

Graduate School of Nursing Course Catalog

Course Number: GSN601

Course Title: Advanced Anatomy

Credits: 3

Course Description: This foundational didactic and human dissection course is designed to facilitate a thorough understanding of human anatomy. It is a specialized course, which includes the study of the cellular and functional aspects of the four tissue types of the body. This knowledge is expected to enhance understanding of human anatomy in subsequent advanced practice clinical settings. The course will be presented in several different modalities: didactic lectures, laboratory pro-sections/dissections. Clinical application of anatomical structures for each advanced practice nursing specialty will be stressed. Operational readiness issues and clinical application will be emphasized throughout the course.

Course Number: GSN602

Course Title: Advanced Health Assessment

Credits: 3

Course Description: This course explores advanced health assessment; the foundational health history and physical examination tools needed by all advanced practice nurses. Throughout the classroom and laboratory skills sessions, students will build upon existing nursing assessment competencies and tailor history and physical examination elements for both episodic complaints and full, well focused exams for populations across the lifespan. Students will devise assessments tailored to the individual's stated needs, physiologic stage of development and socio-cultural context. Formulated and executed assessments will reflect population and risk specific health promotion and disease prevention.

Course Number: GSN603

Course Title: Advanced Physiology

Credits: 3

Course Description: This core course will provide graduate nursing students with the normal physiologic principles that are necessary for the advanced nurse practitioner. Topics are organized to provide an in-depth understanding of the function and regulation of body systems to maintain homeostasis. Emphasis is placed on the integration of the structure and functional systems within the human body. The course content ranges from cellular mechanisms to the major body organ systems, providing the basis for understanding physiologic derangements.

Course Number: GSN604

Course Title: Advanced Pathophysiology

Credits: 3

Course Description: In this core course students engage in the advanced exploration of the scientific underpinnings of pathophysiology. Students will examine the changes in physiological parameters that occur resulting from selected disease processes as they occur across the life span. This course is a bridge between the basic sciences, such as anatomy, and the clinical sciences of Advanced Nursing Practice. This course will expand knowledge of pathophysiologic processes so as to expand the knowledge of concepts relevant for advanced practice nurse and to support more autonomous practice in the Uniformed Services health care system.

Course Number: GSN605

Course Title: Advanced Pharmacology

Credits: 4

Course Description: Building on knowledge acquired in the foundational science courses, this course provides students with the pharmacologic concepts required to practice safely in advanced practice nursing roles while emphasizing health promotion and disease prevention. In addition, students will understand how pharmacologic management may vary across the continuum of care and appreciate how the inter-relatedness of drugs used by different healthcare professionals impacts patient care and outcomes. Heavy emphasis is placed on understanding the pharmacodynamics, pharmacokinetics, pharmacogenomics and biochemical pathways. Side effects, toxicities and contraindications within important classes of drugs and modifications required for age, weight, gender, pregnancy and ethno-cultural differences are also reinforced. Students apply critical thinking and problem solving skills when they are asked to integrate newly acquired pharmacological principles with legal and ethical guidelines to plan safe and effective care for individuals with acute and or chronic medical conditions across a variety of clinical environments including operational and humanitarian settings. Ultimately, students will be prepared to design individualized pharmacotherapeutic plans to safely administer pharmacologic agents.

Course Number: GSN701

Course Title: Advanced Practice Role

Credits: 1

Course Description: This core course introduces the student to the multiple roles of advanced practice nurses within the Military, Civilian, and Federal Health Care systems. The historical, professional, political, and cultural components of the roles are presented, as well as legal and ethical issues in advanced practice nursing. Principles of leadership, collaboration, conflict management, negotiation and power as related to the advanced practice role are some of the topics discussed in this course.

Course Number: GSN702

Course Title: Organizational and Systems Leadership in Healthcare

Credits: 4

Course Description: This core course provides knowledge and skills relevant to systems leadership in clinical practice. Graduates will be prepared to assume leadership positions through skill development and the application of knowledge in addressing complex clinical practice, safety and organizational issues. Content will be drawn from established literatures in political science, anthropology, workforce diversity, economics, human relations, communication, ethical, legal, organizational behavior, systems leadership, change management, marketing, and conflict resolution strategies as they relate to safe and effective patient centered care in complex environments. Knowledge from these theoretical perspectives will be integrated with nursing science and clinical settings as a framework for organizational and quality assessment, management of ethical dilemmas, staff and patient safety, mitigation of risks and emerging system wide practice initiatives.

Course Number: GSN703

Course Title: Ethics and Policy in Federal Health Systems

Credits: 3

Course Description: This core course introduces students to ethical and health care policy issues in federal and military practice. The course examines relationships among social, cultural, political, financial, clinical, and legal factors that influence health care delivery and policy in the Military and Federal Health Care Systems both in peacetime and in contingency operations.

During this course, ethical, legal and federal health policy issues will be explored. Key ethical principles will be presented as a class topic and case studies will be used to demonstrate how theories, principles, frameworks, and code of ethics guide decision-making when practice, research and policy dilemmas are at hand. This course will also examine current issues and legislative actions and nursing involvement in the policy making process. Past and current health debates are used to illustrate contemporary challenges and the critical need for practice experts. The role of the doctorally prepared nurse in influencing policy related to health care services, patient outcomes and professional nursing is emphasized.

At the end of the semester, the student will be familiar with the major ethical principles and will have formulated a system for ethical decision-making in their practice. They will also understand the legislative process and how to further their profession through political activity.

Course Number: GSN704

Course Title: Population Health and Epidemiology in Advanced Practice

Credits: 4

Course Description: This course provides students with an opportunity to understand the use of epidemiology to design and manage advanced health care for populations. The course builds on previous knowledge in analytic methods, policy, systems, and leadership, and includes an overview of the study and distribution of determinants of health and disease in specified populations; and the application of this study to the promotion of health, prevention and control of disease, design of health care services, and initiation of health policy for populations served by the Military/Federal Health Systems

Course Number: GSN705

Course Title: Health Economics and Advanced Practice

Credits: 2

Course Description: This online course is designed to facilitate a thorough understanding of assessment, planning and evaluating fiscal aspects of advanced care delivery with Federal Health Systems. Students will be introduced to health economics with a focus on the elements of fiscal-focused evidenced-based planning and evaluation of care quality care delivery at various systems levels. Macro and micro level systems will be included. Additionally, students will have an opportunity to explore specialty (FNP, PCNS, RNA, PMH) specific issues related to health economics.

Course Number: GSN706

Course Title: Healthcare Informatics

Credits: 3

Course Description: This required core course focuses on leadership and innovation related to

the collection, development, organization, analysis, and dissemination of information in an interdisciplinary health care environment. Students are introduced to the role of the healthcare informaticist, information systems and the information system life cycle, the electronic health record (EHR), telemedicine, clinical decision-making tools, and other technology useful for enhancing healthcare delivery and patient safety. Special emphasis will be placed on information systems used in the federal health system and in the operational (deployed) environment. Students will learn how to apply theory to the design, use, and manipulation of large and small databases to evaluate and monitor outcomes. Strategies for the use and evaluation of information used by consumers and health professionals for health promotion, early detection, disease prevention and tracking will be explored. Students will also gain an understanding of the ethical considerations, laws, and policies governing the oversight of healthcare information systems.

Course Number: GSN707

Course Title: Integration and Application of Family Theory in Primary Care

Credits: 3

Course Description: This course is designed to integrate theories of family health and well-being with particular emphasis on the military family. Integrated throughout are concepts of family centered theories and assessment tools used for analysis and planning. Topics addressed include problem identification, intervention planning and health promotion to optimize family function in the context of prevailing culture and population health. Content specific to military families include stress and coping, deployment separation, reintegration, and care of the wounded warrior within interdisciplinary and interprofessional teams.

