School of Nursing

Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, students use the catalog of the year they entered KU (see advisor (http://www.advising.ku.edu) for details). Other years' catalogs (http://catalog.ku.edu/archives) handles matters related to graduate programs in Health Professions, Medicine, and Nursing.

The School of Nursing

The School of Nursing is one of 3 schools at the University of Kansas Medical Center (http://www.kumc.edu) in Kansas City, Kansas. Academic programs at KU Medical Center are offered through the Schools of Health Professions, Medicine, and Nursing. The Office of Graduate Studies at KUMC (http://www.kumc.edu/academic-affairs/graduate-studies.html) handles matters related to graduate programs in Health Professions, Medicine, and Nursing.

The KU School of Nursing's baccalaureate, master's, and doctor of nursing practice (DNP) programs are approved by the Commission on Collegiate Nursing Education (http://www.aacn.nche.edu) (http://www.aacn.nche.edu), 655 K Street NW, Suite 750, Washington, DC 20001, (202) 887-6791. This organization is a nationally recognized professional accrediting body for collegiate nursing programs. The baccalaureate, master's, and D.N.P. programs also are approved by the Kansas State Board of Nursing (http://www.ksbn.org). The Nurse-Midwifery Program is accredited by the Accreditation Commission for Midwifery Education (ACME), 8403 Colesville Road, Suite 1550, Silver Spring, MD, 20910, (240) 485-1802.

Undergraduate Programs

The Bachelor of Science in Nursing (BSN) program prepares baccalaureate generalist nurses for professional nursing practice. The American Association of Colleges of Nursing's Essentials of Baccalaureate Education for Professional Nursing Practice provide the framework for this first step in professional nursing education (AACN, 2008). The roles of the baccalaureate generalist include: provider of care, designer/manager/coordinator of care, and member of a profession. Baccalaureate generalist education provides the foundation for all graduate nursing education.

High School Preparation

High school students planning to enter the baccalaureate program in nursing are encouraged to follow a general college preparatory course of study. Such a course usually emphasizes basic preparation in English, a foreign language, mathematics, natural science, and social sciences.

Graduate Programs

Basic admission requirements are listed in the Graduate Studies (http://catalog.ku.edu/graduate-studies/#admissiontext) section of the online catalog. Individual graduate programs may have additional specific requirements including prerequisite undergraduate courses. These are listed or referenced in program descriptions. Combined degree options are available.

The School of Nursing offers the following graduate programs:

- Master of Science (http://catalog.ku.edu/nursing/ms-nursing)
- Doctor of Nursing Practice (http://catalog.ku.edu/nursing/dnp)
- Doctor of Philosophy (http://catalog.ku.edu/nursing/phd)
- Nursing and Interprofessional Certificate Programs (http://catalog.ku.edu/nursing/certificates)

For online information about graduate programs, visit the school's website (http://nursing.kumc.edu).

School of Nursing Degree Programs

Degrees (p. 1)

Bachelor of Science in Nursing (http://catalog.ku.edu/nursing/bs)
Master of Science in Nursing (http://catalog.ku.edu/nursing/ms-nursing)
Doctor of Philosophy in Nursing (http://catalog.ku.edu/nursing/phd)
Doctor of Nursing Practice (http://catalog.ku.edu/nursing/dnp)

Certificates (p. 1)

Post-Master's Certificate Programs in Nursing (http://catalog.ku.edu/nursing/certificates)
Graduate Certificate - Adult-Gerontology Acute Care Nurse Practitioner (http://catalog.ku.edu/nursing/certificates/advancedpractice/practitioner)
Graduate Certificate - Adult-Gerontology Primary Care Nurse Practitioner (http://catalog.ku.edu/nursing/certificates/adult-gerontology-primary-care-nurse-practitioner)
Graduate Certificate - Family Nurse Practitioner (http://catalog.ku.edu/nursing/certificates/family-nurse-practitioner)
Graduate Certificate - Health Professions Educator (http://catalog.ku.edu/nursing/certificates/healthprofessionseducator)
Graduate Certificate - Health Informatics (http://catalog.ku.edu/medicalcentercampusinterdisciplinary/studies/healthinformatics/graduatecert)
Graduate Certificate - Nurse Midwifery (http://catalog.ku.edu/nursing/certificates/advancedpractice/midwifery)
Graduate Certificate - Psychiatric/Mental Health Nurse Practitioner (http://catalog.ku.edu/nursing/certificates/advancedpractice/psychiatric)

Interprofessional Degree Programs

Master of Science in Health Informatics (http://catalog.ku.edu/nursing/ms-health-informatics)
Doctor of Philosophy in Therapeutic Sciences (http://catalog.ku.edu/health-professions/therapeutic-science/phd)
Undergraduate University Regulations
For information about university regulations, see Regulations (http://catalog.ku.edu/regulations) or visit the University of Kansas Policy Library (http://www.policy.ku.edu).

Academic Forgiveness
Academic forgiveness does not apply in the School of Nursing.

Change of School
To change from one school to another, you must submit a Change of School form in the dean’s office of the school you plan to enter. Follow the deadlines on the form.

Admission is competitive and occurs once each year for the traditional BSN program, in the fall semester. Applications are due by October 15 of the year before beginning classes.

Credit/No Credit
A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in one course a semester under the option, if the course is not in your major or minor. For more information, visit the KU Policy Library (https://documents.ku.edu/policies/governance/USRR.htm#art2sect2).

Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

Grading
Courses in which grades of D and F are earned do not count toward graduation.

Graduation with Distinction and Highest Distinction
Students who rank in the upper 10 percent of their graduating class may graduate with distinction. The upper third of those awarded distinction may graduate with highest distinction. The list is compiled each spring and includes July, December, and May graduates.

Honor Roll
Students with grade-point averages of 3.5 who have completed at least 12 hours are recognized on the honor roll or dean’s list in fall and spring. An Honor Roll notation appears on the transcript.

Honors Graduates
For students who complete the school’s honors program, designation of honors appears on the transcript.

Independent Study Through KU Continuing Education
Students may complete up to 31 hours of Independent Study through KU Continuing Education, credit-by-examination, and/or extension courses.

Probation
Probation
Students whose grade-point averages fall below 2.0 for the semester are placed on probation. The associate dean of student affairs notifies the student by letter. It is the student’s responsibility to seek a conference with the student affairs advisor. The student and the student affairs advisor assess the situation jointly and make appropriate recommendations.

Return to Good Standing
A student remains on probation until completion of the next term in which the student is enrolled full time. (Full-time enrollment is 12 hours or more; full-time summer session enrollment is 6 hours or more.) To be removed from probation, a part-time student must maintain a 2.0 grade-point average in the next 12 semester hours of enrollment. Only courses required for the nursing major (junior/senior course work) apply toward the required grade-point average for removal from probation. If the student attains a grade-point average higher than 2.0 in the probationary semester, the student is removed from probation. No student may graduate with a nursing grade-point average lower than 2.0 or an overall grade-point average lower than 2.0.

Dismissal
If the student does not attain a grade-point average higher than 2.0 in the probationary semester, the student is dismissed for academic reasons. One nursing course may be repeated one time only if necessary to earn the minimum grade of C or S. Failure to achieve a minimum grade of C or S in two nursing courses or one repeated nursing course results in the student’s dismissal.

Repetition of Courses
For admission to the school, grades in all courses taken and retaken are included in the grade-point average. All grades are considered for calculation of honors and awards.

Transfer of Credit
CredTran (http://credittransfer.ku.edu) is a transfer course equivalency system that lists more than 2,200 colleges and universities from which KU has accepted transfer courses in the past. If your school or course is not listed, your evaluation will be completed when you are admitted to KU.

Only transfer grades of C or higher apply toward graduation at KU.

Graduate University Regulations
For information about university regulations, see Regulations (http://catalog.ku.edu/regulations). For Graduate Studies regulations, see Office of Graduate Studies, Medical Center Campus (http://catalog.ku.edu/graduate-studies/kumc) section of this catalog.

Academic Forgiveness
Academic forgiveness does not apply in the School of Nursing.

Credit/No Credit
Graduate students may select the Credit/No Credit option for courses that do not fulfill a degree requirement, but this option may be limited in certain programs. Students should follow the policy outlined in the University Senate Rules and Regulations, Section 2, article 2.27, and contact the department or program for more information.
Nursing (Graduate) Courses

IPHI 820. Program, Project, and Communication Planning. 2 Hours.
Strategies to promote program, project, and communication planning are presented and applied by the student. Communication strategies for informing, guiding, and persuading clients, health care providers, payers, and other stakeholders to advance program and project development are discussed. The use of evolving information technologies to improve program, project and communication planning is emphasized. Prerequisites: Corequisite: NRSG 880, or consent of instructor. LEC.

IPHI 850. Introduction to Health Informatics. 2-3 Hours.
This course provides a broad survey of health informatics focused on five themes: health informatics foundations; clinical decision support; human factors/organization factors; public health informatics and current issues in health informatics including best practices. Students may register for either 2 or 3 credit hours. Students enrolled for 3 credit hours will develop and demonstrate a practical, innovative small-group health informatics project from one of a set of faculty recommended projects or from a student-proposed idea, in addition to course requirements expected within a 2 credit hour enrollment. LEC.

IPHI 851. Transforming Health Care through Use of Information Systems and Technology. 3 Hours.
Includes 2 credit hour lecture and 1 credit hour practicum. The application of the information system development life cycle in the design, selection, and implementation of health information technology applications will be examined. Human computer interactions and emerging technologies will be explored for their impact on patient care and safety. The role of legal, regulatory, ethical and security issues will be discussed as they apply to clinical and consumer information technologies. Prerequisite: Consent of Instructor. LEC.

IPHI 852. Health Data: Theory and Practice. 3-4 Hours.
Includes 2 credit hour lecture and 1-2 credit hour practicum. Principles of database theory, modeling, design and manipulation will be introduced. Students will have experience using a relational database management system. Database manipulation will be explored using structured query language (SQL) to compose and execute query statements and critically evaluate the results. Prerequisite: None. LEC.

IPHI 853. Abstraction and Modeling of Healthcare Information. 3 Hours.
Includes 2 credit hour lecture and 1 credit hour practicum. The information system development life cycle process is presented with emphasis on determination and analysis of information system requirements and system design that meet the identified health care information requirements. Object-oriented techniques will be introduced, including Unified Modeling Language and Unified Modeling Methodology, to facilitate process analysis and design proposal development. Prerequisite: NRSG 820 and consent of instructor. LEC.

IPHI 854. Knowledge Management in Healthcare. 3 Hours.
Includes 2 credit hour lecture and 1 credit hour practicum. Knowledge management is the creation, communication, and leveraging of a healthcare organization's knowledge assets. Defining knowledge, describing the knowledge creation cycle, and the identification of the knowledge worker and his/her impact on the organization are discussed. Information technology and communities of practice are presented in a balanced approach supporting a systematic viewpoint of the knowledge management process. Knowledge management theory is enhanced with the performance of a knowledge audit and the development of knowledge management tools. (Same as NRSG 854.) Prerequisite: NRSG 820 and consent of instructor. LEC.

IPHI 856. Health Informatics Practicum. 1-3 Hours.
In collaboration with healthcare information faculty, preceptors, students design an experience to facilitate application of theories and research related to health care informatics. Emphasis is on the application of the information system development life cycle. Students analyze the leadership and technical behaviors of various informatics roles and negotiate an informatics project to be completed within the practicum. Prerequisite: All Specialty Core, Leadership Core, IPHI 853, Abstraction and Modeling of Health Care Information, IPHI 852, Health Data: Theory Practice. Prerequisite or Co-requisite: IPHI 854, Knowledge Management in Healthcare, IPHI 851, Topics in Health Care Informatics, IPHI 860, Research Project in Nursing, or consent of instructor. LEC LEC.

IPHI 860. Research Project. 2 Hours.
Students will conduct a health informatics research project. A research report, designed artifact, or other appropriate deliverable will be developed. Prerequisite: A research course and two informatics core courses, or consent of instructor. The research project must meet research guidelines for the MS Informatics program. LEC.

IPHI 957. Health Informatics, Human Factors, and Ergonomics as Applied to Patient Safety. 3 Hours.
Includes 2 credit hour lecture and 1 credit hour practicum. The use of information systems including medical devices is paramount in achieving patient safety. Students will attain an inclusive understanding of how human factors and ergonomic principles can be used to improve patient safety in the design, implementation, and evaluation of information systems and medical devices. Additionally, health care professionals will acquire skills to appropriately apply error reduction strategies developed in high reliability organizations. Prerequisite: Consent of instructor. LEC.

IPHI 958. Knowledge Representation and Interoperability. 3 Hours.
Includes 2 credit hour lecture and 1 credit hour practicum. The need to exchange clinical information consistently between health care providers, care settings, researchers and other requires syntactic and semantic interoperability. Requirements and approaches to meet interoperability will be explored. Standards for messaging, terminology, and knowledge representation will be investigated. Prerequisite: Consent of instructor. LEC.

Nursing (Graduate) Courses

NRSG 700. Analysis of Variance for Nursing Research. 2 Hours.
In this course, students will learn appropriate analytic approaches for experimental and quasi-experimental research designs. Basic statistical foundations such as distributional assumptions and hypothesis testing will be reviewed. Essential statistical concepts, including effect size, power and sample size, and error rates will be discussed in the context of experimental designs. The core focus of the course will be a general linear model approach to analysis of variance (ANOVA) methods including one-way ANOVA, contrasts and post hoc tests, factorial designs, analysis of covariance (ANCOVA), and repeated measures ANOVA. Applications of methods for nursing and healthcare research will be examined. Prerequisite: Graduate level introductory statistics course or consent of instructor. LEC.

NRSG 722. Scholarly Writing for the Health Professional. 3 Hours.
Development of scholarly writing skills is emphasized to promote professional communication and to enhance professional image. Students enrolled in this interdisciplinary course analyze their own and others' writing to improve their written communications. Writing skills are practiced and developed by critiquing published articles, and by preparing written memorandums, letters, abstracts, and a manuscript. Legal and ethical issues related to the publication process are explored.
Prerequisite: Admission to the graduate program, or consent of instructor. LEC.

