

COURSE CATALOG 2016 CALENDAR YEAR

DOCTOR OF NURSING PRACTICE PROGRAM

NURSING CORE COURSES

Course	Title	Credits
GSN701	Advanced Practice Role	1
GSN702	Organizational and Systems Leadership in Healthcare	3
GSN703	Ethics and Policy in Federal Health Systems	3
GSN704	Population Health and Epidemiology in Advanced Practice	4
GSN705	Health Economics and Advanced Practice	2
GSN706	Healthcare Informatics	3
GSN900	Healthcare Research	2
GSN901	Statistical Measures and Analytic Methods: Application and Critique	2
GSN903	Translating Evidence Into Practice	3
GSN906	DNP Project I-III	6
Nursing Core Total		29

Course Number: GSN701

Course Title: Advanced Practice Role

Course 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

Course Credits: 3

Course Description: This core course provides knowledge and skills relevant to systems leadership in clinical practice with a focus on knowledge application within the student's specific Advanced Practice Registered Nurse (APRN) role when addressing complex clinical practice, safety, and organizational issues. Course content will be drawn from established literature and subject matter experts 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

Course 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 in peacetime and 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 policy.

Course Number: GSN704

Course Title: Population Health and Epidemiology in Advanced Practice

Course 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

Course Credits: 2

Course Description: This online course is designed to facilitate a thorough understanding of fundamental principles and concepts of health economics as applied to advance practice nursing to improve outcomes in support of quality and cost-effective care within the federal healthcare system. Students will be introduced to health economic principles with a focus on fiscal aspects of evidenced-based assessment, planning, analysis, implementation and evaluation of quality outcomes from both the micro and macro-level system perspective. Additionally, students will explore specialty specific issues related to health economics supporting their respective Advanced Practice roles (FNP, WHNP, RNA, PMHNP, and AGCNS).

Course Number: GSN706

Course Title: Healthcare Informatics

Course Credits: 3

Course Description: This required core course focuses on the application and innovation related to the collection, development, organization, analysis, and dissemination of information and technology in an interdisciplinary health care environment. Students are introduced to the role of the healthcare informaticist, healthcare 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 Military Health System (MHS). Students will also gain an understanding of the ethical considerations, laws, and policies governing the oversight of healthcare information systems. Students will learn how to apply theory to the design, use, and manipulation of 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.

Course Number: GSN900

Course Title: Healthcare Research

Course Credits: 1

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.

Course Number: GSN901

Course Title: Evidence Based Practice

Course Credits: 2

Course Description: The content in this core course builds on the subject matter from GSN 900 Healthcare Research. 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. 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

Course Credits: 2

Course Description: The content in this core course builds on the subject matter from GSN900 Healthcare Research and GSN901 Evidence Based Practice. The focus of this course is the development of critical appraisal skills, to include statistical reasoning, in advanced practice nursing students through the critique of analytic methods and statistical measures used in the healthcare literature. In a mentored setting, 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: Translating Evidence Into Practice

Course Credits: 3

Course Description: This course provides students with an opportunity to explore philosophical models for translation of evidence into practice and policy. The course builds on previous knowledge in analytic methods, policy, systems, and leadership, and includes an overview of the science of and multifactorial influences on translation of evidence into practice. This course culminates in the development of the scholarly inquiry project proposal specifically seeking to improve healthcare and systems outcomes for populations and communities within Military/Federal Health Systems.

Course Number: GSN906

Course Title: DNP Project I-III

Course Credits: 6

Course Description: The Doctor of Nursing Practice (DNP) project is designed to expand students' ability to apply critical thinking, analytical reasoning, and decision-making skills to clinical and systems-based problems. The focus of the DNP project is translating research into practice in the form of a practice or system improvement. Results will enhance students' ability to resolve complex client health problems, and improve processes supporting safe, effective, patient-centered care. The DNP project is organized by semester across the EBP Enterprise: GSN900, 901A, 902, 903, and 906. Each course provides the academic preparation needed to support advanced translational knowledge and the leadership skills needed to complete iterative elements of the evidence-based clinical practice and/or systems level projects. The DNP project is supported by a collaborative team consisting of the Course Coordinators, Senior Mentors (Committee Chairs), Phase II Site Directors, and Team Mentors (Committee members).