Course Number: GSN901

Course Title: Healthcare Research and Evidence Based Practice

Credits: 2

Course Description: The emphasis of this course is to provide instruction on the entire research process applicable to Advanced Practice Nursing within the military and federal health care systems. The course begins with an introduction to the philosophy of science and the development of nursing science. This course highlights research ethics, fundamental design, theoretical frameworks, sampling, measurement strategies, and data collection for qualitative and quantitative nursing research. Students will experience the research process through identification of a clinical problem, literature review, critical analysis and measurement of concepts, and development of researchable questions that may lead to relevant interventions and improved patient outcomes. The focus is to develop critical thinking skills for the evaluation and appraisal of current literature which is a foundation for evidenced based practice.

Course Number: GSN902

Course Title: Statistical Measures and Analytic Methods: Application and Critique

Credits: 3

Course Description: The content in this core course builds on the subject matter from GSN901 Healthcare Research and Evidence Based Practice. The focus of this course is the development of statistical reasoning and critical appraisal skills in advanced practice nursing students through the application of statistical techniques and critique of analytic methods and statistical measures used in the healthcare literature. Students will integrate existing knowledge of the research process and skills related to searching and summarizing literature with new knowledge and skills for critically

appraising published research. Students will also acquire the knowledge and technological skills needed to manipulate quantitative data and use nonparametric and parametric statistics to answer research questions or test hypotheses.

Course Number: GSN903

Course Title: Translation of Evidence for Health Care Practice, Policy, and Evaluation

Credits: 3

Course Description: This course builds on concepts from GSN901 Healthcare Research and Evidence Based Practice and GSN902 Statistical Measures and Analytic Methods: Application and Critique and will focus on the evaluation of literature and translation to clinical practice. Students will build upon the evidenced based concepts and the systematic approach to obtain and synthesize evidence from a variety of sources in order to evaluate problems that are related to clinical care, health care economics and health care policy. Students will gain the knowledge necessary to utilize information technology in clinical practice and apply the relevant findings to improve practice within the context of their advanced practice role within the federal health care system. The implementation and evaluation of point of care protocols will be highlighted as an essential step in the evidence based practice paradigm.

Course Number: GSN904

Course Title: Clinical Inquiry Project

Credits: 4

Course Description: All students must complete a scholarly project. In pursuing the scholarly project students use a reflective process of thinking, integrate multiple sources of knowledge, and demonstrate scholarly inquiry based on nursing theory, research, and practice. The scholarly project provides students with an opportunity to conceive and execute a learning experience encouraging scientific inquiry, professional growth, and understanding of an area related to advanced nursing practice in the Federal Health Care System. This course builds on: Statistical Measures and Analytic Methods: Application and Critique, Healthcare Research and Evidence Based Practice, increasing student autonomy in utilization, analysis, synthesis and dissemination of evidence in support of advanced clinical decision making. This seminar course is designed to be accomplished over 2 semesters in year 2 of program study.

Course Number: GSN906

Course Title: Scholarly Inquiry Project

Credits: 6

Course Description:

The scholarly inquiry project is a culminating experience demonstrating student synthesis of coursework and laying the foundation for future scholarship. Projects most often evolve from practice environments within Federal and Military Healthcare systems; therefore each scholarly project is unique depending on the student's nursing specialty, and clinical setting. Designed by the student in collaboration with faculty, each project focuses on improving outcomes for patients, groups, populations, communities and/or systems. This seminar course is designed to be accomplished over 3 semesters in year 3 of program of study. Each semester, students will be awarded three semester credit hours, total 9 credits upon program completion.

Clinical Nurse Specialist (CNS) Specialty & Clinical Courses

Course Number: CNS601

Course Title: Principles of CNS Practice across the Lifespan I

Credits: 3

Course Description: This course allows students to engage in systems thinking by performing environmental and system level assessments to identify factors that influence nursing practice and outcomes. These assessments will incorporate federal/national regulations, organizational practice standards, and evidence-based practice. Additionally, students will provide leadership in the design, implementation, and evaluation of a process improvement initiative. Students will design an evidence-based professional nursing education activity that promotes professional development of the nursing staff utilizing advanced communication skills. Adult learning principles, change management theory, and cultural awareness will be employed. Student's knowledge in support of direct care will be enhanced as they conduct comprehensive holistic wellness and illness assessments leading to a differential diagnosis on patients across the age span. Strategies will be utilized to meet the multicultural and diverse needs of the patient population. This course will expose students to a multidisciplinary team approach to advanced practice nursing as well as support the development of the consultant, educator, manager, researcher, and clinical role of the Clinical Nurse Specialist in the acute care environment (e.g., Emergency Room, Perioperative, Intensive Care, and Trauma).

Course Number: CNS602

Course Title: Principles of CNS Practice across the Lifespan II

Credits: 3

Course Description: This course builds upon concepts learned in Principles of CNS Practice across the Lifespan I as students engage in consultative/collaborative relationships with multidisciplinary health care providers focusing on comprehensive wellness/illness assessments, clinical management and problem-solving activities. Utilizing evidence-based techniques, students synthesize assessment data using critical thinking and clinical judgment to formulate differential diagnoses amenable to CNS intervention. High-risk clinical issues are examined in support of the clinical expert role of the CNS. Students research critical processes within the practice environment, review/analyze regulatory and practice guidelines related to the acute care setting, and evaluate patient safety programs according to Joint Commission standards. Additionally, the Association for Professionals in Infection Control (APIC) surveillance guidelines are examined throughout the healthcare environment to identify and minimize the potential for hospital acquired infections. The analysis of these systems/processes exposes students to the value of collaboration as well as support the development of the consultant and managerial/leadership role of the clinical nurse specialist.

Course Number: CNS603

Course Title: Health Care Resource Management

Credits: 3

Course Description: This course examines the concepts of financial and human resource management as well as strategies for application in nursing practice within the federal health care system. Strategies to gain the "competitive advantage" in the business end of health care are explored, as well as tools and techniques facilitating decision-making for patient care programs

with a focus on patient safety. Analysis of financial information and its impact on operational performance are the foci for this course as students develop resource management plans demonstrating efficient and effective administration of resources for delivery of quality patient care services in support of routine health care delivery.

Course Number: CNS604

Course Title: Assessment, Diagnosis, and Management across the Lifespan

Credits: 2

Course Description: This course is designed to build on the fundamentals of advanced health assessment to examine the top disease processes that are the leading causes of death in the United States. The CNS must be able to assess, diagnosis, and manage these disease processes using pharmacological/non-pharmacological interventions for patients across the lifespan within the three spheres of influence: patient, nurse and system. These disease processes represent actual and potential health problems that could affect the delivery of care within the acute care setting.

Course Number: CNS605

Course Title: Medical Facility Master Planning and Hospital Architectural Design

Credits: 3

Course Description: This course introduces students to the complexities of new and renovation facility design projects. This content introduces critical thinking skills necessary to navigate the multidisciplinary issues and constraints in facility design efforts. Students will be challenged to critique comprehensive functional designs in compliance with national standards and Department of Defense (DoD) space criteria, safety concerns and advanced issues for infection control during construction.

Course Number: CNS606

Course Title: CNS Role in Trauma Management

Credits: 2

Course Description: In an environment with constant changes in contingency medicine and trauma management, the clinical nurse specialist (CNS) must have a keen understanding of operational readiness for missions involving combat, peace-keeping and humanitarian assistance involving safety and critical thinking across the continuum of care. The combination of teaching techniques using simulation and real-life hands-on trauma experiences will assist students to enhance clinical skills related to managing trauma patients as well as understanding how to critically manage personnel, equipment and supplies in austere environments. These experiences will promote academic discussions about practice issues, maintenance of national standards of care and maintaining the team's well-being across the continuum of care with critically ill and trauma patient populations with focus on the patient, nurse and system.