NRSG 731. Pharmacokinetics and Pharmacodynamics for Advanced Practice Nursing. 1 Hour.
General principles of pharmacology, including pharmacokinetics and pharmacodynamics, are discussed in preparation to prescribe. The principles for decision making about drug selection, use and monitoring are examined. Prerequisite: Corequisite: Admission to the graduate program, or consent of instructor. LEC.

NRSG 748. Theories for Practice and Research. 3 Hours.
Theory development and analysis techniques provide the framework for the study of concepts and theories from nursing and related disciplines. Particular emphasis will be placed on the relationship of theory and research in the development of nursing knowledge to support evidence-based practice. This course will enhance the decision-making skills for choosing and using concepts and theories that guide practice. Prerequisite: Admission to the graduate nursing program, or consent of instructor. LEC.

NRSG 754. Health Care Research. 3 Hours.
This course will enable the student to synthesize nursing knowledge and make recommendations to translate research findings into practice within diverse health care settings. Research methods, processes and findings for use in practice will be critically evaluated. Emphasis will be placed on formulating relevant research questions from theory and practice. Prerequisite: Admission to the graduate nursing program, Graduate Statistics, or consent of instructor. LEC.

NRSG 755. Professionalism in Advanced Nursing Practice. 3 Hours.
An analysis of economic, political, legal, ethical, professional, societal and cultural issues is conducted within the context of advanced nursing practice. Application of concepts essential to understanding, influencing and leading change in health care delivery specific to advanced nursing practice is emphasized. Prerequisite: Admission to the graduate nursing program, or consent of instructor. LEC.

NRSG 801. Advanced Health Assessment and Clinical Reasoning. 3 Hours.
The purpose of this course is to develop knowledge and skills for advanced clinical nursing practice, including comprehensive history and physical exam across lifespan. Content on special populations, communication with patients and care teams, cultural considerations, health promotion and prevention, and use of electronic health records will be discussed with opportunity for application. Prerequisite: Corequisite: NRSG 812: Advanced Pathophysiology, or permission of course faculty. LEC.

NRSG 802. Methods for Qualitative Research. 3 Hours.
The naturalistic paradigm and various qualitative research approaches such as ethnography, phenomenology/hermeneutics, historiography, grounded theory and/or others are explored. Emphasis is placed on the appropriateness of each approach for description and explanation of phenomena encountered in clinical, organizational, and educational settings. Experience is provided in problem formulation and development of qualitative research proposal. Prerequisite: NRSG 804 or NRSG 945, or consent of the instructor. LEC.

NRSG 803. Introduction to Clinical Research. 1 Hour.
This course will provide a comprehensive overview to clinical research. The student will gain an understanding of how to develop clinical research questions including protocol design and the factors that should be considered in initiating a clinical research study. This will include biostatistical considerations, the recruitment of study participants, regulatory issues, and data management, and defining measures and instruments. Students will gain knowledge of how to define clinical research among the various institutional entities involved with clinical research at the University of Kansas Medical Center such as the Research Institute (RI), General Clinical Research Center (GCRC) and the Human Subjects Committee (HSC). Additionally, one component of the course will focus on how to apply for funding (grantmanship), critical appraisal of research studies, and how to present research data. Prerequisite: Consent of instructor. LEC.

NRSG 804. Interpreting Research for Applied Science. 3 Hours.
Research relevant to therapeutic intervention comes from a variety of disciplines involving varied research designs and analysis strategies. Students in this course will examine selected research studies and gain skill in analyzing methods and results as well as in applying research findings to practical problems. Students also will design their own research project reflecting their area of interest. Prerequisite: Corequisite: NRSG 748, 754, and 755 or consent of instructor. RSC.

NRSG 805. Understanding Disability through Mass Media. 2 Hours.
This class is an overview of how mass media frames disability for the public. This course will focus on issues related to disability and the mass media representation including journalism, TV, film, advertising and the internet. Topics discussed will be the various models of media representation of disability, the impact of stigma in mass media imagery, the impact of cultural and media representations on the experiences of people with disabilities, content created by and for people with disabilities, news about disability rights in the US society, and “hidden” disabilities. Also considered will be the healthcare response to these images and to people with disabilities. The course will be offered online in a synchronous format. Prerequisite: Consent of instructor. LEC.

NRSG 806. Advanced Physiology. 3 Hours.
A course designed to lead to an advanced comprehension of the physiology of organ systems in the human in both cellular and organ processes. Physiology subject matter relevant to clinical health sciences include membrane transport, muscle, cardiovascular, respiratory, renal, gastrointestinal, neurological, and endocrine function. Cellular mechanisms include the structure and function of ion channels and pumps, mechanisms of calcium regulation, excitation-coupling processes. Prerequisite: Admission to the School of Nursing or consent of instructor. LEC.

NRSG 807. Genetics in Primary Care. 2 Hours.
This course is designed to give the primary care nurse practitioner and other graduate nursing students a foundation in medical genetics. The basics of genetics, common genetic disorders and genetic testing are discussed. The application of this knowledge to counsel individuals at risk for genetic disorders is emphasized through the use of case studies. Ethical, legal and clinical practice issues and perspectives of primary care counseling in genetics are addressed. Prerequisite: Admission to the Graduate Nursing Program or Consent of Instructor. LEC.

NRSG 808. The Social Context for Health Care Policy. 2 Hours.
Using a local/single clinical issue students examine ways to abstract this issue into a social policy context. Local exemplars are used throughout the course to demonstrate the leadership and structural systems required to effect change in policy. Strategies to identify constituencies and build coalitions are studied. Prerequisite: NRSG 755, or consent of instructor. LEC.

NRSG 809. Health Promotion and Complementary Therapeutics. 3 Hours.
Current trends in health promotion and clinical preventive care across the lifespan are examined. Specific guidelines for assisting clients to maintain/improve health and/or prevent illness are reviewed. Attention is given to the roles of the health care provider and care recipient in
screening, communication, and counseling. The use of complementary (non-pharmacological) therapeutics in assisting clients to achieve goals of health promotion is examined. The recommendation and use of non-pharmacological interventions will be evaluated based on research findings related to selection of therapeutics and measurement of expected outcomes following use of a particular intervention. Prerequisite: Admission to the graduate nursing program, or consent of instructor. LEC.

NRSG 812. Advanced Pathophysiology. 3 Hours.
Course focus is the in-depth scientific knowledge base relevant to selected pathophysiological states confronted in advanced nursing practice. This information provides a foundation for critical assessment and the formulation of decisions related to clinical diagnosis and the management of therapeutic regimens. Age specific and developmental alterations are correlated with clinical diagnosis and management. Application is made through age-appropriate case studies. Prerequisite: Pre- or Co-requisite: NRSG 806/NURA 806 or consent of instructor. LEC.

NRSG 813. Advanced Pharmacology. 3 Hours.
The clinical application of specific categories of drugs, commonly encountered in primary care settings is discussed. The use of protocols, prescription writing, and the ethical/legal, and economic issues surrounding the advanced nurses’ role in prescribing and monitoring pharmacologic therapies in the ambulatory setting are explained. Factors such as age-appropriate content related to pharmacokinetics, dosages, expected outcomes, and side effects of the drugs are discussed. First line versus second line drugs, alternate drugs, drug interactions, adjusting drug dosages, patient education, and compliance issues related to drug therapy are addressed. The nurse’s role and responsibility related to data collection, problem identification, and consultation with the physician is explored. Application is made through age-appropriate case studies. Prerequisite: NRSG 812 Advanced Pathophysiology or consent of instructor. LEC.

NRSG 820. Program, Project, and Communication Planning. 2 Hours.
Strategies to promote program, project, and communication planning are presented and applied by the student. Communication strategies for informing, guiding, and persuading clients, health care providers, payers, and other stakeholders to advance program and project development are discussed. The use of evolving information technologies to improve program, project and communication planning is emphasized. Prerequisites: Corequisite: NRSG 880, or consent of instructor. LEC.

NRSG 821. Clinical Dynamics and Interventions in Diabetology. 3 Hours.
A complexity science framework is used to discuss current and innovative concepts and trends in the care of person with diabetes. The disease process of diabetes, preventive measures, complications, pharmacologic, technologic, lifestyle interventions and self-management techniques based on current evidence are presented and analyzed in relations to care of persons with diabetes across age groups and in different settings. Consideration is given the complexity of the co-morbidities that accompany diabetes as well as the special approaches to age appropriate treatment and cultural diversity factors that influence care. External barriers that contribute to decrease in quality outcomes are analyzed and innovative solutions are proposed. Prerequisite: NRSG 801, NRSG 813, or Consent of Instructor. SEM.

NRSG 823. Research Clinical Trial Management: Pre-Study Activities. 3 Hours.
This course is designed as an introduction to the research clinical trial manager role and provides in-depth knowledge of Pre-Clinical Trials Study activities. Regulatory, administrative, and ethical issues will be presented as well as the daily operational requirements (study design, financial aspects, protocols, hiring of personnel, subject recruitment, etc.) to begin a study. Included is the development of training skills for the Clinical Trial manager for critiquing sample protocols and for assessing adequate resources for implementation of protocol. Prerequisite: RN Licensure, graduate level, or consent of instructor. LEC.

NRSG 824. Research Clinical Trial Management: During Study Activities. 3 Hours.
This course is designed as an introduction to the research clinical trial manager role and provides in-depth knowledge of During-Clinical Trial Study activities. The process of conducting the ‘day-to-day’ operations of a research study; subject recruitment, data collection forms and documenting subjects’ responses to the interventions, audits, inspections, budget monitoring, ethical/liability situations that may occur during the study, etc. will be addressed. Included is the development of training skills for the Clinical Trial Manager that is involved in conducting the ‘day-to-day’ operations of the research study. Prerequisite: NRSG 823, or consent of instructor. LEC.

NRSG 825. Research Clinical Trial Management: Post-Study Activities and Practicum Experience. 3 Hours.
This course provides an introduction to the research manager role and provides in-depth knowledge of Post-Clinical Trial Study activities. The process of conducting the ‘day-to-day’ operations of a research study; preparing for final sponsor and FDA visits; preparing final reports to the sponsor and IRB; evaluating sponsor, site and team members’ performance; management of data and preparing summary reports, etc. will be addressed. The course provides the student with a Research Manager practicum experience in selected research setting. Opportunities are provided to utilize learned details related to the role of a Research Manager during key phases of a Clinical Trial Study; pre-study, during-study, and at the end-study activities. Prerequisite: NRSG 824, or consent of instructor. PRA.

NRSG 826. Global Perspective and Diversity in Healthcare. 2 Hours.
Cultural receptivity is integrated into the collaboration, development, and implementation of health programs at the local, national, and international level. Frameworks that emphasize the meanings of health and healthcare; prevention and management; and related ethical, economic, and social justice concerns are introduced. Students partner with a community of interest to understand their health and illness beliefs, identify barriers to healthcare access, integrate the historical, social, political and economic forces that impact healthcare. Together they plan and implement appropriate strategies to influence positive community outcomes. Prerequisite: NRSG 880, or consent of instructor. LEC.

NRSG 827. Advanced Concepts Public Health Nursing. 2 Hours.
Public health is addressed in terms of common values and interests as well as particular client populations (vulnerable and at risk groups) across the lifespan. Health promotion and disease prevention for whole communities and selected vulnerable and at risk aggregates are emphasized. Ethical and social justice concerns as well as public policy and legislative issues in population-focused health care are discussed. Selected models, concepts, theories, and research in public health provide the framework for identifying, exploring, prioritizing and planning interventions for public health concerns. Ultimately, a grant proposal is developed to support the action plan. Prerequisite: Corequisite: NRSG 754, NRSG 755, NRSG 809, NRSG 820, NRSG 880, NRSG 885, PRVM 800. Prerequisite/Corequisite: NRSG 808, NRSG 826 PRVM 830.
Corequisite: NRSG 828, or consent of instructor. LEC.

Students are provided with an opportunity to explore advanced practice roles within the context of public health needs. Based on each student’s goals and interests, health related needs of an identified population are
assessed, analyzed, and synthesized; and a plan of action proposed. Prerequisite: Corequisite: NRSG 827, or consent of instructor. LEC.

NRSG 829. Public Health Practicum. 3 Hours.
Students will complete an intensive practicum in a community/public health setting. Prerequisite: NRSG 827, NRSG 828 or Consent of Instructor. LEC.

NRSG 833. Managing Clinical Research Projects. 3 Hours.
This course is designed to help nurses develop in-depth knowledge of good clinical practices and federal regulations, as well as to develop a strong foundation for the management of clinical research program. Regulatory, administrative, and ethical issues will be presented as well as the daily operational requirements of managing a clinical research office. Completion of this course prepares one for clinical research professional national certification. Prerequisite: NRSG 825 or Consent of Instructor. LEC.

NRSG 839. Global Perspectives and Diversity in Healthcare: Practicum. 2 Hours.
Students will have the opportunity to integrate concepts and theories of global health and diversity by direct program planning, delivery, and evaluation of care activities with a vulnerable population. Students will partner with a community of interest to provide directed advanced nursing care and or leadership activities via individual/population/organizational assessment, intervention, and evaluation. Emphasis will be placed on building cultural competence with an understanding of the historical, social, political, and economic forces of health within a specific community setting or geographic area. The worldview of the individual/population/organization will be respected and integrated into all aspects of health care delivery. Prerequisite: NRSG 826 or consent of instructor. PRA.

NRSG 841. Reproductive Endocrinology. 2 Hours.
In-depth examination of the anatomy and physiologic processes of reproduction are studied, and will include normal growth and development, as well as clinical genetics. Essential information will be focused on understanding of the reproductive hormones and regulation of the menstrual cycle. With a complete understanding of menstrual hormone regulation, students will be better prepared to apply concepts to alterations that are encountered with maturation/development, puberty, pregnancy, lactation, menopause, and management of common gynecological needs (such as contraception). Prerequisite: NRSG 812 or Consent of Instructor. LEC.