ADVANCED PRACTICE CORE COURSES

Course	Title	Credits
GSN601	Advanced Anatomy	3
GSN602	Advanced Health Assessment	3
GSN603	Advanced Physiology	3
GSN606	Advanced Pathophysiology I	2
GSN608	Advanced Pathophysiology II	2
GSN607	Advanced Pharmacology I	2
GSN609	Advanced Pharmacology II	2
GSN710	Bedside Ultrasonography	2
GSN711	Integrative Medicine Methodologies	1
Nursing Core Total		20

Course Number: GSN601

Course Title: Advanced Anatomy

Course Credits: 3 credits

Course Description: This foundational didactic and human dissection course is designed to facilitate a thorough understanding of human anatomy. It is a specialized course building on basic knowledge attained in undergraduate nursing courses to expand the understanding and integration of human anatomy into clinical practice of the advanced practice nurse. This knowledge is expected to enhance understanding of human anatomy across the spectrum in the student's advanced practice clinical settings as well as courses in physiology, pathophysiology, and patient assessment. The course will be presented in several different modalities including didactic lectures and laboratory experiences to include cadaveric pro-sections and dissections with the assistance of a web-based dissecting guide and learning platform. Clinical application of anatomical structures for each advanced practice nursing specialty will be discussed throughout the course, as will operational readiness issues.

Course Number: GSN602

Course Title: Advanced Health Assessment

Course Credits: 3 credits

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

Course Credits: 3 credits

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: GSN606

Course Title: Advanced Pathophysiology I

Course Credits: 2 credits

Course Description: In this the first in two core course sequence in which 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: GSN607

Course Title: Advanced Pharmacology I

Course Credits: 2 credits

Course Description: This is the first of two pharmacology courses and will be taught in Fall 1 and delivered concurrently with pathophysiology. 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: GSN608

Course Title: Advanced Pathophysiology II

Course Credits: 2 credits

Course Description: In this the second in two core course in a two course sequence in which 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: GSN609

Course Title: Advanced Pharmacology II

Course Credits: 2 credits

Course Description: This is the second of two pharmacology courses taught in the first spring semester that runs concurrent with pathophysiology. 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: GSN710

Course Title: Bedside Ultrasonography

Course Credits: 1 credit

Course Description: This vertical, integrated bedside ultrasound course is designed to enhance and augment concepts learned in foundational science courses such as anatomy, physiology, pathology and supports clinical decision-making. The content reinforces the military-specific applications and aspects of ultrasound that can be especially useful in primary care, inpatient as well as austere settings such as combat and humanitarian assistance environments. Basic principles of ultrasonography are interwoven with hands-on experiences to offer students the opportunity to experience a number of different bedside ultrasonography assessments including FAST (Focused Assessment with Sonography in Trauma), RUSH (Rapid Ultrasound in Shock and Hypotension), Musculoskeletal, Cardiology, Deep Vein Thrombosis, Renal, Airway/Ventilation, Thoracic Trauma, Ocular, Aorta, Hepatobiliary, Thyroid and Female Pelvic Assessments.

Course Number: GSN711

Course Title: Integrative Medicine Methodologies

Course Credits: 1 credit

Course Description: This introductory course is designed to expand student understanding of treatment options with the goal of improving patient outcomes. Course content introduces aspects of integrative medicine that are useful in all settings, as well as techniques that have been found to be particularly useful in military settings. Basic principles of integrative medicine are interwoven with hands on application of techniques such as acupuncture, guided imagery and progressive relaxation. Students will be asked to apply Evidenced Based principles to enhance

their understanding of how these alternative approaches to healthcare can be effectively integrated into clinical practice..

ELECTIVE COURSES

Course	ELECTIVES	Credits
GSN721	Interdisciplinary Health Policy	2
PDR4127	Media Communication in Health Care	2

Course Number: GSN 721

Course Title: Interdisciplinary Health Policy

Course Credits: 2 credits

Course Description: This course will provide students with an introduction as to how public policy is established and modified over time. In a small group interactive setting, students will practice the critical nature of interdisciplinary collaboration and the substantive and historical rationale behind evolving social policies. The students will evaluate how individuals can influence national policy and explore similarities and differences in policy processes (legislative vs. administrative, for example) across a variety of domains, including policies shaping healthcare, employment, family, the media, etc. Students from both nursing and psychology will collaborate on joint projects, including field experiences. The historical assumptions behind different proffered professional roles will be explored.

Course Number: PDR4127

Course Title: Media Communication in Health Care

Course Credits: 2 credits (P/F)

Course Description: Every great communicator has to be a student of communication. The goal of this course is to allow post-clerkship students at USU to improve their use of media, their ability to communicate and the confidence to assist others in media use. By the end of the 4 week elective, students will: Complete 10 Lessons over the 4 week course: a. Understanding, influencing and reacting to “First impressions”, b. Explore Media Theory, c. Speaking without Words – Practicing Nonverbal Clinical Communication Skills Create a memorable message with impact, d. Using only your voice as a tool, POD casts, radio and telephone skills, e. Creating the most impactful video message, f. Nail your Clinical Presentations and Job Interviews – Speak with Confidence!, g. Managing social media messaging, h. Address stage fright through rehearsal i. Overcoming challenging presentations.