Course Number: CNS607

Course Title: Advanced Assessment, Diagnosis and Management across the Lifespan

Credits: 3

Course Description: This course is designed to build on CNS 604 Assessment, Diagnosis and Management across the Lifespan. The course will develop, expand, and evaluate competence related to the student's ability to conduct a comprehensive focused history and physical examination. This course challenges the student's critical thinking and problem solving abilities,

as they integrate knowledge from health assessment, pathophysiology, and pharmacology to assess, diagnose and manage acute and chronic health conditions of patients across the lifespan incorporating both pharmacologic and non-pharmacologic interventions. The students' critical thinking and data synthesis ability will be further challenged as they analyze assessment data in support of differential diagnosis and management plans for clinical problems amenable to CNS interventions for pediatric, geriatric and adult populations using literature supporting evidence synthesis and clinical guidelines/care pathways. Students will incorporate the development of PICOT questions to guide in the delivery of care across the healthcare continuum. Student activities culminate in their ability to conduct and present a comprehensive focused history and physical examination using evidence-based techniques and tools to collect assessment data.

Family Nurse Practitioner (FNP) Specialty & Clinical Courses

Course Number: FNP601

Course Title: Advanced Diagnosis and Management in Adult Health

Credits: 5

Course Description: This course prepares the student to function at a beginning level as an advanced practice nurse (APN) in a primary care setting. This course applies the nursing process, using communication and assessment skills, interpreting findings, applying laboratory diagnostic methods, developing and evaluating plans of care, and implementing nursing strategies to promote the health of adults with common health problems. Operational readiness and deployment is integrated throughout this course.

This course is designed to teach the student to develop his/her own problem-solving strategies for a variety of health problems presented by the adult patient. The focus of this course will be on selected minor acute and chronic diseases seen in primary care. There will be an integration and application of concepts from basic sciences, along with utilization of research findings in primary care nursing practice. Problem solving & critical thinking are emphasized throughout.

Course Number: FNP602

Course Title: Advanced Diagnosis and Management in Gynecology

Credits: 2

Course Description: This course builds upon the foundational knowledge and skills acquired in basic science courses (anatomy, advanced health assessment advanced pharmacology, physiology, advanced pathophysiology) while integrating concepts of family systems into caring for women with gynecologic conditions. The focus is identification of patient problems, development of differential diagnosis and integration of clinical decision making to appropriately manage common gynecologic conditions across a woman's lifespan. Understanding what well-being means to an individual woman and how this impacts her physical, mental, emotional, and cultural health is emphasized and health promotion, preventive care, and patient education are seen as the cornerstones to improving health outcomes. Management of gynecologic issues unique to women in deployed, humanitarian and austere conditions are reviewed. Concurrent supervised clinical experiences enhance and ground the didactic experience.

Course Number: FNP603

Course Title: Advanced Diagnosis and Management in Pediatric Primary Care

Credits: 5

Course Description: This course lays the foundation for preparing the student to provide primary care for children from birth through adolescence. The course focuses on health promotion, health protection, and disease prevention in primary care. Clinical practice guidelines, didactic information and history/physical techniques will provide the basis for understanding typical and atypical development, anticipatory guidance, selected acute/chronic conditions and appropriate screening. Course content and presentations are intended to enhance learning, integrate knowledge of evidence-based practice, and promote academic discussion on primary care and military issues commonly confronted by patients and their families.

The major advanced practice concepts supported by this course incorporate the scientific underpinnings for practice; analytical methods; use of surveillance, screening, and military health technology tools in patient care; population health, prevention and wellness services; care of patients with acute and chronic illness; and inter-professional collaboration. Clinical sites are carefully chosen in order to offer primary care and specialty evaluation opportunities. This course highlights the unique aspects of caring for the military family.

Course Number: FNP604

Course Title: Advanced Diagnosis and Management in Obstetrics

Credits: 3

Course Description: This evidence-based course builds upon the foundational knowledge and skills acquired in basic science courses (anatomy, advanced health assessment advanced pharmacology, physiology, advanced pathophysiology), advanced practice courses (Advanced Diagnosis and Management in Adults, Pediatrics and Gynecology) and concepts of family systems into caring for women with obstetric conditions. The focus is on the principles and practice of caring for childbearing woman and their families across the ante- and post-partum periods. Recognition and management of common pregnancy complications, as well as the physical, psychological, emotional and social basis for prenatal care is examined in the context of public health. Topics include management through the antepartum period, assessment of fetal growth and development, evaluation of the family unit and teaching/coaching considerations and integration of clinical decision making to appropriately manage common obstetric conditions during the reproductive years. Management of obstetric issues unique to women in deployed, humanitarian and austere conditions are reviewed. Concurrent supervised clinical experiences enhance and ground the didactic experience.

Course Number: FNP605

Course Title: Assessment and Diagnosis in Geriatric Primary Care

Credits: 1

Course Description: This course prepares the student to provide primary care for the elderly. Special focus is placed on assessing the impact of aging on physical and developmental status; adapting interventions to meet the complex needs of the individual and their family; and health promotion, health protection, disease prevention, and end-of-life planning in primary care. Current evidence will provide the basis for understanding typical and atypical development, anticipatory guidance, selected acute/chronic conditions, appropriate screening, and the promotion of self-care and independent living. Course content and presentations are intended to

enhance learning, integrate knowledge of evidence-based practice, and promote academic discussion on issues commonly confronted by patients and their families.

The major advanced practice concepts supported by this course incorporate the scientific underpinnings for practice; analytical methods; use of surveillance, screening, and health technology tools in patient care; population health, prevention and wellness services; care of patients with acute and chronic illness; inter-professional collaboration and health policy issues.

Course Number: FNP606

Course Title: Foundations of Independent Practice

Credits: 4

Course Description: This course provides the foundation for advanced management of complex disease processes across the life span with a special emphasis on the elderly population. The student will learn advanced skills and procedures for assessment, diagnostic tests, diagnosis and management of primary care and family practice patients, incorporating training in specialty areas.

The student will integrate understanding of physiologic changes of the aging process, the social impact of aging and the unique management of the elderly to include pharmacogenomics and pharmacology, complications of aging, communication problems, multidisciplinary considerations, self-management, environment, financial issues, and ethical issues.

Course content and presentations are intended to enhance learning, integrate knowledge of evidence-based practice, and promote academic discussion on primary care and military issues commonly confronted by patients and their families. The major advanced practice concepts supported by this course incorporate the scientific underpinnings for practice; analytical methods; use of military and health technology tools in patient care; population health, prevention and wellness services; care of patients with acute and chronic illness; and inter-professional collaboration.

Course Number: FNP607

Course Title: Primary Care of the Military Member

Credits: 3

Course Description: This course will provide students with militarily relevant primary care content which is unique within Department of Defense populations. The course will address clinically challenging primary care issues during the three phases of a military career: accession, active duty, and retirement. The student will identify, synthesize and adapt to environmental risks, deployment challenges, and account for cultural influences of providing medical care in foreign countries. The student will adopt a population health perspective in order to provide the best care in the most austere environments while applying knowledge of planning and preparation in order to forecast support necessary to provide medical support to DoD personnel anywhere in the world

Course Number: FNP608

Course Title: Advanced Concepts in Independent Practice

Credits: 5

Course Description: This course continues to develop FNP skills in the management of complex disease processes across the life span. Student will acquire additional skills and

procedures necessary to conduct advanced assessments, order and interpret diagnostic tests, develop nuanced differential diagnoses, select a primary diagnosis and manage primary care and family practice patients.

Course content and presentations are intended to enhance learning, integrate knowledge of evidence-based practice, and promote academic discussion on primary care and military issues commonly confronted by patients and their families. The major advanced practice concepts supported by this course incorporate scientific underpinnings for practice; analytical methods; use of military and health technology tools in patient care; population health, prevention and wellness services; care of patients with acute and chronic illness; and inter-professional collaboration.