NRSG 842. Topics in Mental Health Nursing. 1-5 Hours.
Investigation of issues and psychiatric mental health problems relevant to a selected population in mental health nursing. Prerequisite: Consent of instructor. LEC.

NRSG 844. Advanced Psychiatric Assessment. 3 Hours.
Advanced psychiatric assessment of children, adults and the elderly will be covered, including conducting patient-centered, culturally competent interviews in simulated situations. Epidemiology of psychiatric disorder is addressed. Assessment for psychiatric diagnoses of substance abuse, mood and anxiety disturbances, psychosis, dementia and disorders arising in childhood and adolescence are emphasized. Assessment of dangerous behaviors and crisis intervention is covered. Prerequisite: Corequisite: NRSG 801, or consent of instructor. LEC.

NRSG 850. Mental Health Assessment of Infants, Children and Adolescents. 3 Hours.
This is an advanced course in infant, child and adolescent mental health assessment development for those individuals who desire to gain greater knowledge and understanding of complex mental health issues in children, adolescents and their families. The course focus is to identify deviations between normal and abnormal development. Identification of environmental and social determinates will be examined. Recognition of pre-birth risk factors affecting children and protective measure that promote positive growth and development will be discussed. Assessment tools and strategies for effective assessment will be reviewed. Emphasis on the legal and ethical issues regarding safety and well-being of children and families will be addressed. Prerequisite: NRSG 748, or consent of instructor. LEC.

NRSG 851. Psychopharmacology for Advanced Nursing Practice. 3 Hours.
Understanding of the neuron, neurotransmitter and receptor functioning as the basis for psychopharmacotherapy is emphasized in developing the knowledge for prescribing and monitoring psychotropic medications for clients diagnosed with psychiatric disorders. The major classes of psychotherapeutic drugs, their mechanism of action, metabolism, interaction, adverse and side effects are discussed. Drug development is reviewed and ethical and legal issues involved in prescribing across the lifespan are covered. Knowledge is applied to case studies that include differentiating drugs, dosages and response to clients’ internal environment, racial/ethnic background, and age. Prerequisite: NRSG 844 or equivalent; or consent of instructor. LEC.

NRSG 853. Abstraction and Modeling of Healthcare Information. 3 Hours.
Includes 2 credit hour lecture and 1 credit hour practicum. The information system development life cycle process is presented with emphasis on determination and analysis of information system requirements and system design that meet the identified health care information requirements. Object-oriented techniques will be introduced, including Unified Modeling Language and Unified Modeling Methodology, to facilitate process analysis and design proposal development. Prerequisite: NRSG 820 or Consent of Instructor. LEC.

NRSG 854. Knowledge Management in Healthcare. 3 Hours.
Includes 2 credit hour lecture and 1 credit hour practicum. Knowledge management is the creation, communication, and leveraging of a healthcare organization's knowledge assets. Defining knowledge, describing the knowledge creation cycle, and the identification of the knowledge worker and his/her impact on the organization are discussed. Information technology and communities of practice are presented in a balanced approach supporting a systematic viewpoint of the knowledge management process. Knowledge management theory is enhanced with the performance of a knowledge audit and the development of knowledge management tools. (Same as IPHI 854.) Prerequisite: NRSG 820 or consent of instructor. LEC.

NRSG 856. Health Informatics Practicum. 1-3 Hours.
In collaboration with healthcare information faculty and preceptors, students design an experience to facilitate application of theories and research related to health care informatics. Emphasis is on the application of the information system development life cycle. Students analyze the leadership and technical behaviors of various informatics roles and negotiate an informatics project to be completed within the practicum. Prerequisite: All Common Core, Leadership Core, NRSG 853, NRSG 858. Prerequisite/Corequisite: NRSG 854, NRSG 855, NRSG 898, or consent of instructor. LEC.

NRSG 857. Transforming Health Care through Use of Information Systems and Technology. 3 Hours.
Includes 2 credit hour lecture and 1 credit hour practicum. The application of the information system development life cycle in the design, selection, and implementation of health information technology applications will be examined. Human computer interactions and emerging technologies will be explored for their impact on patient care and safety. The role of legal, regulatory, ethical and security issues will be discussed as they apply to
clinical and consumer information technologies. Prerequisite: Consent of Instructor. LEC.

NRSG 858. Health Data: Theory and Practice. 3-4 Hours. Includes 2 credit hour lecture and 1-2 credit hour practicum. Principles of database theory, modeling, design and manipulation will be introduced. Students will have experience using a relational database management system. Database manipulation will be explored using structured query language (SQL) to compose and execute query statements and critically evaluate the results. Prerequisite: None. LEC.

NRSG 859. Introduction to Health Informatics. 2-3 Hours. This course provides a broad survey of health informatics focused on five themes: health informatics foundations; clinical decision support; human factors/organization factors; public health informatics and current issues in health informatics including best practices. Students may register for either 2 credit hours or 3 credit hours. Students enrolled for 3 credit hours will develop and demonstrate a practical, innovative small-group health informatics project from one of a set of faculty recommended projects or from a student-proposed idea, in addition to course requirements expected with a 2 credit hour enrollment. Prerequisite: Consent of Instructor. LEC.

NRSG 870. Designing a Student Learning Environment. 3 Hours. The roles of both the educator and student in designing a learning environment provide the framework for analyzing pedagogical philosophies, theories, ethical/legal issues, and research related to teaching strategies and education. The interprofessional focus is on best practices and research-based strategies to promote various learning styles and create an active learning environment that increases student retention and learning success for diverse, multicultural student populations. Attention will be given to the relationship between the setting, methodologies of clinical teaching, and the assessment of competencies. Prerequisite: NRSG 748, NRSG 754, or consent of instructor. LEC.

NRSG 871. Curriculum/Program Planning and Evaluation. 3 Hours. Philosophies, methods, and processes of curriculum and instruction in health professions' education provide the framework for discussing curricular and program planning theories/models, resources for decision making, research, and evaluation methods that create a learner-centered environment. Attention is given to frameworks for program evaluation, methods of data collection, and the ethics and standards of evaluation practice. The influence of societal trends, and current health professions issues relevant to curriculum planning are addressed. Emphasis is on strategies for anticipating future societal needs and developing educational curriculum to meet those needs. Matters of diversity, inclusion, interprofessional practice, workforce development, and ethics/legal issues in curriculum planning and education also are included. Prerequisite: NRSG 748, NRSG 754, or consent of instructor. LEC.

NRSG 872. Topics in Nursing Education. 1-5 Hours. Investigation of special issues or problems relevant to appropriate client systems (client, family, and student or health care professional) in Nursing Education. Prerequisite: Consent of instructor. LEC.

NRSG 873. Teaching with Technologies. 3 Hours. Theories and trends that support the use of merging and emerging technologies for the enhancement of teaching and learning in the health professions are explored. The focus is on assisting educators to gain skills in choosing appropriate instructional technologies to enhance learning. Learning variables, including the environment context, interprofessional education, finance, policy, and the influence of those variables on technologies are examined. The evaluation and impact of current technology on the delivery of education are examined along with strategies for considering/anticipating future technologies to meet educational needs. Prerequisite: NRSG 748, NRSG 754 or Consent of Instructor. LEC.

NRSG 874. Health Professions Educator Preceptorship. 3 Hours. The role components of the health professions educator are implemented with a preceptor in selected educational settings. Opportunities are provided to utilize teaching and learning strategies, research findings, and evaluation methods with diverse students. Professional issues, educational trends, changing role of the educator, and self-assessment are incorporated in accompanying modules. Prerequisite: NRSG 870, NRSG 871, NRSG 873. LEC.

NRSG 877. Foundations in Education and Learning. 3 Hours. Foundations and applications of education and evaluation strategies for teaching and learning in academic, clinical, research, and organizational settings are explored. Scholarly evidence from a variety of sources is used to develop educational processes, products, and evaluation strategies. Students acquire knowledge to support professional development and employ research skills as educators in diverse teaching environments with diverse learners. Prerequisite: Admission to the Doctoral Program, or Consent of Instructor. LEC.

NRSG 878. Clinical Radiology for the Advanced Practice Nurse. 2 Hours. A complexity science framework is used to present the basic and advanced technical aspects of radiological tests used in the care of adult and pediatric patients in the diagnostic work up of the etiology of the health problem. The science that forms the basis for all plain (cathode) films as well as computerized scanning and magnetic resonance imaging tests is covered in the course. The emphasis is on the appropriate choice of radiological tests in the work-up of the patient's health problem. Also, advanced practice nurses will learn a framework for evaluating the findings of the radiological test, and the clinical implications of the findings. Prerequisite: Corequisite: NRSG 818, or NRSG 868, or NRSG 869, or NRSG 849, or NRSG 840, or consent of instructor. SEM.

NRSG 880. Organizational Foundations for Leading Change. 3 Hours. Self-discovery as a foundation for professional development while exploring the concepts of leader, manager and follower is emphasized. Analysis and prediction of an organization's stages of development and its capacity for linear and social change are introduced through the lens of complexity science. Political, legal, ethical and other issues that constrain and destabilize organizations and strategies to restore equilibrium are explored. (Same as HPM 840.) Prerequisite: NRSG 748, or consent of instructor. Prerequisite/Corequisite: NRSG 755. LEC.

NRSG 881. Applied Budgeting and Finance. 3 Hours. Leaders apply basic principles associated with program, project and service-line fiscal management, price setting, budget preparation, cost-benefit/break-even analysis, managed-care contracting, and interpreting financial ratios while concurrently acquiring a financial vocabulary to communicate with various stakeholders. Financial reports such as balance sheets, budget forms and expense reports are studied and formulated related to government agencies, small clinical operations, grant-funded projects, and start-up programs. Staffing models and the staffing-quality equation are analyzed for the purpose of projecting human resource requirements. Prerequisite: NRSG 880, HPM 822, or Consent of Instructor. LEC.

NRSG 882. Introduction to Operations. 3 Hours. Examines performance of health care organizations, sources of variation, methods of measurement, and strategies for improving performance. Considers several approaches to performance improvement and examines tools widely used in operations management. Incorporates lecture, discussion, and fieldwork. (Same as HPM 850.) Prerequisite:
NRSG 754 or NRSG 880 or equivalent course; or consent of instructor. LEC.

NRSG 883. Complexity Science Approaches to Improve Organizational Effectiveness. 3 Hours.
This course introduces complexity science principles with the aim of improving the quality and effectiveness of healthcare organizations. Traditional approaches to quality improvement will be contrasted with tools and metrics that can be applied in complex organizations. Principles that relate to embeddedness, diversity, distributed control, co-existence of order and disorder, nonlinearity, inability to predict, emergence, and functioning at the edge of chaos will be introduced. Prerequisite: NRSG 880, or consent of instructor. LEC.

NRSG 884. Topics in Organizational Leadership. 3 Hours.
Investigation of current and futurist issues and trends relevant to organizational leadership. LEC.

NRSG 885. Evaluation and Analysis for Healthcare Effectiveness. 2 Hours.
Systematic approaches for analyzing and evaluation processes of care delivery and their impact on client populations, organizational processes, and communities are considered. Research concepts and methods are used in a systems context. Program evaluation, performance improvement, and other methods of measuring outcomes are examined for their utility within the health care setting. Linkages between program evaluation and regulatory policy are studied. Prerequisite: NRSG 754. Prerequisite/Corequisite: NRSG 880 or Consent of Instructor. LEC.

NRSG 886. Organizational Leadership Practicum. 1-3 Hours.
The knowledge, skills, and abilities learned throughout the course of study are integrated in this practicum experience designed to develop further specialized knowledge. The faculty and preceptor provide support and guidance to help interpret experiences, and gain a broader world-view within organizational leadership. Students design an experience to facilitate application of theories and research related to organizational leadership. Emphasis is on expanding the capacity of the emerging leader in leading change, facilitating advanced communication skills, and demonstrating one or more areas of leadership expertise. Students negotiate a leadership project to be completed within the practicum. Prerequisite: Corequisite: NRSG: 808, 820, 826, 881, 882 or 883, 885, 891 HPM 822, or consent of instructor. CLN.

NRSG 889. Grant Writing. 3 Hours.
All aspects of preparing grant applications are covered. This includes writing an actual grant application containing all the usual elements of grants—budgets, biosketches, resources, and scientific text. In addition, different funding agencies, building research teams, the review process, responding to reviewers, and resubmitting grants will be covered. Prerequisite: Appropriate research methods and statistics courses in student's current graduate program (at least 2 statistics courses, one including content of multiple regression), and permission of instructor. For students in the Outcomes Management and Research Concentration: prerequisites: HPM 821 or PRVM 800. Same as ANAT 869 and HPM 788. LEC.

NRSG 890. Independent Study in Nursing. 1-5 Hours.
Intensive study in an area of interest with experiences selected according to the student's written purposes, conceptual framework, objectives and evaluation (1-5 credit hours). Appropriate prerequisite courses, as determined by the Independent Study faculty advisor, must be completed. LEC.

NRSG 891. Human Resources and Workforce Development. 3 Hours.
The focus of this course is to understand the leadership functions of human resource management in organizations to create a competitive edge through employee empowerment. Core human resource concepts are introduced and applied to optimize human capital within a variety of healthcare settings, including compensation and benefits, employee recognition, and employee/labor relations. National, regional and local strategies and workforce trends are discussed related to best practices for the selection, retention, and management as a healthcare employer of choice. Prerequisite: All Leadership Core Courses, or consent of instructor. Same as HPM 854. LEC.

NRSG 892. Independent Study in Nursing Practicum. 1-5 Hours.
Intensive practicum in a specified area of interest with experiences selected according to aims that are mutually agreed upon by faculty and student. Prerequisite: None IND.