AG-CNS DNP SPECIALTY SPECIFIC COURSES

Course	Title	Credits
CNS600A	Principles of Outcomes Management for CNS Practice	2
GSN601A	CNS Role Application across the 3 Spheres of Influence	4
CNS603	Business Administration for Highly Reliable Healthcare Organizations	3
CNS605	Medical Facility Master Planning and Hospital Architectural Design	3
CNS606	Trauma Management in CNS Practice	2
CNS608	Performance Metrics in Outcomes Management	3
CNS610	Advanced Diagnosis and Management in Adult-Geriatric Acute Care	3
GSN708	Advanced Diagnosis and Management in Adult Primary Care	5
GSN709	Advanced Diagnosis and Management in Geriatric Primary Care	1
GSN723	Reflective Practice: Contextual Thinking	1
CNS802	CNP Practicum for CNS Practice I: Advanced Concepts	4
CNS803	DNP Practicum for CNS Practice II: Systems Assessment	4
CNS804	DNP Practicum for CNS Practice III: Strategic Planning in Healthcare	3

Course	Title	Credits
CNS805	DNP Practicum for CNS Practice IV: Capstone Immersion	6
AG-CNS Role/Population Specific Total		44

Course Number: CNS 600A

Course Title: Principles of Outcomes Management for CNS Practice

Course Credits: 2

Course Description: Outcomes management (OM) is critical to assessing interventions, identifying effective practices, and identifying practices that need improvement. The requirement to measure outcomes by federal and state regulatory agencies has spurred organizations to actively monitor outcomes as a means for evaluation and as a requirement for accreditation and certification. As such, management of outcomes in CNS practice is critical to demonstrate the impact of CNS contributions to the organization. This course will provide the foundation for measuring outcomes related to CNS competencies and the three spheres of influence (patient/client, nurse, and organization/system) of CNS practice. Students will be introduced to the practical application of OM including methods to collect, analyze, and share outcome data.

Course Number: CNS 601A

Course Title: CNS Role Application across the 3 Spheres of Influence

Course Credits: 4

Course Description: This course allows students to engage in systems thinking within the domains of CNS practice across the three spheres of influence (patient, nurse, organization). Students will engage in consultative/collaborative relationships with inter-professional health care team members focusing on comprehensive wellness/illness assessments, education, clinical management, and problem solving activities for the Adult/Gerontology patient population. Incorporating adult learning principals, change management theory, and cultural awareness students will design an evidence-based patient education brochure/pamphlet to increase the patient's knowledge of the perioperative process. Additionally, to support perioperative patient care on a national level, students will develop and present a professional nursing education activity through the Association of perioperative Nurses (AORN) via Webinar. Within the context of the course, students will research critical processes, review/analyze regulatory and practice guidelines, and evaluate patient safety programs according to Joint Commission standards for the Adult/Gerontology patient population within the perioperative environment.

Incorporating federal/national regulations, organizational practice standards, and evidence-based practices, students will conduct a system level assessment of current policy and practice to identify weaknesses/gaps and provide leadership with an analysis of current state and recommendations for improvement. Additionally, students will collaborate with hospital professionals utilizing the Association for Professionals in Infection Control (APIC) surveillance guidelines to identify and minimize the potential for hospital acquired infections with particular attention to surgical site 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 (CNS) throughout the perioperative environment.

In support of the development of advanced practice clinical skills and expertise, students will utilize evidence-based techniques and synthesize assessment data using critical thinking and clinical judgment to formulate differential diagnoses amenable to CNS intervention for the Adult/Gerontology patient population. Student's knowledge in support of direct care will be enhanced as they conduct comprehensive, surgically focused exams throughout the entire perioperative continuum of care (pre-operative, intra-operative, and post-operative). Strategies

will be utilized to meet the multicultural and diverse needs of the Adult/Gerontology 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 (CNS) in the perioperative environment.

Course Number: CNS603

Course Title: Business Administration for Highly Reliable Healthcare Organizations

Course 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 and improving patient outcomes. Students will utilize critical thinking skills that incorporate evidence to support best practices in the development of strategies focused on improving manpower and resource utilization. They will also critically analyze financial information and its impact on operational performance. The culmination of this course is the creation of a comprehensive business plan that demonstrates competencies supporting efficient and effective administration of resources for quality health care delivery across the organization.