Course Number: GSN801

Course Title: FNP Residency I

Credits: 3

Course Description: This is the first of three residency courses that build upon the scientific, theoretical and clinical foundations taught during the first two years of the DNP curriculum. This 3 course series focuses on transitioning students into the full primary care FNP role. At the end of the 3 semester residency period, students will be prepared to apply theories, standards of practice and evidence-based research findings to the care of increasingly complex patients, populations and systems leading to improved practice and health care delivery.

In FNP Residency I, students will integrate and synthesize knowledge, scholarly reading, educational offerings and clinical experience to develop an individual patient evidence based case narrative demonstrating their ability to appraise and present a complex clinical case. Emphasis will be placed on the continuing development of critical thinking and decision making skills necessary to individualize treatment plans and interventions to optimize patient outcomes.

Across all three courses students will be prepared to independently manage healthcare challenges ranging from straightforward to complex, while developing collaborative patient, population and professional partnerships. They will be asked to function as a practice specialist/consultant in the resolution of clinical problems through refinement of communication, reflection and scholarly practice. While employing analytic skills to evaluate and implement evidence-based, direct and indirect patient care across a variety of healthcare settings, students will also apply principles of health policy and health care delivery systems to the care of individuals, populations and the systems in which they practice.

Course Number: GSN802

Course Title: FNP Residency II

Credits: 3

Course Description: This is the second of three residency courses that build upon the scientific, theoretical and clinical foundations taught during the first two years of the DNP curriculum. This 3 course series focuses on transitioning students into the full primary care FNP role. At the end of the 3 semester residency period, students will be prepared to apply theories, standards of practice and evidence-based research findings to the care of increasingly complex patients, populations and systems leading to improved practice and health care delivery.

In FNP Residency II, students will develop a population focused evidence based case

narrative demonstrating their ability to critically appraise and synthesize the care of the population with complex clinical needs. Emphasis will be placed on expanding critical thinking and decision making skills needed to address issues unique to management of populations with complex healthcare needs.

Across all three residency courses students will be prepared to independently manage healthcare challenges ranging from straightforward to complex, while developing collaborative patient, population and professional partnerships. They will be asked to function as a practice specialist/consultant in the resolution of clinical problems through refinement of communication, reflection and scholarly practice. While employing analytic skills to evaluate and implement evidence-based, direct and indirect patient care across a variety of healthcare settings, students will also apply principles of health policy and health care delivery systems to the care of individuals, populations and the systems in which they practice.

Course Number: GSN803

Course Title: FNP Residency III

Credits: 3

Course Description: This is the third of three residency courses that build upon the scientific, theoretical and clinical foundations taught during the first two years of the DNP curriculum. This 3 course series focuses on transitioning students into the full primary care FNP role. At the end of the 3 semester residency period, students will be prepared to apply theories, standards of practice and evidence-based research findings to the care of increasingly complex patients, populations and systems leading to improved practice and health care delivery.

In FNP Residency III, students will develop an evidence based case narrative demonstrating their ability to critically appraise and synthesize care of the populations typically managed using an inter- and/or intra-professional approach, because they may have special support, educational, cultural, safety, economic or transitional care needs. Emphasis will be placed on expanding leadership and communication skills critical for improving healthcare outcomes, optimizing the function of inter-professional teams and care delivery approaches.

Across all three courses students will be prepared to independently manage healthcare challenges ranging from straightforward to complex, while developing collaborative patient, population and professional partnerships. They will be asked to function as a practice specialist/consultant in the resolution of clinical problems through refinement of communication, reflection and scholarly practice. While employing analytic skills to evaluate and implement evidence-based, direct and indirect patient care across a variety of healthcare settings, students will also apply principles of health policy and health care delivery systems to

Psychiatric Mental Health (PMH) Specialty and Clinical Courses

Course Number: PMH601

Course Title: Foundations of Advanced Practice Psychiatric Nursing

Credits: 5

Course Description: This course introduces the student to the history and progression of mental health disorders by examining psychosocial, personality, and psychopathology theories as they apply to individuals with mental disorders of across the lifespan. Classroom and clinical activities provide students an opportunity to synthesize and apply psychotherapeutic theories and concepts as they develop assessment and interview skills. The introduction of

standardized bio-psycho-social data collecting tools and psychiatric rating scales will provide structure for the assessment/interview process. Students will further their emersion into the development and progression of mental disorders with an overview of the classification system in the DSM-IV-TR. The culmination of these activities is designed to foster critical thinking and help students develop a broader view of mental disorder formation.

Course Number: PMH602

Course Title: Advanced Diagnosis of Mental Disorders across the Lifespan

Credits: 4

Course Description: This course builds on the assessment course providing the student with knowledge and skills to perform advanced clinical differential diagnoses and management of individuals with mental disorders using the criteria of the DSM-IV-TR. This course introduces special population with mental health needs in the military and federal health settings. Advanced critical thinking skills will be honed as the assessment process becomes more comprehensive, requiring additional data from collaborative sources (i.e. psychological tests, lab work, consultation with other providers, etc.). Students will be challenged to develop a treatment plan with interventions based on their diagnosis that include selecting a therapy mode, follow up intervals, medication recommendations, and referral management.

Course Number: PMH603

Course Title: Therapeutic Modalities

Credits: 3

Course Description: This course builds on the assessment and diagnosis and management course providing the student with knowledge and skills to perform a variety of evidenced based psychotherapeutic interventions and management across the lifespan. This course builds on the PMH 602 Diagnosis and Management Course by adding knowledge and critical thinking skills related to treatment modalities in the context of mental health needs in the military and federal health settings.

Advanced critical thinking skills will continue to be applied as the assessment and diagnosis and management process becomes more comprehensive, requiring additional data from current research and collaborative sources. Students will be challenged to develop a treatment plan with interventions based on best practices and individual treatment needs that promote preventive and secondary mental health interventions.

Course Number: PMH604

Course Title: Psychopharmacology

Credits: 5

Course Description: This course is designed to assist students in obtaining the necessary psychopharmacologic content required to prepare them to function in an advanced practice role as a Psychiatric Mental Health Nurse Practitioner. This course builds on the core nurse practitioner pharmacology course and diagnostic and neuroscience content from previous courses. The focus of this course is on additional categories of medications specific to individuals with psychiatric illness and mental disorders incorporating cultural needs and lifespan development. This course will challenge student critical thinking and problem solving skills as they apply psychopharmacologic principles to a wide array of chronic and acute clinical conditions. Students will learn to synthesize information as it relates to

psychopharmacological treatment of disease components related to operational, humanitarian and homeland defense health risks.

Course Number: PMH605

Course Title: Advanced Practice Psychiatric Nursing Specialty Practicum

Credits: 1

Course Description: This course covers “Topics in Deployment Psychology” focusing on areas that impact service members and their families to include: issues during deployment cycle, post-traumatic stress disorder (PTSD), traumatic brain injury (TBI), sexual assault, and sleep needs. Each topic area is presented by experts in the mental health field from the Army, Navy, Air Force, and Marine perspective. Training in two therapy models effective in reducing the effects of PTSD, Prolonged Exposure Therapy (PE) and Cognitive Processing Therapy (CPT) will be offered. Student must choose one therapy model, participate in the training, and write a paper based on a case study as to how the chosen therapy would be utilized. Thus, the practicum provides the student valuable insight into the global mental health care needs and assets currently available and in practice that meet the psychological demands of our nation’s multi-service armed forces including their families.