NRSG 893. Preparing for Healthcare Practice in Rural Communities. 2 Hours.
Establishing and maintaining healthy rural communities is dependent on preparation of the rural healthcare workforce. This includes professionals living and working in rural communities as well as distant providers who contribute services and/or support through telehealth. Students will explore broad patterns of health and illness in rural communities, evaluate resources and develop advanced strategies to meet the diverse needs of rural communities. Prerequisite: Prerequisites: NRSG 748, NRSG 754, NRSG 890, or Consent of Instructor. LEC.

NRSG 895. Grant Writing for Nursing Science. 1 Hour.
Portions of the research process in an area of nursing are implemented. Emphasis is placed on experiential knowledge of the actual conduct of research. The student selects one of several research activities and reports on the project. Prerequisite: Consent of Instructor. Corequisites: NRSG 895. LEC.

NRSG 896. Grant Writing Application. 2 Hours.
The student will work with their faculty research mentor to develop a federal level grant application (NIH, HRSA, AHRQ, or foundation) in preparation for submission. The funding proposal will be developed in conjunction with the NRSG 895 Grant Writing for Nursing Science course that provides information related to grant application structure and key issues. The mentor will provide content expertise and will work with the student to develop the specific content for a grant application. The final product will be a grant proposal suitable for submission. Prerequisite: Prerequisites: Current enrollment in the PhD in Nursing program or Consent of Instructor. Corequisites: NRSG 895. LEC.

NRSG 898. Research Project in Nursing. 2 Hours.
Portions of the research process in an area of nursing are implemented. Emphasis is placed on experiential knowledge of the actual conduct of research. The student selects one of several research activities and reports on the project. Prerequisite: NRSG 754 plus either one advanced practice or one administration track course, or consent of instructor. LEC.

NRSG 899. Thesis. 1-6 Hours.
Prerequisite: NRSG 754, and one core track course. THE.

NRSG 901. Primary Care I: Adult-Gerontology Health. 3 Hours.
The first of two core specialty courses using a systems approach that emphasizes a multi-dimensional and interprofessional approach to assessment, differential diagnosis and treatment formulation for the health care needs of adults across the life span in multiple care settings. Common health conditions are explored in relation to health promotion, health maintenance, assessment, diagnosis and management of common episodic, chronic, and complex conditions affecting health. Students develop skills in critical thinking, analysis and synthesis of data from a variety of sources, and use of evidence-based practice guidelines in diagnosing and managing health care needs. In addition to cultural spiritual diversity, students learn how patient preferences in health care
decision making are incorporated in a focus on person-centered care. Prerequisite: NRSG 801, NRSG 812, and NRSG 813. LEC.

NRSG 902. Primary Care II: Adult-Gerontology Health. 3 Hours.
The second of two core specialty courses using a systems approach that emphasizes a multi-dimensional and interprofessional approach to assessment, differential diagnosis and treatment formulation for the health care needs of adults across the life span in multiple care settings. Common health conditions are explored in relation to health promotion, health maintenance, assessment, diagnosis and management of common episodic, chronic, and complex conditions affecting health. Students develop skills in critical thinking, analysis and synthesis of data from a variety of sources, and use of evidence-based practice guidelines in diagnosing and managing health care needs. In addition to cultural spiritual diversity, students learn how patient preferences in health care decision making are incorporated in a focus on person-centered care. Prerequisite: NRSG 901 or consent of instructor. LEC.

NRSG 903. Primary Care Practicum I: Adult/Gerontology - Nurse Practitioner. 2 Hours.
This is the first practicum course in a series of three practicum courses that prepares the student for entry into practice as a primary care provider. This course is designed to prepare the adult-gerontology primary care nurse practitioner as a provider of direct health care services. The patient population of the adult-gerontology provider includes young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old, old, and old-old adults). Within this role, the adult-gerontology primary care nurse practitioner student will synthesize theoretical, scientific, and contemporary clinical knowledge for the assessment and management of both health and illness states. Advanced practice competencies incorporate the health promotion, health protection, disease prevention, and management focus of the adult-gerontology primary care nurse practitioner practice. Prerequisite: NRSG 902, or Consent of Instructor. LEC.

NRSG 904. Primary Care Practicum II: Adult/Gerontology - Nurse Practitioner. 4 Hours.
This is the second practicum course in a series of three practicum courses that prepares the student for entry into practice as a primary care provider. This course is designed to prepare the adult-gerontology primary care nurse practitioner as a provider of direct health care services. The patient population of the adult-gerontology provider includes young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old, old, and old-old adults). Within this role, the adult-gerontology primary care nurse practitioner student will synthesize theoretical, scientific, and contemporary clinical knowledge for the assessment and management of both health and illness states. Advanced practice competencies incorporate the health promotion, health protection, disease prevention, and management focus of the adult-gerontology primary care nurse practitioner practice. Prerequisite: NRSG 903 or Consent of Instructor. LEC.

NRSG 905. Primary Care Practicum III: Adult/Gerontology - Nurse Practitioner. 4 Hours.
This is the final practicum course in a series of three practicum courses that prepares the student for entry into practice as a primary care provider. This course is designed to prepare the adult-gerontology primary care nurse practitioner as a provider of direct health care services. The patient population of the adult-gerontology provider includes young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old, old, and old-old adults). Within this role, the adult-gerontology primary care nurse practitioner student will synthesize theoretical, scientific, and contemporary clinical knowledge for the assessment and management of both health and illness states. Advanced practice competencies incorporate the health promotion, health protection, disease prevention, and management focus of the adult-gerontology primary care nurse practitioner practice. Prerequisite: NRSG 904 or Consent of Instructor. PRA.

NRSG 906. Primary Care Practicum I: Adult/Gerontology - Clinical Nurse Specialist. 2 Hours.
This is the first practicum course in a series of three practicum courses that prepares the student for entry into practice as a clinical nurse specialist. The focus of this course is an introduction to the CNS role that includes the competencies of direct care, consultation, systems leadership, collaboration, coaching, research, and ethical decision-making related to patients, families, and patient populations. The patient population of the adult-gerontology CNS learner includes young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old, old, and old-old adults). The three spheres of CNS influence are reviewed: patient, nurse/nursing, and organization/system. Clinical activities include designing, implementing and evaluating evidence-based advanced nursing practice interventions along with measurement of outcomes; promoting and facilitating change and innovation in practice; project management; and program evaluation. Clinical practice will include comprehensive interprofessional coordination of the acute and chronic health care needs for culturally diverse populations of adults from adolescence through elder adulthood with specific systems dysfunctions. The change process/theory, project management, problem solving, outcomes measurement, and program evaluation are important aspects of this course. Prerequisite: NRSG 902, or Consent of Instructor. PRA.

NRSG 907. Primary Care Practicum II: Adult/Gerontology - Clinical Nurse Specialist. 4 Hours.
This is the second practicum course in a series of three practicum courses that prepares the student for entry into practice as a clinical nurse specialist. The focus of this course is ongoing acquisition of CNS competencies: direct care, consultation, systems leadership, collaboration, coaching, research, and ethical decision-making related to patients, families, and patient populations. The patient population of the adult-gerontology CNS learner includes young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old, old, and old-old adults). Clinical activities include designing, implementing and evaluating evidence-based advanced nursing practice interventions along with measurement of outcomes; promoting and facilitating change and innovation in practice; project management; and program evaluation. Clinical practice will include comprehensive interprofessional coordination of the acute and chronic health care needs for culturally diverse populations of adults from adolescence through elder adulthood with specific systems dysfunctions. Effective communication, leading groups, difficult patient and staff situations, research, CNS practice settings, the business of CNS practice, professional development, and networking are covered in this course. Prerequisite: NRSG 906 or Consent of Instructor. PRA.

NRSG 908. Primary Care Practicum III: Adult/Gerontology - Clinical Nurse Specialist. 4 Hours.
This is the final practicum course in a series of three practicum courses that prepares the student for entry into practice as a clinical nurse specialist. The focus of this course is maximizing acquisition of CNS competencies: direct care, consultation, systems leadership, collaboration, coaching, research, and ethical decision-making related to patients, families, and patient populations. The patient population of the adult-gerontology CNS learner includes young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old, old, and old-old adults). Clinical activities include designing, implementing and evaluating evidence-based advanced nursing practice
interventions along with measurement of outcomes; promoting and facilitating change and innovation in practice; project management; and program evaluation. Clinical practice will include comprehensive interprofessional coordination of the acute and chronic health care needs for culturally diverse populations of adults from adolescence through elder adulthood with specific systems dysfunctions. Licensure, accreditation, certification; CNS job descriptions and performance appraisals; credentialing; negotiating; place within the organization; working with the boss; role orientation; credibility; over/under commitment; finding a mentor; legislative and legal issues; and practical advice/tips from current CNSs are highlighted in this course. Prerequisite: NRSG 907 or Consent of Instructor. LEC.

NRSG 911. Tools for Practice Doctorate Scholarship. 3 Hours.
Foundations and applications of tools and methods to develop advanced practice project proposals across diverse settings are explored. Scholarly evidence from a variety of sources is used to develop project proposals that enhance patient care, staff development, and organizational leadership. Relevant practice theories such as quality improvement and evaluation models serve as project proposal guides. Students acquire knowledge and skills to support professional development, to write advanced practice project proposals, and to advance doctoral scholarship. Prerequisite: NRSG 804, or consent of instructor. LEC.

NRSG 913. Business Strategies for Healthcare Leaders. 3 Hours.
The learner will develop advanced leadership skills focusing on business strategies in a variety of healthcare and industry settings in the private and public sector. Through application, analysis, synthesis and evaluation methods, using a variety of approaches to modern-day business challenges, the learner is positioned to gain a high-level, mind-raising attitude about how to think differently in addressing organizational and business problems, and supporting organizational success. Prerequisite: NRSG: 808, 820, 880, 881, 882 or 883, 885, 891 HPM 822, or Consent of Instructor. LEC.

NRSG 914. Primary Care I: Family Health. 3 Hours.
The first of two core specialty courses using a systems approach that emphasizes a multi-dimensional interprofessional approach to assessment, differential diagnosis and treatment formulation for the primary care needs of individuals and families across the lifespan. Common health conditions are explored in relation to health promotion, health maintenance, assessment, diagnosis, and management of common episodic, chronic, and complex conditions affecting health. Students will develop skills in critical thinking and the use of evidence-based practice guidelines in developing the rationale for diagnosing and managing primary care needs. In addition to cultural and spiritual diversity, students learn patient preferences in health care decision making with a focus on person centered care. Prerequisite: NRSG 801, NRSG 812, and NRSG 813. LEC.

NRSG 915. Primary Care II: Family Health. 3 Hours.
The second of two core specialty courses using a systems approach that emphasizes a multi-dimensional interprofessional approach to assessment, differential diagnosis and treatment formulation for the primary care needs of individuals and families across the lifespan. Common health conditions are explored in relation to health promotion, health maintenance, assessment, diagnosis, and management of common episodic, chronic, and complex conditions affecting health. Students will develop skills in critical thinking and the use of evidence-based practice guidelines in developing the rationale for diagnosing and managing primary care needs. In addition to cultural and spiritual diversity, students learn patient preferences in health care decision making with a focus on person centered care. Prerequisite: NRSG 914 or consent of instructor. LEC.

NRSG 916. Primary Care Practicum I: Family Nurse Practitioner. 2-4 Hours.
This is the first practicum course in a series of three practicum courses that prepares the student for entry into practice as a primary care provider. This course is designed to prepare the family nurse practitioner student as a provider of direct health care services. The patient population of the family provider includes individuals and families across the lifespan. Within this role, the family nurse practitioner student will synthesize theoretical, scientific, and contemporary clinical knowledge for the assessment and management of both health and illness states. Advanced practice competencies incorporate the health promotion, health protection, disease prevention, and management focus of the family nurse practitioner practice. Prerequisite: NRSG 915 or Consent of Instructor. LEC.

NRSG 917. Primary Care Practicum II: Family Nurse Practitioner. 4 Hours.
This is the second practicum course in a series of three practicum courses that prepares the student for entry into practice as a primary care provider. This course is designed to prepare the family nurse practitioner student as a provider of direct health care services. The patient population of the family provider includes individuals and families across the lifespan. Within this role, the family nurse practitioner student will synthesize theoretical, scientific, and contemporary clinical knowledge for the assessment and management of both health and illness states. Advanced practice competencies incorporate the health promotion, health protection, disease prevention, and management focus of the family nurse practitioner practice. Prerequisite: NRSG 916 or Consent of Instructor. LEC.

NRSG 918. Primary Care Practicum III: Family Nurse Practitioner. 2-4 Hours.
This is the final practicum course in a series of three practicum courses that prepares the student for entry into practice as a primary care provider. This course is designed to prepare the family nurse practitioner student as a provider of direct health care services. The patient population of the family provider includes individuals and families across the lifespan. Within this role, the family nurse practitioner student will synthesize theoretical, scientific, and contemporary clinical knowledge for the assessment and management of both health and illness states. Advanced practice competencies incorporate the health promotion, health protection, disease prevention, and management focus of the family nurse practitioner practice. Prerequisite: NRSG 917, or consent of instructor. LEC.

NRSG 919. Foundations for Leading and Communicating in Organizations. 3 Hours.
Theoretical foundations in organizational decision making and communication will enhance students’ development of expertise in assessing organizations, identifying systems issues, and facilitating organization- and system-wide improvements in healthcare. Traditional approaches to organizing and communicating are contrasted with emerging approaches that promote sensitivity to diverse organizational cultures and populations. Through examination of theoretical perspectives, the student will develop an ability to integrate the contributions of different points of view and ways of thinking crucial to accurately assess, design and lead high performing healthcare organizations in a dynamic world. Prerequisite: NRSG 829 or 833 or 856 or 886 (Practicum respective to specialty) and NRSG 941, or consent of instructor. LEC.

