various parts of the body including the knee, femur, hip and pelvis, humerus, shoulder girdle, scapula, clavicle, acromioclavicular joints, abdomen, lower gastrointestinal (GI) system, and small bowel. Students apply knowledge of human anatomy to position the patient correctly to achieve the desired result.

Prerequisite(s) RAD 114 Introduction to Radiography; RAD 116 Radiographic Anatomy and Positioning I; RAD 116CL Clinical Practicum I

Corequisite(s) RAD 123CL Clinical Practicum II

RAD 123CL: Radiography Clinical Practicum II

2 Credits (2 Clinical)

This second level clinical course prepares radiography students to perform radiographic imaging procedures on patients. Students will demonstrate continued competence on prior clinical requirements gained in the first level clinical practicum course, as well as learn new procedures. Students apply radiation protection and standard precautions in the production of radiographic images by taking

exposures in a health care setting while adhering to legal and ethical guidelines. An emphasis of the course is the development of communication and critical thinking skills appropriate to the clinical setting.

Prerequisite(s) RAD 116CL Clinical Practicum I

Corequisite(s) RAD 123 Radiographic Anatomy & Positioning II

RAD 127: Radiographic Equipment and Computers

3 Credits (3 Lecture)

The course is designed to establish a knowledge base in radiation physics, and radiographic equipment. Concepts that will be covered include X-ray production, X-ray interactions with matter, and digital radiography. The student will also be provided with an introduction to the basics of mobile imaging, conventional fluoroscopy, and digital fluoroscopy.

Prerequisite(s) MAT 105 College Algebra; PHY 105 Introduction to Physics

Corequisite(s) NA

RAD 132: Radiographic Anatomy & Positioning III

3 Credits (2 Lecture, 1 Lab)

This course is a continuation of radiographic terminology, positioning, and procedure. New radiographic procedures will be introduced and practiced in a laboratory setting. Image evaluation will include anatomy, positioning, and radiation protection. This course prepares radiography students to perform routine radiographic procedures on various parts of the body including the upper gastrointestinal and biliary system, cervical, thoracic, lumbar spine and the bony thorax, and urological studies. Students apply knowledge of human anatomy to position the patient correctly to achieve the desired result.

Prerequisite(s) RAD 123 Radiographic Anatomy and Positioning II; BIO102 Structure and Function I

Corequisite(s) RAD 132CL Radiography Clinical Practicum III

RAD 132CL: Radiographic Clinical Practicum III

2 Credits (2 Clinical)

This third level clinical course prepares radiography students to perform radiographic imaging procedures on patients with supervision and direction. Students will demonstrate continued competence on prior clinical requirements, as well as learn new procedures. Students apply radiation protection and standard precautions in the production of radiographic images by taking exposures in a health care setting while adhering to legal and ethical guidelines. Students are encouraged to demonstrate independent judgment in the performance of clinical competencies.

Prerequisite(s) RAD 123CL Radiography Clinical Practicum II; RAD 123 Radiographic Anatomy and Positioning II

Corequisite(s) RAD 132 Radiographic Anatomy & Positioning III

RAD 133: Radiographic Pathology

2 Credits (2 Lecture)

This course prepares students to determine the basic radiographic manifestations of pathological conditions. Students classify trauma related to site, complications, and prognosis and locate the radiographic appearance of pathologies.

Prerequisite(s) RAD 123 Radiographic Anatomy and Positioning II; RAD 127 Radiographic Equipment and Computers; ENG 101 English Composition

Co-requisite(s) RAD 132CL Radiography Clinical Practicum III; RAD 132 Radiographic Anatomy & Positioning III

RAD 227: Radiographic Anatomy & Positioning IV

2 Credits (1 Lecture, 1 Lab)

This course prepares students to determine the basic radiographic manifestations of pathological conditions. Students classify trauma related to site, complications, and prognosis and locate the radiographic appearance of pathologies.

Prerequisite(s) BIO 104 Advanced Function and Structure; RAD 132CL Radiography Clinical Practicum III; RAD 132 Radiographic Anatomy and Positioning III

Corequisite(s) RAD 227CL Radiography Clinical Practicum IV; RAD 228 Radiographic Imaging and Analysis

RAD 227CL: Radiography Clinical Practicum IV

3 Credits (3 Clinical)

This fourth level clinical course prepares radiography students to perform radiography imaging procedures on patients with supervision and direction. Students will show continued competence on prior clinical requirements, as well as learn new procedures. Students apply radiation protection and standard precautions in the production of radiographic imaging in a health care setting while adhering to legal and ethical guidelines. Students are encouraged to demonstrate independent judgment in the performance of clinical competencies.