Course Number: PMH606

Course Title: Operational Readiness for Advanced Psychiatric Practice

Credits: 5

Course Description: Military Contingency Medicine (MCM) is the capstone course in the Uniformed Services University Military Unique Curriculum. This unique curriculum is specifically designed to prepare medical and advanced practice nursing students to provide the highest quality health care for servicemen and women in austere environments. MCM augments the student’s core clinical knowledge with unique medical training that enables them to excel as a General Medical Officer (GMO) in an operational setting. This training includes a three week didactic, clinical, and lab sessions on specific medical topics that would be seen in an operational environment. Previous to the start of MCM, the students will be enrolled in Advanced Trauma Life Saving Course which they will be taught a simplified and standardized approach to trauma patients developed by American College of Surgeons. The course will culminate with a two one day field exercise “Operation BUSHMASTER”. The course is based on the adult learner model, which reinforces didactic discussion with small group practical exercises and the culminating field exercise in order to enhance retention.

Course Number: PMH607

Course Title: Treatment of Substance Abuse Disorders across the Lifespan

Credits: 2

Course Description: This course is designed to introduce substance abuse treatment theory and provide the student with opportunities to synthesize and apply the principles of advanced practice psychiatric nursing in a substance abuse treatment facility. Under the guidance of a qualified preceptor, the student will apply principles of the advanced practice psychiatric nurse practitioner role, utilizing theoretical and experiential knowledge from all previous course work. The clinical practice requirements are based on the expected competencies for the advanced practice nurse in psychiatric mental health nursing as outlined by the American Nurses Association (2006) and the National Organization of Nurse Practitioner Faculties (2003). Clinical conference sessions are

designed to assist the student to analyze multiple variables in mental health and illness and, using a problem-solving framework, to determine optimal psychiatric mental health care for individuals in substance abuse treatment setting.

Course Number: PMH803

Course Title: Applied Clinical Concepts

Credits: 4

Course Description: This course builds on the previous first and second year DNP curriculum by providing the student with knowledge and skills to perform a variety of evidenced based psychotherapeutic interventions across the lifespan within a military and federal health care setting. Advanced critical thinking skills will continue to be applied as the assessment and diagnosis and management process becomes more comprehensive, requiring additional data from current evidenced based research and collaborative sources. Students will be challenged to develop a treatment plans and interventions based on best practices that incorporate individual treatment needs that promote preventive and secondary mental health interventions.

Course Number: PMH804

Course Title: PMH Residency I

Credits: 3

Course Description: This course builds on the previous first and second year DNP curriculum by providing the student with knowledge and skills to perform a variety of evidenced based psychotherapeutic interventions across the lifespan within a military and federal health care setting. Advanced critical thinking skills will continue to be applied as the assessment and diagnosis and management process becomes more comprehensive, requiring additional data from current evidenced based research and collaborative sources. Students will be challenged to develop a treatment plans and interventions based on best practices that incorporate individual treatment needs that promote preventive and secondary mental health interventions.

Course Number: PMH805

Course Title: PMH Residency II

Credits: 4

Course Description: This course builds on the previous first and second year DNP curriculum by providing the student with knowledge and skills to perform a variety of evidenced based psychotherapeutic interventions across the lifespan within a military and federal health care setting. Advanced critical thinking skills will continue to be applied as the assessment and diagnosis and management process becomes more comprehensive, requiring additional data from current evidenced based research and collaborative sources. Students will be challenged to develop a treatment plans and interventions based on best practices that incorporate individual treatment needs that promote preventive and secondary mental health interventions.

Course Number: PMH806

Course Title: PMH Residency III

Credits: 4

Course Description: This course builds on the previous first and second year DNP curriculum by providing the student with the opportunity to experience expanded clinical rotations that enhance their understanding of both neuropsychiatric and organizational concepts. The students will be

challenged to explore clinical and organizational areas that will serve to provide a well-rounded experience in order to produce an expert doctorally prepared clinician and community leader. The student will choose and negotiate several rotations with approval from faculty from amongst a variety of clinical and leadership settings and spend a predetermined amount of clinical hours in each setting.

Nurse Anesthesia (RNA) Specialty and Clinical Courses

Course Number: RNA601

Course Title: DNP-Basic Anesthetic and Pharmacologic Principles of Anesthesia

Credits: 5 credits

Course Description: This course integrates basic principles of anesthesia with pharmacologic chemical and physical principles involved in the administration of anesthetic drugs and perioperative management of the surgical patient. The basic principles of anesthesia covered include fluid management, equipment and monitoring, regional anesthesia, and beginning airway management. Pharmacologic principles discussed include states and properties of matter, laws governing the behavior of gases, flow and vaporization as well as the description of anesthetic drugs and agents common to clinical practice. Content includes chemistry of anesthetic drugs, uptake, distribution, and toxicology of anesthetic drugs. The human patient simulator is incorporated into the learning process to reinforce principles introduced in class. Content allows for integrating and application of science learned in this course to nurse anesthesia practice.

Course Number: RNA602

Course Title: Applied Biochemistry for Nurse Anesthetists

Credits: 3 credits

Course Description: This course is intended to provide the students with an understanding of the biochemical basis of physiological processes including abnormal derangements. Students are expected to apply the biochemical principles to nurse anesthesia practice. Major topics covered include: 1) structures of the nucleic acids, synthesis of DNA, RNA and proteins; 2) protein structure and function, enzyme, pH and pKa, acids, bases, and buffers; 3) common metabolic pathways of carbohydrates, lipids, and amino acids; and 4) special topics including malignant hyperthermia. Lectures are supplemented by case studies and clinical correlate presentations related to anesthesia.

Course Number: RNA603

Course Title: DNP-Advanced Anesthetic and Pharmacological Principles of Anesthesia

Credits: 5 credits

Course Description: This core course is the second of two courses that provides the foundation for nurse anesthesia practice. The course is designed to prepare the student for the best evidence based decision making for the complex issues of anesthesia that the nurse anesthetist encounters in clinical practice. Integration of core concepts advanced practice concepts into tailored patient specific techniques and practices of anesthesia management are presented using lecture, seminars, simulation lab, practice application, oral boards, and exams. Broader concepts of the role, leadership, and wellness the advanced practice nurse are incorporated throughout the course.

Course Number: RNA604

Course Title: DNP-Clinical Pharmacology and Coexisting Disease of Anesthesia

Credits: 3

Course Description: This course integrates the clinical pharmacology of anesthesia with co-existing disease states and the perioperative implications to anesthesia care. Content is paired and coordinated in conjunction with the advanced principles of anesthesia course and expands on physiology and pathophysiology taught in previous semesters. Additionally, content is integrated and applied to nurse anesthesia practice.

Course Number: RNA691

Course Title: MSN-Basic Anesthetic and Pharmacologic Principles of Anesthesia

Credits: 5

Course Description: This course integrates basic principles of anesthesia with pharmacologic chemical and physical principles involved in the administration of anesthetic drugs and perioperative management of the surgical patient. The basic principles of anesthesia covered include fluid management, equipment and monitoring, regional anesthesia, and beginning airway management. Pharmacologic principles discussed include states and properties of matter, laws governing the behavior of gases, flow and vaporization as well as the description of anesthetic drugs and agents common to clinical practice. Content includes chemistry of anesthetic drugs, uptake, distribution, and toxicology of anesthetic drugs. The human patient simulator is incorporated into the learning process to reinforce principles introduced in class.

Course Number: RNA693

Course Title: MSN-Advanced Anesthetic and Pharmacological Principles of Anesthesia

Credits: 5

Course Description: This core course is the second of two courses that provides the foundation for nurse anesthesia practice. The course is designed to prepare the student for decision making for the complex issues of anesthesia that the nurse anesthetist encounters in clinical practice. Situation-specific techniques and practices of anesthesia management are presented using lecture, seminars, simulation lab, practice application, oral boards, and exams.

Course Number: RNA694

Course Title: MSN-Clinical Pharmacology and Coexisting Disease of Anesthesia

Credits: 2

Course Description: This course integrates the clinical pharmacology of anesthesia with co-existing disease states and the perioperative implications to anesthesia care. Content is paired and coordinated in conjunction with the advanced principles of anesthesia course and expands on physiology and pathophysiology taught in previous semesters. Additionally, content is integrated and applied to nurse anesthesia practice.