NRSG 920. Microsystems in Health Care Operations. 3 Hours.
Competencies necessary for studying clinical Microsystems and examining their influence on patient safety, satisfaction, and other clinical
outcomes are developed in this course. Microsystems will be determined, deconstructed, analyzed for best practice, and re-constituted for the purpose of improved organizational performance. The roots of quality improvement are traced and quality improvement application within a microsystem environment is explored. Key topics include: assessment tools and models, continuous quality improvement theory, evidence-based practice, performance improvement methods (measurement, statistics, problem identification and analysis, control charts) and the development of team-based problem solving and resolution. Students examine productivity and cost indicators, strategic and operational planning, healthcare finance, relationship-building, collaboration techniques, and leadership principles. Prerequisite: Completion of graduate program in organization leadership or nursing administration, or consent of instructor. LEC.

NRSG 921. Primary Care of Women Across the Lifespan. 2 Hours. The knowledge and skills necessary to promote health, prevent illness, and manage the primary care needs of women across the lifespan will be provided. Theory- and research-based therapeutic management of acute, episodic and chronic conditions that occur in women across the lifespan will be explored. Professional values including standards of practice, cultural, legal and ethical issues and professional roles will be addressed. The health care delivery system will be analyzed for cost effectiveness and sensitivity to women. Prerequisite: NRSG 801, NRSG 809, NRSG 812, NRSG 813, NRSG 841, or Consent of Instructor. LEC.

NRSG 922. Care of Women in the Antepartal Period. 3 Hours. Care during the antepartal period in healthy pregnant women is presented and analyzed. Strategies focusing on risk reduction and early identification of deviation from normal during pregnancy are examined. Biopsychosocial and cultural aspects of pregnancy within the family structure are presented. Concepts of research, ethics, legal and political issues, nutrition, genetics, pharmacotherapeutics, health promotion, and selected deviations from normal are included. Prerequisite: NRSG 801, NRSG 809, NRSG 812, NRSG 813, NRSG 921, or consent of instructor. LEC.

NRSG 923. Nurse Midwifery in the Postpartum and Newborn Period. 2 Hours. Synthesis of the nurse-midwifery philosophy for postpartum and newborn periods is conceptualized. Health maintenance for mothers and infants is explored. Research, ethics, legal and political issues, nutrition, pharmacotherapeutics, health promotion, and selected deviations from normal are included. The nurse-midwifery role in consultation, collaboration, and referral are addressed. Prerequisite: NRSG 922, or Consent of Instructor. Corequisite: NRSG 924. LEC.

NRSG 924. Nurse Midwifery in the Intrapartum Period. 3 Hours. Nurse-midwifery care of uncomplicated women in the intrapartum period is presented and analyzed. Intrapartum and immediate postpartum complications and emergency events are addressed. Concepts of research, ethics, legal and political issues, nutrition, pharmacotherapeutics, health promotion, and selected deviations from normal are included. Prerequisite: NRSG 922 or Consent of Instructor. Corequisite: NRSG 923. LEC.

NRSG 925. Care of Women in The Antepartal Period Practicum. 2 Hours. This clinical practicum focuses on competencies for management of pregnant women in various health care environments. Health promotion and risk reduction in pregnant women are emphasized. Management experiences in the advanced practice role include antepartal risk-assessment, consultation, collaboration, and referral when medically necessary. Prerequisite: NRSG 841, NRSG 922 or Consent of Instructor. Corequisite: NRSG 926 or Consent of Instructor. PRA.

NRSG 926. Primary Care of Women Across the Lifespan Practicum. 2 Hours. This practicum focuses on clinical competencies for the advanced practice nurse providing primary care and gynecologic management of women throughout the lifespan. Health promotion, complementary therapies, and evidence-based models of health care delivery are incorporated in the care of women. Clinical management experiences in the advanced practice role include but are not limited to: family planning, gynecologic health, and primary care for women from adolescence through menopause. Clinical experiences will include consultation, collaboration, and/or referral when medically necessary. Prerequisite: NRSG 841, NRSG 921 or Consent of Instructor. Corequisite: NRSG 925 or Consent of Instructor. PRA.

NRSG 927. Childbearing Family Practicum: Intrapartum, Postpartum, and Newborn. 3 Hours. Competencies for nurse-midwifery management according to national standards of practice for the care of healthy women during labor, birth, and postpartum are demonstrated; additionally, competencies for nurse-midwifery management according to national standards of practice for the care of newborns are demonstrated. The development of a skill base for intrapartum, postpartum, and newborn emergencies is addressed. Nurse-midwifery management practice provides experience in the role of care provider during normal labor, delivery, postpartum, and newborn periods. This care may include consultation, collaboration, and referral when medically necessary. Prerequisite: NRSG 923, NRSG 924. Completion of Intermediate or Advanced Fetal Heart Monitoring Course within past 3 years. Up-to-date Neonatal Resuscitation Program (NRP) certification. PRA.

NRSG 928. Nurse-Midwifery Integration Practicum. 4 Hours. The theoretical, clinical and role components of care as delivered by the advanced nurse-midwife student are implemented through an intensive supervised clinical practicum. Advanced professional clinical skills and evidence-based practice in the assessment, management and care of women and newborns are applied. Emphasis is on increased independence and decision-making embracing the function, scope and practice of nurse-midwifery practice. Prerequisite: NRSG 925, NRSG 926, NRSG 927 or Consent of Instructor. PRA.

NRSG 929. Psychotherapeutic Interventions I: Psychiatric Mental Health Nurse Practitioner. 3 Hours. Focus is placed on assessing vulnerabilities, social determinants and resilience as they relate to health promotion, disease prevention, symptom management, and behavior change. Mental health and common psychiatric disorders such as depression and anxiety throughout the life span are discussed. Evidence-based brief psychotherapeutic intervention frameworks including psychotherapy are applied to individuals, groups and families across the life span. Professional issues that commonly occur in implementing the advanced practice role in psychiatric and mental health care are emphasized. Prerequisite: NRSG 748, NRSG 754, NRSG 755, NRSG 801, NRSG 809, NRSG 812, NRSG 813, NRSG 844, NRSG 850, or Consent of Instructor. Prerequisite/Corequisite: NRSG 851. LEC.

NRSG 930. Psychotherapeutic Interventions II: Psychiatric Mental Health Nurse Practitioner. 3 Hours. This theory course focuses on recovery-oriented, person-centered approaches for individuals, families, and populations with complex and persistent alterations in mental health functioning. Factors that affect mental health functioning will be explored with a focus on interventions that facilitate recovery including psychopharmacology. In addition, policies and socioeconomic factors that influence the delivery of mental health services will be analyzed. Emphasis is placed on identifying the unique
role of the psychiatric mental health nurse practitioner (PMHNP) within an integrated, client-centered delivery system. Prerequisite: NRSG 929 or consent of instructor. LEC.

NRSG 931. Psychotherapeutics Practicum I: Psychiatric Mental Health Nurse Practitioner. 2 Hours.
This course is the first of three practicum courses. The focus of this clinical course is to apply theories and evidence-based findings in a clinical setting serving culturally diverse individuals, groups, and families. Students will have opportunities to conduct comprehensive psychiatric assessments, formulate diagnoses, and conduct therapy in conjunction with an interdisciplinary team. Prerequisite: NRSG 930, or Consent of Instructor. PRA.

NRSG 932. Psychotherapeutics Practicum II: Psychiatric Mental Health Nurse Practitioner. 4 Hours.
In this second of three practicum courses, students will apply recovery oriented, evidence-based frameworks such as biobehavioral, pharmacologic and psychoeducational to individuals and groups across the lifespan with complex alterations in functioning. The psychiatric mental health nurse practitioner in collaboration with interdisciplinary team members and families coordinates person-centered culturally sensitive care. Ethical principles and legal issues are identified and integrated into care. Prerequisite: NRSG 931 or Consent of Instructor. PRA.

NRSG 933. Psychotherapeutics Practicum III: Psychiatric Mental Health Nurse Practitioner. 3-4 Hours.
In this third of three clinical practicum courses, students will demonstrate integration of knowledge from previous courses in implementing the psychiatric mental health nurse practitioner role. This includes using diagnostic reasoning, evidence-based therapy, biobehavioral, and psychoeducational interventions with culturally diverse clients from different age groups. Students will implement care within interdisciplinary teams using consultation and referral as needed to deliver person-centered culturally sensitive care. Students will work with age groups needed to meet the role of psychiatric nurse practitioner across the lifespan. Prerequisite: NRSG 932, or Consent of Instructor. PRA.

NRSG 934. Foundations of Data Science. 3 Hours.
The course is designed to provide students with foundational knowledge about data science and big data. Students will learn the skills to participate on and lead interprofessional teams analyzing health and other related data to build knowledge and apply findings to practice. Topics to be examined will include diverse types and sources of data, data management techniques, exploratory data analysis approaches, and data visualization. Prerequisite: Admission to the SON PhD program, Graduate level research course (NSRG 754 or equivalent), or Consent of Instructor. LEC.

NRSG 935. Professionalism and Scholarship Workshop. 2 Hours.
Building a foundation for advanced study is explored in the context of professionalism and scholarship. Strategies for promoting professional development while preparing for future roles as nurse scholars and nurse scientists are examined. Students are introduced to a model of scholarship that includes discovery, integration, application, and teaching. Issues associated with scientific integrity in academics, research and services are identified and examined. Students are introduced to methods for conducting and synthesizing literature that is essential to the doctoral level student. Prerequisite: Admission to the Doctoral Program or Consent of Instructor. LEC.

NRSG 936. Philosophy of Nursing Science. 2 Hours.
This course examines the origins and development of western philosophy and science. Students will explore nursing knowledge from diverse philosophical perspectives as well as the natural and human sciences. Different conceptions of broad topics such as knowledge, personhood, the body, and technology will be examined for the investigation of nursing phenomena. Prerequisite: Admission to the PhD program, graduate level nursing theory course, or Consent of Instructor. LEC.

NRSG 937. Innovative Theories and Models for Nursing Science. 3 Hours.
This course explores innovative models and theories to guide nursing science. Historical foundations of theory are traced to current trends and future possibilities in theory development, application, and evaluation. Strategies for using existing theoretical knowledge for nursing science and to foster new knowledge are also examined. Prerequisite: NRSG 936 or Consent of Instructor. LEC.

NRSG 938. Informatics and Technology Applications. 2 Hours.
The field of nursing informatics and the role of the nurse to support research and evidence-based practice inquiry in a variety of organizational settings is introduced. The current state of the science in naming nursing phenomena and how these phenomena are represented in information systems is explored. The use of technology as an adjunct to doctoral-level inquiry and how it supports clinical and professional decision-making is explained and demonstrated. Prerequisite: Corequisite: NRSG 935, or consent of instructor. LEC.

NRSG 939. Precision Health. 3 Hours.
This course focuses on precision health as an emerging approach for health promotion, disease prevention and treatment that considers individual variability in genes, environment, and lifestyle (also known as the determinants of health). Students will learn to more accurately predict prevention and treatment strategies for various populations. This course will assist students in understanding the National Institute of Nursing Research (NINR) pathway to precision science that focuses on personalized strategies to prevent and manage symptoms across diverse populations and settings. Students will also learn about the vision reflected in the Precision Medicine Initiative to accelerate discoveries that can provide nurse scientists with new tools, knowledge, and therapies for individuals and populations. Prerequisite: Admission to Doctoral Program or consent of instructor. LEC.

NRSG 940. Knowledge and Theory Development in Nursing Science. 3 Hours.
The philosophical, ethical, socio-cultural, economic, and political forces that shaped the historical course of nursing science are examined. Philosophical and scientific foundations of knowledge development in nursing science are explored. Conceptual and grand theoretical development and analysis strategies are practiced. Integration of theory, research, and practice knowledge development in nursing science is emphasized. Prerequisite: NRSG 938, or consent of instructor. LEC.

NRSG 941. Preparing for Doctoral Leadership. 3 Hours.
Skills in leading, managing, and following as the doctoral graduate assumes critical roles within academia, the healthcare system, or other business entities are developed and strengthened. Through developmental exercises, theoretical and practical explorations of organizational structures and settings, and career trajectory planning, the student is poised to optimize the doctoral experience to influence social change. Prerequisite: Admission to a School of Nursing Doctoral Program or consent of instructor. LEC.

NRSG 942. Theory Application in Nursing Science. 3 Hours.
The development of middle-range theoretical structures and processes in nursing science is examined. Historical foundations of middle-range theory are traced to current trends and future possibilities in theory development, application, testing, and evaluation. Examples from nursing science and related health and social sciences are used to illustrate middle-range theory development, application, testing, and evaluation. Strategies for using existing theoretical knowledge to guide practice in
diverse settings and to foster ongoing development of new knowledge are explored. Prerequisite: NRSG 940, or consent of instructor. LEC.

NRSG 943. Methods for Quantitative Research. 3 Hours.
Quantitative research methods are studied as they relate to investigation of phenomena in nursing and health care. Focus is on understanding the issues involved in generating research questions and hypotheses, designing and implementing studies to answer specific questions or test hypotheses, the logic and application of statistical inference, and the strengths and weaknesses of different approaches to quantitative methods. Prerequisite: NRSG 945, BIOS 730, BIOS 740 or equivalent, or Consent of Instructor. LEC.

NRSG 944. Quantitative Research Application. 2 Hours.
This practicum provides a research application experience in quantitative methods and seminar discussions of quantitative research issues such as scientific integrity, research implementation and management, and interpretations of statistical analyses. Students identify a research problem/question/hypothesis that may be analyzed using existing data, plan and execute appropriate analyses to answer the question or test the hypothesis, and write a formal report including a description of what was done, why it was done, and an interpretation of the findings. Prerequisite: NRSG 943 or consent of instructor. SEM.

NRSG 945. Synthesis Workshop I. 1 Hour.
Leadership development and technologic applications are integrated with theoretical, statistical, and research methods. Doctoral leadership skills are refined and tested through case study simulations of theory and research applications in diverse practice settings. A qualifying examination concludes the Workshop consisting of a written and oral case study simulation. Prerequisite: BIOS 730 and BIOS 740 or equivalent, NRSG 941, NRSG 942, NRSG 946, or Consent of Instructor. Prerequisite/Corequisite: NRSG 877. LEC.