Prerequisite(s) RAD 132CL Radiography Clinical Practicum III

Corequisite(s) RAD 227 Radiographic Anatomy & Positioning IV

RAD 228: Radiographic Imaging and Analysis

3 Credits (3 Lecture)

This course introduces radiography students to the process of creating radiographic images. Students examine the factors that affect image quality such as image receptor (IR) exposure, contrast, distortion, and noise. In learning about the image quality factors, students will discuss the use of beam limiting devices, grids, and how to properly adjust techniques. Students will analyze the processing and

manipulation of image data and describe the nature of the image in a computerized environment. The student will also learn about computer networking, the picture archiving and communication system (PACS) and the importance of these components in diagnostic imaging. Students will discuss methods of quality control and concepts of quality assurance as they pertain to radiography.

Prerequisite(s) RAD 127 Radiographic Equipment and Computers

Corequisite(s) NA

RAD 234: Radiographic Anatomy & Procedures V

2 Credits (1 Lecture, 1 Lab)

This course is designed to be a capstone course that focuses on the synthesis of professional knowledge, skills, and attitudes in preparation for professional employment and lifelong learning. The major emphasis is to help students develop a sense of professionalism by focusing on such topics as the role of radiography in the health care system, ethics and medical legal responsibility, patient care, communication skills, community engagement, and professional development. This course utilizes lecture, demonstration, self-directed learning activities, clinical experiences, and in-depth critique of positioning that further develops critical thinking skills supporting clinical competencies, validation, and terminal evaluation events such as the American Registry of Radiologic Technologist (ARRT) simulated registry.

Prerequisite(s): RAD 227 Radiographic Anatomy & Positioning IV

Co-requisite(s): RAD 234CL Radiography Clinical Practicum

RAD 234CL: Radiography Clinical Practicum V

3 Credits (Clinical)

This final clinical course requires students to integrate and apply all knowledge learned in previous courses to the production of high-quality radiographic images in the clinical setting. Students apply radiation protection and standard precautions in the production of radiographic images in a health care setting while adhering to legal & ethical guidelines. Students are encouraged to demonstrate independent judgment in the performance of clinical competencies.

Prerequisite(s) RAD 227CL Radiography Clinical Practicum IV

Corequisite(s) RAD 234 Radiographic Anatomy & Positioning V

RAD 235: Radiation Safety

2 Credits (Lecture)

This course provides information which will enable the student to safely administer ionizing radiation in the diagnostic clinical setting. This course examines how radiation affects human cellular biology; federal regulations regarding exposure levels to patients and operators; and the proper utilization of protective devices to minimize exposure.

Prerequisite(s) RAD 228 Radiographic Imaging and Analysis

Co-requisite(s) NA

Science

SCI 099: Foundations for Health Sciences

3 credits (Lecture)

This course provides an integrated foundation for students preparing to enter the rigorous study of Anatomy and Physiology. Emphasis is placed on developing essential knowledge and skills in mathematics, basic chemistry, medical terminology, and human biological concepts. Through applied learning activities, problem-solving, and discipline-specific practice, students strengthen scientific reasoning, quantitative skills, and academic readiness for health sciences programs.

Sociology

SOC 101: Introduction to Sociology

3 Credits (Lecture)

What makes up a society? A society is composed of separate, but interrelated components, or social institutions. The family, government, education, and religion are some of the large structures that guide our everyday lives. Introduction to Sociology explores these institutions of society, along with other individual factors, such as race, class, and gender, in order to understand what it means to live in a global society. Students are given the opportunity to develop their sociological imagination to become critical of the world around them, and will learn to analyze this social world using a variety of theoretical perspectives.

Prerequisite: None

Statistics

STAT 201: Introduction to Statistics

3 Credits (Lecture)

STAT 201 focuses on the use of statistics to conduct and critique research. Topics include: descriptive statistics, confidence intervals, hypothesis testing, and the use of computer software for statistical applications. Students will learn to apply, analyze, and interpret statistics from research articles and data in the health care setting.

Prerequisite: None

Technology

TECH 180: Intro to AI

1 Credits (Lecture)

This course provides students with a foundational understanding of Artificial Intelligence (AI). Students explore the history, foundational concepts, practical skills for application, and awareness of ethical concerns for using AI. The course prepares students to use AI in general, and specifically in healthcare and healthcare-related settings.

Prerequisites: None