Course Number: RNA801

Course Title: DNP-Clinical Practicum and Seminar for Nurse Anesthesia Practice I

Credits: 1

Course Description: This course provides the foundation for the art and science of nurse anesthesia. The beginning clinical practicum will introduce the student to the anesthetic equipment and operating room environment. Basic, guided instruction is provided to begin to integrate the didactic principles provided in Patient Assessment, Basic and Advanced Principles of Anesthesia, Co-existing Disease and Clinical Pharmacology into the clinical practice settings. A targeted review of human anatomy will be integrated into the course during discussions of regional anesthesia or airway management as determined by the coordinator. This course is designed to give the student practical information regarding the administration of safe anesthesia with a significant amount of preceptor intervention.

Course Number: RNA802

Course Title: DNP-Clinical Practicum and Seminar for Nurse Anesthesia Practice II

Credits: 8

Course Description: This course is a clinical course and continues providing the foundation for the art and science of nurse anesthesia with a significant amount of preceptor intervention. This clinical practicum will begin with a review of the basic clinical anesthesia topics presented in Phase I and continue the introduction of the novice student to anesthetic equipment and the operating room environment. Progressive, guided instruction is provided for the clinical management of patients undergoing all forms of anesthesia. Legal and ethical aspects of anesthesia delivery and patient interaction strategies are also reviewed.

Course Number: RNA803

Course Title: DNP-Clinical Practicum and Seminar for Nurse Anesthesia Practice III

Credits: 8

Course Description: This clinical course focuses on individual in-depth study of basic science, basic and advanced clinical nurse anesthesia principles as well as a continued review of equipment/monitoring and professional aspects of the career. The student learns to manage more complex patients with an emphasis on advanced monitoring techniques, use of pharmacological agents, and handling higher stress situations. Students develop and utilize practical clinical applications of nurse anesthesia theory. They are individually assigned to specialty areas and formally evaluated at the end of each rotation. Case presentations and group discussion designed to assist the student in conceptualizing, analyzing, and evaluating various nurse anesthesia strategies are included.

Course Number: RNA804

Course Title: DNP-Clinical Practicum and Seminar for Nurse Anesthesia Practice IV

Credits: 5

Course Description: This clinical course is a continuation of advanced clinical nurse anesthesia administration. The student will continue to progress toward greater independent practice. Emphasis is on management of advanced anesthetic principles. Students continue out rotations in specialty areas. This semester will include a Professional Aspects/Wellness Focused Seminar. This is primarily a clinical semester with 4 credits reflected in the Clinical area and one as a seminar with specific topics listed on the semester schedule. The deliverable for this semester is

a Clinical Case Report that will be a part of the student's DNP portfolio.

Course Number: RNA805

Course Title: DNP-Clinical Practicum and Seminar for Nurse Anesthesia Practice V

Credits: 8

Course Description: This clinical course is the continuation of advanced nurse anesthesia administration. In this semester the students synthesize and integrate all aspects of anesthesia care. Students should be preparing for entry into practice. The didactic review for this semester will focus on Cardiac/Neurology/Renal and Trauma Anesthesia.

Course Number: RNA806

Course Title: DNP-Clinical Practicum and Seminar for Nurse Anesthesia Practice VI

Credits: 8

Course Description: This clinical course is the continuation of advanced nurse anesthesia clinical administration. In this semester the students complete the synthesis and integration of all aspects of anesthesia care. Students are prepared to transit from student to independent practitioner status. The first part of this semester is a continued didactic review of Phase I topics. During the remainder of the semester the student will be focused on preparing for the National Board Certification Exam. This is the final clinical semester and the main focus continues to be on clinical anesthesia. There will be Operational Leadership in Anesthesia Seminar held during the second portion of the semester.

Course Number: RNA 891

Course Title: MSN-Clinical Practicum and Seminar for Nurse Anesthesia Practice I

Credits: 5

Course Description: This clinical course provides the foundation for the art and science of nurse anesthesia. The beginning clinical practicum will introduce the student to the anesthetic equipment and operating room environment. Progressive, guided instruction is provided to provide for the clinical and ethical management of patients undergoing all forms of anesthesia. Legal and ethical aspects of anesthesia delivery and patient interaction strategies are also covered. This course is designed to give the student practical information regarding the administration of safe anesthesia with a significant amount of preceptor intervention.

Course Number: RNA892

Course Title: MSN-Clinical Practicum and Seminar for Nurse Anesthesia Practice II

Credits: 8

Course Description: This clinical course is a graduated, guided instruction in the clinical management of patients receiving various types of anesthesia. Students will discuss basic science, basic and advanced principles of clinical nurse anesthesia as well as individualize their study of equipment/ monitoring and professional aspects of the career. Focus is on the preparation and planning for anesthesia, including administration of anesthesia for patients exhibiting more complicated pathophysiology. Emphasis is on more advanced technical instruction and experience. Correlation of didactic and clinical materials and the continuous evaluation of student's progress are integral to this course. Students may begin some specialty areas and will be formally evaluated at the end of each rotation.

Course Number: RNA893

Course Title: MSN-Clinical Practicum and Seminar for Nurse Anesthesia Practice III

Credits: 8

Course Description: This clinical course focuses on individual in-depth study of basic science, basic and advanced clinical nurse anesthesia principles as well as a continued review of equipment/monitoring and professional aspects of the career. The student learns to handle more difficult specialized patients. Emphasis is on more complex management with advanced monitoring techniques, use of pharmacological agents, and handling higher stress situations. Students develop and utilize practical clinical applications of nurse anesthesia theory. They are individually assigned to specialty areas and formally evaluated at the end of each rotation. Case presentations and group discussion designed to assist the student in conceptualizing, analyzing, and evaluating various nurse anesthesia strategies are included.

Course Number: RNA894

Course Title: MSN-Clinical Practicum and Seminar for Nurse Anesthesia Practice IV

Credits: 5

Course Description: This clinical course is a continuation of advanced clinical nurse anesthesia administration. The student will continue to progress toward greater independent practice. Emphasis is on management of advanced anesthetic principles. Students continue rotations in specialty areas. This semester will include a Professional Aspects/Wellness Focused Seminar.

Course Number: RNA895

Course Title: MSN-Clinical Practicum and Seminar for Nurse Anesthesia Practice V

Credits: 8

Course Description: This clinical course is the continuation of advanced nurse anesthesia administration. In this semester the students synthesize and integrate all aspects of anesthesia care. Students are prepared to transition from student to independent practitioner status.

PhD Courses

Course Number: PHD800

Course Title: Scholarship of Discovery

Credits: 3

Course Description: This foundation course provides students with an opportunity to conceptualize and develop a phenomenon in their area of interest that is relevant to the knowledge gaps of relevance to federal nursing service, policy and research. Processes of intellectual activity will be emphasized to enable students to address the following competencies: (1) critically identify and evaluate gaps in current knowledge in a scientific domain, (2) systematically investigate, evaluate and synthesize existing literature and, (3) engage in constructive scholarly critique and discourse. Using experiential observations, as well as published theoretical and research literature, students will begin to explore nursing phenomenon from concept analysis to synthesis in support of their selected area of scientific study and scholarly development.

Course Number: PHD810

Course Title: Ethics in Science

Credits: 2

Course Description: This course provides students with the foundations to explore the relationship of ethics to science including ethical issues in scientific research. In our modern day society, science has become an integral part of our society and future researchers need greater awareness about, and critical insights into, its ethical dimensions in a contemporary and global world. The ability to identify, analyze, and evaluate ethical issues and arguments pertaining to science is critical to conducting research. To that end the course proceeds in three sections. First, students will review health care ethics and the current structure of ethical oversight for health care research. Then students will apply ethical theory and principles undergirding that structure including existent conceptual controversies in the discipline. The final section will allow students to employ their understanding of structure and theory to the current difficult issues in the field of research ethics.