NRSG 946. Measurement Principles and Practice. 3 Hours.
Classical measurement theory and related measurement concepts are the focus of this course. Various approaches to instrumentation are examined. Students use existing data to evaluate selected measures, with emphasis on reliability and validity. They also critically analyze published reports of instrumentation for research. Basic knowledge of concept analysis is expected prior to enrollment. Prerequisite: NRSG 940, or consent of instructor. LEC.

NRSG 947. Qualitative Research Application. 3 Hours.
Students conduct fieldwork to implement a qualitative research proposal. Emphasis is placed on advanced application of various qualitative methods. Extended experience in qualitative data collection and analysis is provided. Prerequisite: NRSG 802, NRSG 945, or Consent of Instructor. LEC.

NRSG 948. Advancing Organizational and Clinical Quality. 2 Hours.
The roles of nursing leaders in the design, measurement, and evaluation of the discipline within a variety of organizational settings are analyzed. The nuances of measurement and statistics are compared and related to the quality science paradigm, applying incremental measurement techniques to foster continuous improvement. Process design, standards development and adaptation, regulatory requirements, and consumer expectations for quality are integrated into a quality plan that aligns with the student's career trajectory. Prerequisite: NRSG 804 or either [NRSG 944 or NRSG 947], or Consent of Instructor. LEC.

NRSG 949. Synthesis Workshop II. 1 Hour.
Content from the full range of doctoral courses including theory, research, statistics and professional development is integrated and synthesized. Strategies for using these content areas to meet program objectives and students' professional objectives are explored. A qualifying examination, consisting of a written and oral case study simulation, concludes the Workshop. Prerequisites: Completion of all doctoral course work. Prerequisite: Corequisite: NRSG 948, NRSG 970. LEC.

NRSG 950. Symptom Science in Nursing. 3 Hours.
In this course, students will determine personalized strategies to identify, prevent, and treat the adverse symptoms of acute and chronic illness across diverse populations and settings. Biological and behavioral dynamics of symptoms (e.g., dyspnea, fatigue, impaired sleep/insomnia, pain, depression) that can change the trajectory of chronic illnesses, and how the dynamics can be optimized and maintained to prevent symptom relapse, will be discussed. Various innovative care delivery models (e.g. interdisciplinary, family-based), research methods (e.g. community engaged research, pragmatic trials) and technologies (e.g. eHealth) will be reviewed that can be used to improve symptom management and change the chronic illness trajectory especially among individuals who experience disparate health outcomes. Prerequisite: Admission to Doctoral Program or consent of instructor. LEC.

NRSG 951. Biomarkers. 3 Hours.
This course builds a foundation for doctoral students to understand how biomarkers can be used as targets for therapeutic and clinical interventions. Students will describe potential biomarkers for measures of normal biological processes, pathogenic processes, or pharmacologic responses. Biological elements ("biomarkers") associated with symptoms and symptom experiences across populations and conditions will be explored. Students are introduced to direct and indirect biomarkers and the various methods for sampling. Issues associated with sensitivity and specificity of particular biomarkers are examined. Prerequisite: Admission to Doctoral Program or consent of instructor. LEC.

NRSG 952. Qualitative Research Methods and Application. 4 Hours.
Qualitative methodologies, such as ethnography, phenomenology/ hermeneutics, grounded theory, and their epistemological origins are explored. Emphasis is placed on the appropriateness of each approach in diverse settings. Students are guided in formulating qualitative research questions and developing component parts of a qualitative research proposal. Students complete simulated qualitative research activities to gain experience in data collection and analysis. Prerequisite: NRSG 754 Health Care Research, or admission to the doctoral program. LEC.

NRSG 953. Quantitative Research Methods and Application. 4 Hours.
The course is designed to provide students with knowledge and research application experience in quantitative research methods. Students will learn how research questions lead to different study designs, data collection procedures, and analyses in nursing and health care. The course focuses on content on methodological techniques and issues involved in generating research questions and hypotheses, designing and implementing quantitative studies, and analyzing and interpreting results. The course includes a quantitative research application experience provided through the exercise in planning, conducting, and interpreting analyses with existing data. Prerequisite: NRSG 946 Measurement Principles and Practice, NRSG 934 Foundations of Data Science, BIOS 730 Applied Linear Regression, or consent of instructor. LEC.

NRSG 957. Health Informatics, Human Factors, and Ergonomics as Applied to Patient Safety. 3 Hours.
Includes 2 credit hour lecture and 1 credit hour practicum. The use of information systems including medical devices is paramount in achieving patient safety. Students will attain an inclusive understanding of how human factors and ergonomic principles can be used to improve patient safety in the design, implementation, and evaluation of information systems and medical devices. Additionally, health care professionals will acquire skills to appropriately apply error reduction strategies developed
The synthesis experience culminates in a written synthesis paper in the minor area of study. Typically, the minor coursework and the minor synthesis paper contribute directly to the student's dissertation. Prerequisite: Completion of Minor Coursework (at least 10 credit hours) and NRSG 945, or consent of instructor. LEC.

NRSG 958. Knowledge Representation and Interoperability. 3 Hours. Includes 2 credit hour lecture and 1 credit hour practicum. The need to exchange clinical information consistently between health care providers, care settings, researchers and other requires syntactic and semantic interoperability. Requirements and approaches to meet interoperability will be explored. Standards for messaging, terminology, and knowledge representation will be investigated. Prerequisite: Admission to a doctoral program in nursing, NRSG 853 or consent of instructor. LEC.

NRSG 959. Research Experience. 2 Hours. This practicum is an intensive research experience with a specific faculty mentor. It involves working on part of the faculty mentor's current research or on a subject closely related to the mentor's work. The student submits a proposal for this research experience to the faculty mentor. Once the project is complete, the student presents the research orally in a structured forum and, if appropriate, develops a publishable manuscript. Prerequisite: Consent of instructor. FLD.

NRSG 963. Advanced Leadership Residency. 1-9 Hours. The advanced leadership residency is designed to expand the DNP student's breadth and depth of leadership knowledge and skills in an area of practice at the aggregate/systems/organization level. Students will have the opportunity to enhance their existing advanced leadership skills in one or more of the following areas: organizational and systems leadership for enhancing healthcare outcomes; quality improvement strategies to support decision-making; prediction and evaluation of practice outcomes; patient safety initiatives; health care policy; creating and sustaining change at organizational and policy levels; or ethics related to healthcare systems; information technology; knowledge management; or population health. Prerequisite: Corequisite: NRSG 919 and NRSG 941, or consent of instructor. PRA.

NRSG 964. Advanced Clinical Residency. 1-9 Hours. The advanced clinical residency is designed to expand the DNP student's breadth and/or depth of clinical knowledge and skills in an area of practice. The focus can be either on the delivery of sub-specialty care services or full spectrum primary care services. Students will have the opportunity to enhance their existing advanced practice skills in one or more of the following areas: the diagnosis and management of ambulatory patients with complex diagnoses and comorbid conditions in the context of family, community and culture; the diagnosis and management of patients with complex diagnoses and/or comorbid conditions who present with acute changes in health status requiring interventions available only in an acute care setting; and the diagnosis and management of patients who are unable to function independently due to age related alteration in mental and physical status, developmental, perceptual and physical disability and chronic, degenerative illness. Students will synthesize clinical knowledge and use evidence-based decision making to construct symptom-based assessments, advanced differential diagnoses, independent therapeutic interventions, and outcome evaluation of the care of clients. Prerequisites: Corequisite: Post-BSN students: NRSG 918, or NRSG 908, or NRSG 905, or NRSG 933, or NRSG 928, or consent of instructor. Post-Master's students: A minimum of 1000 clinical hours in your current or previous work following graduation from an accredited Master's in Nursing program; National certification in your area of expertise (e.g. family, adult, psych, pediatric, CNM, etc.) CLN.

NRSG 970. Synthesis of Minor Area of Study. 1-2 Hours. This course provides an opportunity for the PhD student to synthesize work in their selected minor. After completion of minor coursework, students will focus on synthesizing content across these minor courses. The synthesis experience culminates in a written synthesis paper in the minor area to assure the student's competency in the minor area of study. Typically, the minor coursework and the minor synthesis paper contribute directly to the student's dissertation. Prerequisite: Completion of Minor Coursework (at least 10 credit hours) and NRSG 945, or consent of instructor. LEC.

NRSG 971. Special Considerations for the Acute Care Nurse Practitioner. 1 Hour. This course will focus on the preparation and scope of practice of the adult-gerontology acute care nurse practitioner. Concepts of the advanced practice role, primary vs. acute care, transitions of care, and age-related considerations of the adult-gerontology patient will be reviewed. Prerequisite: Consent of Instructor. LEC.

NRSG 972. Advanced Pharmacology for the Acute Care Setting. 2 Hours. This course for acute care settings is complementary to any advanced pharmacology course for advanced practice nursing. The clinical application of specific categories of drugs commonly encountered in acute care settings is discussed. First line versus second line drugs, alternate drugs, drug interactions, adjusting drug dosages, patient education and compliance issues related to drug therapy are addressed. The nurse's role and responsibility related to data collection, problem identification, and consultation with the physician is explored. Application is made through age appropriate studies. Prerequisite: NRSG 801, NRSG 812, NRSG 813 or Consent of Instructor. LEC.

NRSG 973. Acute Care I: Adult-Gero NP. 3 Hours. The first of two core specialty courses using a systems approach that emphasizes a multi-dimensional and interprofessional approach to assessment, differential diagnosis, and treatment formulation for the care needs of the chronically, acutely, or critically ill or those who are experiencing an acute exacerbation of a chronic health problem. Students will develop skills in critical thinking and the use of evidence-based practice guidelines in developing the rationale for diagnosing and managing care needs across the acute, critical, and complex care continuum in order to return the individual to their optimal level of health. Prerequisite: NRSG 971, NRSG 972, or Consent of Instructor. LEC.

NRSG 974. Acute Care II: Adult-Gero NP. 3 Hours. The second of two core specialty courses using a systems approach that emphasizes a multi-dimensional and interprofessional approach to assessment, differential diagnosis, and treatment formulation for the care needs of the chronically, acutely, or critically ill or those who are experiencing an acute exacerbation of a chronic health problem. Students will develop skills in critical thinking and the use of evidence-based practice guidelines in developing the rationale for diagnosing and managing care needs across the acute, critical, and complex care continuum in order to return the individual to their optimal level of health. Prerequisite: NRSG 973 or Consent of Instructor. LEC.

NRSG 975. Acute Care Practicum I: Adult-Gero NP. 4 Hours. This is the first practicum course in a series of three practicum courses that prepares the student for entry into practice as an acute care provider. This course is designed to prepare the adult-gerontology acute care nurse practitioner as a provider of direct health care services. The patient populations of the adult-gerontology provider includes young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old, and old-old adults). Within this role, the adult-gerontology acute care nurse practitioner will synthesize theoretical, scientific, and contemporary clinical knowledge for the assessment and management of both health and illness states, including care needs of the chronically, acutely, or critically ill or those who are experiencing an acute exacerbation of a chronic health problem. The competencies of this course incorporate health promotion, disease prevention, and
management focus of the adult-gerontology acute care nurse practitioner practice. Students will develop skills in critical thinking and the use of evidence-based practice guidelines in developing the rationale for diagnosing and managing care needs across the acute, critical, and complex care continuum in order to return the individual to their optimal level of health. Prerequisite: Pre or Co-Req: NRSG 973 or Consent of Instructor. PRA.

NRSG 976. Acute Care Practicum II: Adult-Gero NP. 2-4 Hours. This is the second practicum course in a series of three practicum courses that prepares the student for entry into practice as an acute care provider. This course is designed to prepare the adult-gerontology acute care nurse practitioner as a provider of direct health care services. The patient populations of the adult-gerontology provider includes young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old, and old-old adults). Within this role, the adult-gerontology acute care nurse practitioner will synthesize theoretical, scientific, and contemporary clinical knowledge for the assessment and management of both health and illness states, including care needs of the chronically, acutely, or critically ill or those who are experiencing an acute exacerbation of a chronic health problem. The competencies of this course incorporate health promotion, disease prevention, and management focus of the adult-gerontology acute care nurse practitioner practice. Students will develop skills in critical thinking and the use of evidence-based practice guidelines in developing the rationale for diagnosing and managing care needs across the acute, critical, and complex care continuum in order to return the individual to their optimal level of health. Prerequisite: NRSG 975 Acute Care Practicum I: Adult-Gero NP or Consent of Instructor. Co-Req: NRSG 974 Acute Care II: Adult-Gero NP. PRA.

NRSG 977. Acute Care Practicum III: Adult-Gero NP. 2-4 Hours. This is the final practicum course in a series of three practicum courses that prepares the student for entry into practice as an acute care provider. This course is designed to prepare the adult-gerontology acute care nurse practitioner as a provider of direct health care services. The patient populations of the adult-gerontology provider includes young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old, and old-old adults). Within this role, the adult-gerontology acute care nurse practitioner will synthesize theoretical, scientific, and contemporary clinical knowledge for the assessment and management of both health and illness states, including care needs of the chronically, acutely, or critically ill or those who are experiencing an acute exacerbation of a chronic health problem. The competencies of this course incorporate health promotion, disease prevention, and management focus of the adult-gerontology acute care nurse practitioner practice. Students will develop skills in critical thinking and the use of evidence-based practice guidelines in developing the rationale for diagnosing and managing care needs across the acute, critical, and complex care continuum in order to return the individual to their optimal level of health. Prerequisite: NRSG 976 Acute Care Practicum II: Adult-Gero NP or Consent of Instructor. PRA.

NRSG 980. Doctor of Nursing Practice Project. 1-6 Hours. The Doctor of Nursing Practice (DNP) project is an amalgamation of the student's field of inquiry in his/her doctoral course of study. As such, the DNP project requires that a practice-focused problem be identified and examined in depth. For most students the DNP project will include application of an evidence-based intervention suitable to their area of focus (e.g. organizational leadership, clinical practice, education, etc.) that involves the appropriate metric (or sets of metrics) evaluation, and dissemination of the project findings to a targeted audience. The DNP project must meet DNP Project guidelines for the DNP program. Prerequisite: NRSG 911 and completion of 2 doctoral level specialty courses, or consent of instructor. FLD.

NRSG 990. Doctoral Research. 1-12 Hours. Original and independent investigation approved by and conducted under the supervision of the student's adviser or advisory committee and in partial fulfillment of the requirements for the Ph.D. degree. Prerequisite: Consent of Advisor. RSH.

NRSG 997. Independent Study. 1-4 Hours. Having chosen an appropriate mentor, the student selects an area of advanced study. Specific objectives and credit hours are jointly determined by the student and selected faculty member. Prerequisite: Prior graduate course work in the area of study and consent of instructor. IND.

NRSG 999. Dissertation. 1-12 Hours. Preparation of the dissertation based upon original research and in partial fulfillment of the requirements for the Ph.D. degree. Credit is given only after the dissertation proposal has been accepted by the student’s dissertation committee. Prerequisite: Consent of Instructor. THE.

Nursing Courses

NURS 320. Pathophysiology for the Practicing Nurse. 3 Hours. This course is designed to provide students with a basic understanding of pathophysiological changes that occur within the internal environment of the individual. Understanding these alterations is basic to providing quality nursing care. System variations across the lifespan are addressed. Prerequisites: Admission to the School of Nursing and RN to BSN program or consent of instructor. LEC.

NURS 326. Pharmacology for the Practicing Nurse. 3 Hours. Pharmacodynamics and pharmacokinetics of drug therapy are discussed in order to provide a basic understanding of the client's reaction to a drug, both therapeutically and adversely, and to predict potential drug interactions. Internal and external environmental factors affecting drug therapy are assessed in order to provide a comprehensive database for therapeutic nursing interventions. Specific prototypes of selected drug classifications provide the framework for understanding the action, use, side effects and nursing implications of drugs. The nurse's role in drug administration, assessment of drug effects, and client system education are emphasized. Legal and ethical responsibilities for administering drugs are considered. Prerequisite: Admission to the School of Nursing or consent of instructor. LEC.

NURS 327. Communicating and Managing Healthcare Information. 3 Hours. Basic theories of interpersonal communication and information technologies are explored. Use of these skills and technologies to develop therapeutic relationships with patients and the interdisciplinary healthcare team is emphasized. Legal and ethical issues related to health information technology and health information exchanges will be examined. Prerequisite: Admission to the School of Nursing or consent of instructor. Corequisite: NURS 331, NURS 328, NURS 329, NURS 330, NURS 332, NURS 333 or consent of instructor. LEC.

NURS 328. Professional Development I: Introduction to the Profession. 2 Hours. Students are introduced to the evolution of the profession of nursing. Concepts of caring, professional identity and scholarship are examined. Students will have opportunities to investigate personal and professional boundaries, examine their own beliefs and values, and explore the value of scholarship on nursing practice. Students will examine how their lived experience will impact their professional practice. Prerequisite: Admission to the School of Nursing or consent of instructor. Corequisite: NURS 327,
NURS 331, NURS 329, NURS 330, NURS 332, NURS 333 or consent of instructor. LEC.

NURS 329. Alterations in Physiological Functioning I. 2 Hours.
Basic mechanisms underlying illness and disease are stressed as a basis for the understanding of health promotion and disease prevention in this first of two sequential courses. Pathophysiological changes that occur within the environments of individuals in the presence of dysfunction or disease of selected systems are presented as a rationale for nursing diagnoses and therapeutic interventions. System variations across the life span (fetuses, children, pregnant women, adults, and older adults) are addressed. Prerequisite: Admission to the School of Nursing or consent of instructor. Corequisite: NURS 327, NURS 331, NURS 332, NURS 330, NURS 333 or consent of instructor. LEC.

NURS 330. Pharmacology I. 2 Hours.
Pharmacodynamics and pharmacokinetics of drug therapy across the lifespan are discussed in order to provide a basic understanding of the patient's reaction to a drug both therapeutically and adversely, and to predict potential drug interactions. Personal, genetic, and environmental factors affecting drug therapy are assessed in order to provide a comprehensive data base for therapeutic nursing interventions. Specific prototypes of selected drug classifications provide the framework for understanding the action, use, adverse effects and nursing implications of drugs. The nurse's role in drug administration, assessment of drug effects, and patient education are emphasized. Legal and ethical responsibilities for administering drugs are considered. Prerequisite: Admission to the School of Nursing or consent of instructor. Corequisite: NURS 327, NURS 331, NURS 332, NURS 329, NURS 330, NURS 333, or consent of instructor. LEC.

NURS 331. Basic Assessment and Therapeutic Interventions. 3 Hours.
Skills necessary to perform basic patient assessment and therapeutic interventions are discussed and demonstrated. Opportunities are provided in a laboratory setting for students to demonstrate cognitive and psychomotor competencies of therapeutic interventions and assessment of the individual patient across the life span. The emphasis is on interviewing techniques, physical examination, and psychomotor skills. Developmental factors and risk factors, including genetic and environmental, that affect the patient's health will be explored. Case studies and simulation are used to apply the concepts of safe quality care. Prerequisite: Admission to the School of Nursing or consent of instructor. Corequisite: NURS 327, NURS 331, NURS 332, NURS 329, NURS 330, NURS 333 or consent of instructor. LEC.

NURS 332. Health and Illness: Foundations of Nursing. 3 Hours.
Concepts basic to the art and science of nursing are introduced as a foundation for safe, quality patient care. Emphasis is placed on the patient and/or designee as the source of control and full partner in providing compassionate and coordinated care. Tools of communication and technology are utilized in the delivery and documentation of care. The role of the nurse within the interdisciplinary team is demonstrated. Prerequisite: NURS 331, or consent of instructor. Corequisite: NURS 327, NURS 329, NURS 330, NURS 332, NURS 333, or consent of instructor. LEC.

NURS 334. Professional Development II: Image, Roles, and Ethics. 3 Hours.
Ethical principles are applied to care of persons in diverse settings. Team building and group process skills are explored to facilitate students working within teams. The role of the nurse as a member of the interprofessional team is examined using concepts of ethics, advocacy, group process, and team building. The professional responsibilities and role of the advocate will be explored. Prerequisite: NURS 327, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, or consent of instructor. Corequisite: NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor. LEC.

NURS 335. Quality Improvement. 2 Hours.
Continuous quality improvement is introduced as a foundation for quality care and patient safety. Data to monitor the processes and outcomes of care are discussed. Methods to design and test changes to continuously improve the quality and safety of healthcare systems are explored. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, or consent of instructor. Corequisite: NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor. LEC.

NURS 336. Alterations in Physiological Functioning II. 3 Hours.
Building on NURS 321, this course expands knowledge of pathophysiological changes that occur within the environments of the individual in the presence of dysfunction or disease. The most common alterations in selected physiological systems are presented as a framework for clinical reasoning. Relevant risk factors, epidemiology, pathophysiologic mechanisms, and clinical manifestations across the life span (fetuses, children, pregnant women, adults, and older adults) are discussed. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, or consent of instructor. Corequisite: NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor. LEC.

NURS 337. Pharmacology II. 2 Hours.
In this second sequential course, students continue their study of pharmacology across the lifespan. Specific prototypes of selected drug classifications provide the framework for understanding the action, use, adverse effects and nursing implications of drugs. The nurse's role in drug administration, assessment of drugs' effects, and patient education are emphasized. Legal and ethical responsibilities for administering drugs are considered. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, or consent of instructor. Corequisite: NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, or consent of instructor. LEC.

NURS 338. Health and Illness: Nursing Across the Lifespan. 3 Hours.
A greater sophistication of clinical reasoning is developed to achieve safe and quality outcomes using multiple ways of knowing including nursing knowledge. Emphasis is placed on managing the care of patients experiencing acute and chronic illnesses and promoting health across the lifespan. Strategies to empower and engage patients/designees in all aspects of the health care process are examined. Evidence-based therapeutic nursing interventions that meet a patient's holistic health needs will be expanded. Perspectives of other health care members will be recognized in order to collaborate and work effectively as a team to provide interdisciplinary care. Technology and communication skills are integrated as methods to support safe processes of care. Prerequisite:
NURS 331, NURS 332, NURS 333, NURS 327, NURS 328, NURS 329, NURS 330, or consent of instructor. Corequisite: NURS 334, NURS 335, NURS 336, NURS 337, NURS 339, or consent of instructor. LEC.

NURS 339. Health and Illness: Nursing Across the Lifespan Practicum. 3 Hours.
Students engage patients in active partnerships to manage acute and chronic illness and promote health across the lifespan. Multiple sources of evidence are incorporated into the planning, implementation and evaluation of nursing care including nurse sensitive quality indicators. Coordination, integration and continuity of care for multiple patients will be applied in the healthcare microenvironment. Emphasis is placed on interdisciplinary collaboration to ensure safe and quality outcomes. Technology and information management tools are utilized to support safe processes of care. Prerequisite: NURS 331, NURS 332, NURS 333, NURS 327, NURS 328, NURS 329, NURS 330, or consent of instructor. Corequisite: NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, or consent of instructor. LEC.

NURS 345. Nursing of Children: Practicum. 2 Hours.
Evidenced based clinical reasoning is applied in the care of children with acute and chronic illness to ensure safe and quality outcomes. Emphasis is placed on the patient and/or designee as the source of control and full partner in providing compassionate and coordinated care. Tools of communication and technology are utilized in the delivery and documentation of care. The role of the nurse within the interdisciplinary team is demonstrated. Prerequisite: NURS 333, NURS 339, or consent of instructor. CLN.

NURS 346. Nursing of Adults: Practicum. 2 Hours.
Evidenced based clinical reasoning is applied in the care of adults with acute and chronic illness to ensure safe and quality outcomes. Emphasis is placed on the patient and/or designee as the source of control and full partner in providing compassionate and coordinated care. Tools of communication and technology are utilized in the delivery and documentation of care. The role of the nurse within the interdisciplinary team is demonstrated. Prerequisite: NURS 333, NURS 339, or consent of instructor. CLN.

NURS 352. Client Assessment for the Practicing Nurse. 3 Hours.
Opportunities are provided, in a laboratory setting and with simulations, to demonstrate competencies in assessment of the individual client system across the life span. Historical data collection and psychological and physical assessment are reviewed. Interviewing techniques and the four basic methods of physical examination (inspection, percussion, palpation, and auscultation) are presented. Critical thinking is emphasized to cluster data to select and support nursing diagnoses. Prerequisite: Admission to the School of Nursing and RN licensure, or consent of instructor. LEC.

NURS 356. Using Technology and Informatics to Improve Patient Safety. 3 Hours.
Beginning theory and practical applications of various uses and results of computer technologies, including electronic health records, are explored in order to provide the basic skills and current infrastructure for information management in healthcare delivery. These concepts and skills are essential for curriculum related activities, as well as for providing therapeutic nursing interventions and communications with faculty, client systems, and other healthcare participants. Built-in safeguards, and legal and ethical issues related to electronic communications and health records are emphasized using 21st century tools of communication and collaboration. Knowledge and skills presented in this course will be expanded in future nursing courses related to the baccalaureate completion program. Prerequisite: Admission to the School of Nursing or consent of instructor. Satisfactory completion of a statistics course. LEC.

NURS 357. Introduction to the Baccalaureate Nurse Role. 3 Hours.
Contemporary issues confronting the nursing profession are discussed. Personal accountability, professional boundaries, and group process skills are explored to facilitate students working within interprofessional health care teams. Students will examine their own beliefs and values, establish personal and professional boundaries, and develop their personal philosophy of nursing. Students will explore how their lived experience will impact their professional practice. Prerequisite: Admission to the School of Nursing or consent of instructor. LEC.

NURS 382. Honors Seminar. 1 Hour.
This seminar provides the Honors nursing student the opportunity to explore topics of interest and begin reviewing the current research literature on a given topic. Emphasis is placed on interaction with active nurse researchers to enable the student to identify available research opportunities in ongoing studies. Students are introduced to the application of various methods used to address nursing questions. Prerequisite: Admission to the Nursing Honors Program. LEC.

NURS 401. Basic Spanish for Nurses. 2 Hours.
This is an entry level Medical Spanish course for students with minimal or no Spanish language education. Students will develop working language skills, learning techniques for optimal communication, phonetics, morphology, grammar, understanding sentence structure, conjugation and cultural aspects applicable to the current health care environment. The goal is to achieve proficiency and confidence when using the Spanish language with Hispanic patients. Prerequisite: None or Consent of Instructor. LEC.

NURS 402. Health Care of the Older Adult. 2-3 Hours.
Students will explore concepts and theories to increase their knowledge base of the complex challenges that face older adults and their families. Emphasis will be on promotion, maintenance and restoration of health and wellness, and the prevention of disease. Internal and external environmental factors will be assessed including biophysical, psychological, behavioral, sociocultural, economic and political. Students will utilize case examples and discussion to practice integrating communication and clinical skills into the role of the nurse as a client advocate and professional health team member. A clinical experience option for one-credit hour is offered for students to provide direct care to older adults in a variety of settings. Prerequisite: NURS 360, NURS 420, NURS 434 or consent of instructor. LEC.

NURS 411. Population-Based Nursing. 3 Hours.
Concepts and theories related to providing health care to complex systems and aggregates in the community, state, nation and world are explored. Emphasis is placed on the promotion, maintenance and restoration of health and wellness, and the prevention of disease. Environmental components including historical, political, social, cultural, and economic factors are presented. The role of the health care provider in identifying, prioritizing and meeting the health and life participation needs of populations is discussed. Prerequisite: Admission to the School of Nursing. LEC.