Course Number: PHD811

Course Title: Research Ethics

Credits: 3

Course Description: This required core PhD course focuses on the ethics of biomedical research and provides an overview of the issues and the roles of ethical theories and principles that undergird ethically responsible conduct of research. It explores the complex and often contemporary issues raised by human subject research. Recent scientific developments have raised ethical questions and have resulted in regulatory investigations and a revisiting of protective guidelines. How patients have been recruited into research and how they were benefited or harmed by the intervention has fueled public debate and underscore the need for scientist in biomedical, behavioral, public health and other areas to understand core ethical issues and guidelines in research ethics. This course will begin by examining, in depth, the seminal cases of unethical use of human subjects in research, the development of regulations governing research that shape our current understanding of the ethical conduct of research with human

subjects, and the current mechanisms for research oversight nationally and internationally.

We will discuss the ethical and legal aspects of topics such as, but not limited to, informed consent, decisional capacity, privacy and confidentiality, research design, risk-benefit assessment, use of “vulnerable “ subjects, inducements, conflicts of interests, disclosure of research findings, tissue use, vaccine development, and international research. Lastly, we will address research misconduct, authorship and peer review, intellectual property, and the importance of continued learning in the field and how to remain abreast of changes in federal regulations. Throughout the course, research ethics and law content will be integrated in class discussions and assignments; invited faculty will come from a variety of disciplines and represent scholars and officials who are nationally recognized leaders in the field of human subjects research.

Course Number: PHD812

Course Title: Public Policy

Credits: 3

Course Description: This required core course considers the legislative, executive, judicial, institutional, consumer, and provider forces that form and shape health care in the United States. The purpose of the course is to explore the role of research in public policy analysis – both a social and political activity generally related to population health in military and federal health care. During the course, students will identify and critically analyze laws, regulations, policies and non-governmental factors that influence health care. Special emphasis is accorded to those factors affecting providers (nurses, physicians, public health administrators and others) practicing in the federal health care sector. Specific issues to be addressed include providing a strong conceptual foundation of the rationale for, and the limitations, to public policy; systematic approaches used to conduct a policy analysis; and analytic techniques appropriate to design a comprehensive policy analysis.

Course Number: PHD813

Course Title: Theoretical Models

Credits:

Course Description: Theoretical frameworks that are applicable to federal and military health practice and research, advance knowledge for guiding professional practice and health policy. The development and testing of concepts, the generation of middle range theories and the critique and evaluation of such is the focus of this course. Students will identify, critique, and build concepts, theories and frameworks that are useful in their area of scientific interest. Emphasis will be evident for the applicability of integrating theory, clinical practice and research relevant to the federal and military health care systems.

Course Number: PHD814

Course Title: Philosophy of Science

Credits: 3

Course Description: This core course prepares PhD students to systematically analyze and evaluate a variety of perspectives in philosophy of science through the study and exploration of epistemology, metaphysics, the scientific method, foundations of modern science and the philosophy of human and cultural development. The evolution and dominant themes underpinning philosophies of science will be examined. Emphasis will be given to experiential

dialogue, writing, language and thought related to historical philosophical thinkers and scientists in the pursuit of understanding the progress and future directions for knowledge development relevant to health care in the global and federal sector.

Course Number: PHD820

Course Title: Research Rotation I

Credits: 1

Course Description: This course will provide a supervised research experience with a USU faculty member in collaboration with the site advisor at a military or federal institution to guide the student in acquiring an understanding of the roles and responsibilities of research scientists. The rotation is an individualized experience for the integration and synthesis of philosophical, scientific and methodological dimensions of planning and conducting research within intensive environments. Each student is required to take three research rotations depending on the breadth and depth of a student's area of investigation and the opportunities available to work with senior investigators. The rotations will be selected in consultation with the faculty and site advisor. Each research experience will entail a total of approximately 50- 60 hours a quarter which may include a variety of experiences including but not limited to- direct subject contact, webinar opportunities, staff or research meetings, journal clubs, and scientific review panels. The intent of the experience is to provide opportunities for students to become engaged in diverse, intensive and rigorous research environments to include the clinical, health services, and behavioral and social sciences.

Course Number: PHD821

Course Title: Research Rotation II

Credits: 2

Course Description: This course will continue the supervised research experience with a PhD faculty member in collaboration with the site advisor at a military or federal institution. This rotation will guide the student in acquiring an understanding of specific research techniques and approaches to include the areas of basic science, animal studies, the behavioral and social sciences, health services research, health policy and ethical investigations using qualitative, quantitative and mixed methods. The rotation is an individualized experience for the integration and synthesis of philosophical, scientific and methodological dimensions of planning and conducting research within intensive research environments. Each student is required to take a series of research rotations in unique settings which utilize a particular type of research technique. The rotations will be selected in consultation with the faculty and site advisor. Each individual research experience will entail a total of approximately 10 hours of immersion in separate research areas over the quarter for a total of 60 hours. Each experience will be tailored for the student but may include a variety of experiences including but not limited to, direct subject contact, laboratory settings, webinar opportunities, staff or research meetings, journal clubs, and scientific review panels. The intent of the experience is to provide additional opportunities for students to become engaged in diverse, intensive and rigorous research environments.

Course Number: PHD822

Course Title: Research Rotation III

Credits: 2

Course Description: The purpose of this research internship is to provide an immersion experience in selected research areas which align with the students' respective research foci. The

course is individually tailored to be a structured research experience which allows students to integrate practical and theoretical knowledge in a specific scientific area. The intent of this experience is for the students to utilize the concepts learned in PhD 820 Research Experience I with the methods explored in PhD 821 Research Experience II to formulate a synthesis project during this course. Students are encouraged to pursue practicum experiences which will enhance and strengthen their developing research topic.

Course Number: PHD823

Course Title: Research Internship I

Credits: 2

Course Description: The Research Internship I course is a focused exploration and synthesis of theories and conceptual models relevant to a specific scientific area. The intent of this course is to begin laying the groundwork for the dissertation thesis. The course will be individually tailored as a structured investigation and exploration of the relevant theoretical models for a unique research focus chosen by the student. This course is intended to begin the application of the knowledge and experience gained by the student in the Research Experience courses.

Course Number: PHD830

Course Title: Approaches to Scientific Inquiry

Credits: 3

Course Description: This advanced research methods course provides students with a foundation in traditional and novel approaches to design, measurement and statistical inference. Building on the content of the course, students will focus on the logic of inference with respect to the philosophical basis of scientific research to issues of sampling, measurement, scaling, and statistical interpretation. In an overview of models of research design, students will become familiar with the validity and reliability issues common to all single-factor and multi-factor studies as well as single subject, multiple group, longitudinal, correlational, and non-experimental methods. In a rigorous exploration of models of research design, students will advance their ability to conceptualize a research problem and design a sound approach for its investigation

Course Number: PHD831

Course Title: Qualitative Methods

Credits: 3

Course Description: Through participation in this course, students will examine the philosophical and theoretical orientations of a variety of qualitative methods including but not limited to phenomenology and grounded theory, concurrently considering sampling, research designs, paradigm specific concerns with special emphasis on participant and researcher related ethical issues, and sources of potential bias and rigor. Examples of data collection and analysis for qualitative research will involve traditional approaches as well as newer computer programs that aid in data analysis (e.g., Atlas ti, NVivo, etc.). The course is intended to prepare students to design, conduct and analyze qualitative studies that address phenomena that require systematic exploration required to advance science in the military and federal health systems.

Course Number: PHD832

Course Title: Survey Methodology

Credits: 3

Course Description: This introduction to survey methodology is developed in collaboration with the distinguished faculty of the Institute for Social Research (ISR) at the University of Michigan in Ann Arbor. The course is specifically designed for USU PhD students by compressing a full term course into one intensive week of instruction (36 hours) to be held onsite in Ann Arbor. The ISR has provided a Summer Institute for over 50 years and has a world renowned reputation for educating survey methodologists in both design and statistical analysis.

PhD 832 is designed as a graduate level introduction to the specialized field of survey methodology. The field of survey methodology draws on theories and practices developed in several academic disciplines—mathematics, statistics, psychology, sociology, computer science, and economics. The course exposes the student to research literatures that use both observational and experimental methods to test key hypotheses about the nature of human behavior that affect the quality of survey data. To become an accomplished professional in the survey research field requires a mastery of research literatures as well as experience designing, conducting, and analyzing surveys.

The course uses *total survey error* as a framework to discuss the properties of sampling frames, sample designs, modes of data collection, field administration and the survey interviewer, nonresponse issues, question wording, measurement error, post-survey processing, and estimation in surveys. Lectures and course readings assume that students understand basic statistical concepts and have exposure to elements of social science perspectives on human behavior as well as basic research design and methods. It presents statistical concepts and techniques in sample design, execution, and estimation, and models of behavior describing errors in responding to survey questions. For those lacking such a background, supplementary readings are recommended.

Course Number: PHD833

Course Title: Application of Analytic Methods and Statistical Techniques

Credits: 3

Course Description: This course is designed to develop statistical reasoning through application of analytic methods in the design of a data analysis plan for a quantitative research proposal. Students will build on knowledge and skills acquired in *PhD 830 Approaches to Scientific Inquiry, Biostatistics, and use of the Statistical Package for the Social Sciences (SPSS)* in formulating analytic approaches to research questions and/or hypotheses, conducting appropriate statistical analyses, making interpretations of statistical output, and constructing write-up of results relative to statistical and/or clinical significance. The final exam will provide students with an opportunity to integrate knowledge of scientific inquiry, biostatistics, and application of analytic methods by constructing a data analysis plan, conducting statistical analysis, and orally reporting the interpretation of statistical results.

Course Number: PHD840

Course Title: Emerging Scholars Seminar I

Credits: 1

Course Description: This is the first in a series of pre-doctoral, pre-candidacy seminars. The purpose of this course is to facilitate the transition of the emerging PhD nurse scientist from the role of knowledge consumer to knowledge creator. Faculty will act as catalyst to lead discussions, encourage individual philosophical growth and provide the appropriate milieu in

which the students can begin to explore their new role. Activities and discussions will assist students with epistemologic, ontologic and scholarly identity development within their peer community. This course will include an introduction of the importance of stress reduction techniques for the PhD student as applicable to the health/wellness continuum. An ongoing analysis of self/group identified needs or interests will be used to develop specific activities.

Course Number: PHD841

Course Title: Emerging Scholars Seminar II

Credits: 1

Course Description: This is the second in a series of Pre-doctoral Seminars. The purpose of this course is to continue the facilitation of the transition of the PhD nurse scientist from the role of knowledge consumer to knowledge creator. Faculty will act as catalyst to lead discussions, encourage individual philosophical growth and provide the appropriate milieu in which the students can begin to explore their new role. Activities and discussions will assist students with epistemologic, ontologic and scholarly identity development within their peer community. Emphasis this quarter will include integration of physical, emotional and spiritual health maintenance strategies for stress reduction in the PhD student. An ongoing analysis of self/group identified needs or interests will be used to develop specific activities.

Course Number: PHD842

Course Title: Emerging Scholars Seminar III

Credits: 1

Course Description: This is the third in a series of pre-doctoral, pre-candidacy seminars. The purpose of this course is to facilitate the transition of the emerging PhD nurse scientist from the role of knowledge consumer to knowledge creator. Faculty will act as catalyst to lead discussions, encourage individual philosophical growth and provide the appropriate milieu in which the students can begin to explore their new role. Activities and discussions will assist students with epistemologic, ontologic and scholarly identity development within their peer community. Emphasis this quarter will include a presentation of a scholarly review of literature on a topic related to a scientific research/philosophical interest. Health/wellness activities will emphasize ergonomic work environment stress reduction techniques. An ongoing analysis of self/group identified needs or interests will be used to develop specific activities.

Course Number: PHD851

Course Title: Stress and Trauma in the Military Context

Credits: 3

Course Description: This interdisciplinary course is designed to provide a sound theoretical exploration of the phenomenon as a foundation for the scientific investigation of stress and trauma in the military context.

Course Number: PHD870

Course Title: Health Informatics for Health Service Researchers

Credits: 4

Course Description: The course provides students a conceptual framework for understanding health informatics and information technology as applied in the healthcare environment. The course will include in-depth discussion of ‘meaningful use’ of technology in health care systems

with emphasis on leveraging technology to improve quality and efficiency in care delivery. The course will also highlight successes and failures in implementing health information technology and the critical role that informaticians play in each step of the developmental process from idea inception through systematic implementation. There are four major focus areas within the course that include: major recurring themes in health informatics, application of health informatics, engaging health care organizations, and emerging technologies/future. Students will have the opportunity to examine health informatics within the context of the entire federal sector (e.g. DoD, VA, IHS). *The course is supported through collaboration between the Uniformed Services University and the National Library of Medicine. Several of the invited speakers are scientists employed by the NLM or other National Institutes of Health; entities, who have invested the time to help shape the curriculum, prepare for and deliver the content.*

Course Number: PHD871

Course Title: Patient Safety & Quality for Health Services Researchers

Credits: 4

Course Description: This course integrates theory and conceptual frameworks at use in patient safety, clinical quality, and in implementation science. The course is designed for students (both clinically-oriented and non-clinical) with patient safety & quality exposures but minimal understanding of health informatics and for those with health informatics exposure but minimal introduction to patient safety & quality. The curriculum includes three basic building blocks: 1) basic theories, frameworks, and concepts in patient safety & quality, 2) health information systems and technologies, and 3) themed challenges in patient safety & quality being addressed with technology solutions (either exclusively or as a component). The course will emphasize advancing the science of patient safety & quality. **The course is a part of an emerging graduate education partnership between the Agency for Healthcare Research & Quality and the Uniformed Services University.**

Course Number: PHD 872

Course Title: Health Communications

Credits: 3

Course Description: Generally, health communication is the application of communication theory and processes to health promotion and disease prevention, including the design of messages and interventions. As a discipline, health communication is inherently multidisciplinary, drawing on the literature and expertise of psychology, the humanities, public health, medicine, nursing, and social marketing. Health communication scholars also represent the full continuum of epistemological and ontological paradigms and pursue inquiry with a wide diversity of methodologies.

Course Number: PHD881

Course Title: The Principles Scholarly Writing

Credits: 2

Course Description: This course is designed to foster scholarly writing skill development.

Issues relevant to professional writing, publication and the grant writing process are addressed. Seminar topics include challenges to successful writing (writer's block, procrastination, and time management), journal selection, authorship guidelines and the relative importance of scientific impact factors. Faculty-facilitated discussions center on techniques to create manuscripts or grant applications that are organized, objective, concise, and contain linear arguments supported by key literature. This course provides opportunities for students to receive constructive feedback and to prepare a manuscript to the point of submitting it for publication.

Course Number: PHD890

Course Title: Independent Study in Applied Biochemistry

Credits: 2

Course Description: This course is intended to provide the students with an understanding of the biochemical basis of physiological processes including abnormal derangements. Students are expected to apply the biochemical principles to nursing science. Major topics covered include: 1) structures of the nucleic acids, 2) synthesis of DNA, RNA and proteins; 2) protein structure and function, enzyme, pH and pKa, acids, bases, and buffers. During the course, students will identify and critically analyze laws, regulations, policies and non-governmental factors that influence health care. Special emphasis is accorded to those factors affecting providers (nurses, physicians, public health administrators and others) practicing in the federal health care sector. Specific issues addressed include a strong conceptual foundation of the rationales for, and the limitations to public policy; how to do a policy analysis; and analytical techniques used to conduct policy analysis.