NURS 412. Nursing in Healthcare Microsystems. 3 Hours.
Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in micro-environments of health care delivery. The microsystem is the structural unit responsible for delivering care to specific patient populations or the frontline places where patients, families, and care teams meet. This environment is where the nurse participates in a broad mixture of direct and indirect care patient care delivery. Findings of current research related to nursing leadership are discussed. Professional, organizational, historical, and social factors that affect health care delivery within a clinical micro system are considered.
NURS 413. Teamwork and Collaboration in Healthcare. 3 Hours.
Ethical principles of patient care are applied. Team building and group process skills are explored to facilitate working within the interprofessional healthcare team. The role of the nurse as a member of the healthcare team is examined using concepts and theories of communication, group process, team building, and advocacy. Skills to continue professional growth and support excellence in nursing practice are investigated. Prerequisite: Admission to the School of Nursing or consent of instructor. LEC.

NURS 414. Organizational Influences on Nursing Practice. 3 Hours.
The impact that nursing departments and organizational decision making has on the achievement of quality patient outcomes will be explored. Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in the meso-environment of health care delivery. The role of the nurse as leader in achieving organizational goals addressing socio-cultural, economic, legal, and political environmental factors is examined. Prerequisite: Admission to the School of Nursing or consent of instructor. LEC.

NURS 415. Improving Healthcare Quality. 3 Hours.
Skills of inquiry and information literacy are developed to locate and evaluate information to improve healthcare quality. Continuous quality improvement is introduced as a foundation for quality care and patient safety. Data to monitor the processes and outcomes of care are discussed. Methods to design and test changes to continuously improve the quality and safety of healthcare systems are explored. Prerequisite: Admission to the School of Nursing or consent of instructor, Satisfactory completion of a statistics course. LEC.

NURS 416. Evidence-Based Nursing Practice. 3 Hours.
Searching, critiquing and synthesizing sources of evidence as it applies to the nurse's clinical practice will be emphasized. Fundamental principles of the research process and models for applying evidence to clinical practice will be explored. Strategies for implementation of evidence into clinical practice will be discussed. Prerequisite: Admission to the RN to BSN program, course in statistics, or consent of instructor. LEC.

NURS 443. Developing the Baccalaureate Nurse Role. 3 Hours.
Contemporary issues confronting the nursing profession are discussed and methods to advocate for patients and the profession are investigated. Communication, clinical leadership, and evidence-based practice skills that enhance the student's ability to perform in a complex organizational system are emphasized. Personal accountability, professional boundaries, team building, and group process skills are explored to facilitate students working within interprofessional health care teams. Students will examine their own beliefs and values and develop their personal philosophy of nursing. Prerequisite: Admission to the RN to BSN program. LEC.

NURS 444. Using Technology to Enhance Client Safety. 3 Hours.
Beginning theory and practical applications of various uses and results of computer technologies, including electronic health records, are explored in order to provide the basic skills and current infrastructure for information management in healthcare delivery. These concepts and skills are essential for curriculum related activities, as well as for providing therapeutic nursing interventions and communications with faculty, client systems, and other healthcare participants. Built-in safeguards, and legal and ethical issues related to electronic communications and health records are emphasized using 21st century tools of communication and collaboration. Knowledge and skills presented in this course will be expanded in future nursing courses related to the baccalaureate completion program. Prerequisite: Admission to the RN to BSN program. LEC.

This course is designed to enlighten students to new cultures, provide the opportunity to see how these cultures deal with health care, and assess the clients' internal and external environment that impact health care. Various roles and responsibilities of nurses participating in international health are examined. A short term immersion experience provides an opportunity to incorporate the nursing process in clinic and community settings and to function as members of a health care team. Prerequisite: NURS 333, NURS 339, or consent of instructor. LEC.

NURS 446. Population Based Health Care for the Practicing Nurse. 3 Hours.
Concepts and theories important to providing health care to aggregates, communities, and populations are explored. Health promotion and prevention of disease and injury as essential elements of baccalaureate nursing practice are emphasized. Determinants of health are identified to allow students to construct methodologies that address health care disparities. The role of individuals within the interprofessional healthcare team is examined to determine the contributions of each to the achievement of healthy populations. Prerequisite: Admission to the RN to BSN program. LEC.

NURS 447. Nursing Practice within the Clinical Health Care Micro System. 3 Hours.
Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in micro-environments of health care delivery. The microsystem is the structural unit responsible for delivering care to specific patient populations or the frontline places where patients, families, and care teams meet (2008 AACN Essentials, p. 38). This environment is where the nurse participates in a broad mixture of direct and indirect care patient care delivery. Findings of current research related to nursing leadership are discussed. Professional, organizational, historical, and social factors that affect health care delivery within a clinical micro system are considered. Prerequisite: Admission to the RN to BSN program. LEC.
NURS 448. Scholarly Inquiry for Quality Improvement. 3 Hours.
Skills of inquiry and information literacy are developed to locate and evaluate information to improve healthcare quality. Continuous quality improvement is introduced as a foundation for quality care and patient safety. Data to monitor the processes and outcomes of care are discussed. Methods to design and test changes to continuously improve the quality and safety of healthcare systems are explored. Prerequisite: Admission to the RN to BSN program LEC.

NURS 449. Nursing Practice within the Healthcare Organization. 3 Hours.
The impact that nursing departments and organizational decision making has on the achievement of quality patient outcomes will be explored. Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in the micro-environment of health care delivery. The role of the nurse as leader in achieving organizational goals addressing socio-cultural, economic, legal, and political environmental factors is examined. Prerequisite: Admission to the RN to BSN program LEC.

NURS 451. Navigating the Influences of the Health Care Macro-Environment. 3 Hours.
Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in the macro-environment of health care delivery. The role of the nurse as a provider of direct and indirect care is expanded to include local, state, national and international regulatory, legal, and professional association interactions that impact the ability of the nurse to deliver patient care. Prerequisite: Admission to the RN to BSN program LEC.

NURS 469. Independent Study in Nursing. 1-5 Hours.
Intensive study in an area of interest with experiences selected according to the student’s written purposes, conceptual framework, objectives and evaluation. Appropriate prerequisite courses, as determined by the Independent Study faculty advisor, must be completed. IND.

NURS 471. Development of a Microsystems Leader. 4 Hours.
The microsystem is the structural unit responsible for delivering care to specific patient populations or the frontline places where patients, families, and care teams meet (2008 AACN Essentials, p. 38). This environment is where the nurse participates in a broad mixture of direct and indirect care patient care delivery. Students will be given the opportunity to apply principles of leadership and management to recognize how changing delivery patterns, organizational, regulatory, care, and association processes impact the care provided to specific patient populations. Prerequisite: NURS 327, NURS 329, NURS 331, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339 or consent of instructor. Corequisite: NURS 472, NURS 473, NURS 474, NURS 475, or consent of instructor. LEC.

NURS 472. Evidence-Based Practice: Translating Research to Practice. 2 Hours.
Concepts of evidence-based practice (EBP) and healthcare research are explored. Methods to critically appraise healthcare research will be applied. Critical appraisal of evidence will be employed to inform the delivery of safe and quality nursing care. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor. Corequisite: NURS 471, NURS 473, NURS 474, NURS 475, or consent of instructor. LEC.

NURS 473. Professional Development III: Navigating the Profession. 2 Hours.
Contemporary issues confronting the nursing profession are discussed and methods to advocate for persons and the profession are investigated. The dynamic and ever present evolution of healthcare will be explored. Professional skills, such as job interviewing, portfolio development, and examination of advanced roles in nursing, will be emphasized. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or Consent of Instructor. Corequisite: NURS 471, NURS 472, NURS 474, NURS 475, or Consent of Instructor. LEC.

NURS 474. Health and Illness: Nursing with Diverse Populations. 4 Hours.
Comprehensive and focused evidence-based care of patients in diverse populations with complex health conditions will be examined. The nurse’s role in assuring coordination, integration, and continuity of care is investigated. Integration of the physical, behavioral, psychological, spiritual, socioeconomic and environmental factors that influence patient centered care is explored. Collaboration with other health care team members to provide safe and quality care for diverse patients in a variety of complex settings is analyzed. Information management tools to monitor outcomes of care are evaluated. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 334, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor. Corequisite: NURS 471, NURS 472, NURS 473, NURS 475, or consent of instructor. LEC.

NURS 475. Health and Illness: Nursing with Diverse Populations Practicum. 3 Hours.
Coordination, integration, and continuity of care for diverse patients with multiple/complex problems will be applied in the dynamic microenvironments such as: maternity, pediatrics, mental health, and critical care. Patients/designees are engaged in active partnerships that promote health, safety, well-being, and self-care management. Synthesis of evidence and collaboration with other members of the health care team are used to plan, implement, and evaluate safe and quality care for patients. Technologies that support clinical decision-making, error prevention, and care coordination are emphasized. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor. Corequisite: NURS 471, NURS 472, NURS 473, NURS 474, or consent of instructor. LEC.

NURS 476. Nursing in an Evolving Healthcare System. 4 Hours.
Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges presented to the nurse. The role of the nurse as provider of direct and indirect patient care is expanded to include the external influences of the health care organization, the regulatory environment, and the professional association. The development of the nurse as a member of a profession is expected. Inherent is a developing knowledge and appreciation for the diversity of opinions and organizations that exist to provide assistance in the delivery of direct patient care. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor. Corequisite: NURS 477, NURS 478, NURS 479, NURS 480, or consent of instructor. LEC.

NURS 477. Capstone. 3 Hours.
A preceptor model of learning professional nursing practice provides opportunities to synthesize and integrate previous learning experiences. Emphasis is placed on the roles of the nurse as provider of direct and direct care; designer, manager and coordinator of care; and member of the profession. The focus is on individual transition to the professional nursing role, recognizing the organizational, social, political, economic, ethical, and legal context in which interdisciplinary health care is delivered in a selected clinical setting. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 332, NURS 333, NURS 334, NURS 335, NURS...
NURS 336, NURS 337, NURS 338, NURS 339, NURS 472, NURS 474, NURS 475, or consent of instructor. Corequisite: NURS 476, NURS 478, NURS 479, NURS 480, or consent of instructor. LEC.

NURS 478. Integration Seminar. 1 Hour.
The seminar provides students with an opportunity to apply concepts discussed in the classroom with observations from the clinical setting to enhance knowledge of how nurses meet multiple responsibilities. Through the use of small group guided discussion, students begin building a skill set that shows knowledge of and appreciation for the roles of direct care provider, designer, manager and coordinator of care; and member of profession. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 332, NURS 333, NURS 334, NURS 336, NURS 337, NURS 338, NURS 339, NURS 471, NURS 472, NURS 474, NURS 475, or consent of instructor. Corequisite: NURS 476, NURS 477, NURS 479, NURS 480, or consent of instructor. LEC.

NURS 480. Population Based Healthcare Practicum. 2 Hours.
Concepts and theories from Population Based Healthcare are applied to the health care of multiple patients; individuals, groups, communities and populations in the community. There is a concentrated focus on health promotion and disease prevention that provides safe, effective, and efficient care. Students are provided opportunities for inter-professional collaboration in the planning of health care and promotion of quality outcomes for culturally diverse populations. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, NURS 471, NURS 472, NURS 473, NURS 474, NURS 475, or consent of instructor. Corequisite: NURS 476, NURS 478, NURS 479, or consent of instructor. LEC.

NURS 481. Honors Evidence-Based Practice: Translating Research to Practice. 2 Hours.
Concepts of evidence-based practice (EBP) and health care research are explored to inform the delivery of safe and quality nursing care. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, NURS 471, NURS 472, NURS 473, NURS 474, NURS 475, or consent of instructor. Corequisite: NURS 476, NURS 478, NURS 479, or consent of instructor. LEC.

NURS 482. Honors Practicum I. 2 Hours.
Under the mentorship of an active nurse researcher the student designs and conducts a research project and participates as a member of a research project team. Students apply principles of research learned in NURS 460 to design and critique their own research project while providing feedback to peers. Through seminar activities they critically analyze the issues, rewards, and challenges of conduction research. LEC.

NURS 483. Honors Practicum II. 2 Hours.
Under the mentorship of an active nurse researcher the student designs and conducts a research project and participates as a member of a research project team. Students apply principles of research learned in NURS 460 to design and critique their own research project while providing feedback to peers. Through seminar activities they critically analyze the issues, rewards, and challenges of conduction research. LEC.

NURS 485. Populations Based Healthcare I. 1 Hour.
Concepts and theories related to improving health of entire populations are explored. Focus is placed on risk reduction, protective and predictive factors within the environments which influence the health of individuals, families, aggregates, and entire populations, and the identification of core public health functions and essential of service that impacts population health. Considering the multiple determinants of health, students will learn methods to facilitate collaboration to provide quality and safe health interventions for populations. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339 LEC.

NURS 486. Populations Based Healthcare II. 2 Hours.
Building upon the concepts and theories taught in Population Based Healthcare I, emphasis is placed on behavioral change techniques to promote health and manage disease that influence the health of individuals, families, communities, and entire populations. Considering the multiple determinants of health, students will learn methods to facilitate collaboration to provide quality and safe population health interventions through program planning to meet the needs of aggregate populations. Principles of disaster management and emergency preparedness will be explored at the individual, community, and population level. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 336, NURS 337, NURS 338, NURS 339, NURS 471, NURS 472, NURS 473, NURS 474, NURS 475, NURS 485. Corequisites: NURS 476, NURS 477, NURS 478, NURS 480. LEC.

NURS 492. Senior Project. 2-3 Hours.
Synthesis of knowledge for professional practice will guide development of a project to meet an identified need in an area of interest. The student will select one of three areas (management, clinical practice, education for patients and families, staff, or agency personnel) for project implementation. Prerequisite: NURS 320, NURS 352, NURS 433, NURS 434, NURS 435, and NURS 437. Corequisite: NURS 326, NURS 439, and NURS 441. LEC.