Course Number: CNS605

Course Title: Medical Facility Master Planning and Hospital Architectural Design

Course 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: Trauma Management in CNS Practice

Course Credits: 2

Course Description: This course exposes students to the management of patients in contingency and trauma environments. The clinical nurse specialist (CNS) must have a keen understanding of patient management across the continuum of care supporting combat, peace-keeping and humanitarian missions. The foundation of this course is based on a combination of teaching techniques using scenarios supporting simulation exercises and student led classroom seminars to enhance the student’s critical thinking and advanced clinical practice. Students will examine the evidence related to the management of trauma patients as well as management of personnel, scarce resources, equipment and supplies in austere environments. To promote a team approach to management of trauma patients, students will participate in a simulated trauma scenarios that incorporate elements of TeamSTEPPS and support the role of the CNS. To enhance their clinical skills as advanced practitioners, students will also perform simulated lifesaving interventions on manikins and/or simulators (i.e., needle decompression, chest tube insertion, and lower leg fasciotomy). Additionally, students will identify outcome measures to ensure quality patient care is delivered across the patient, nurse, and organization spheres of influence with a focus on adherence to professional practice standards.

Course Number: CNS608

Course Title: Performance Metrics in Outcomes Management

Course Credits: 3

Course Description: This is a capstone course that demonstrates student attainment of Clinical Nurse Specialist (CNS) competencies supporting outcomes management. Students will create numerous comprehensive dashboards across the continuum that incorporates quality indicators with outcome metrics supported by professional standards and best practices. Demonstrating advanced clinical knowledge, students will critique the delivery of care within the acute care environment and develop clinical questions targeting opportunities to improve the care process for the adult and geriatric patient populations. Rounding out this course, students expand their management acumen by discovering the “evidence” in evidence-based design initiatives to support efficiency, productivity, and positive patient outcomes across the CNS spheres of influence.

Course Number: CNS610

Course Title: Advanced Diagnosis and Management in Adult-Geriatric Acute Care

Course Credits: 3

Course Description: This course is designed to build on GSN602, Advanced health Assessment; GSN708, Advanced Diagnosis and Management in Adult Primary Care: and GSN709, Advanced Diagnosis and Management in Geriatric Primary Care and build on the foundations of CNS practice. The course will develop, expand, and evaluate competence related to the student’s ability to develop a differential diagnosis and implement a patient specific plan of care for the Adult/Gerontology patient population within the perioperative environment of care. This course challenges the student’s critical thinking and problem solving abilities, as they integrate knowledge from health assessment, pathophysiology, and pharmacology to diagnose, and manage acute health conditions of the Adult/Gerontology surgical patients incorporating both pharmacologic and non-pharmacologic interventions.

The student’s 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 the Adult/Gerontology population using literature supporting evidence synthesis, and clinical guidelines/care pathways. Students will incorporate the development of clinical questions using the PICOT format to guide in the delivery of care for the Adult/Gerontology patient population across the Perioperative continuum of care. Within the context of the clinical activities, students will be exposed to patients in high acuity specialty areas including the cardiovascular, neurosurgery, diabetes, and oncology units/clinics. Student activities culminate in the ability to present a patient case study using evidence-based literature supporting the development of a plan of care that spans the entire perioperative continuum of care.

Course Number: GSN708

Course Title: Advanced Diagnosis and Management in Adult Primary Care

Course 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: GSN709

Course Title: Advanced Diagnosis and Management in Geriatric Primary Care

Course 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: GSN723

Course Title: Reflective Practice: Contextual Thinking

Course Credits: 1 credit

Course Description: This course explores the non-cognitive human elements present in every clinical encounter, and how these non-cognitive elements may impact a provider's cognitive process thereby influencing healthcare outcomes. Using personal experience, panel based sessions, online supplemental resources, written reflective essays, and small group discussions, students will be afforded the opportunity to consider their own reactions to various common and challenging situations in healthcare. They will thereafter examine their personal context, composed of one's unique and diverse life experiences, beliefs and values; analyze the implications of those reactions for patient care; and develop a plan to enhance the positive and mitigate the negative implications of those reactions. Through contemplation of the often unacknowledged assumptions and biases they bring into the clinical environment, students will increase their self-awareness, a critical skill for healthcare providers. Participation of students from the Graduate School of Nursing and the School of Medicine is designed to facilitate students' understanding that one's profession composes only a small part of one's personal context. Such understanding offers students the ability to identify their own predispositions to labeling others (patients and colleagues alike) based on a single identifiable factor and fosters an environment in which inter-professional education and thereafter inter-professional practice is most likely to be successful.

Course Number: CNS802

Course Title: DNP Practicum for CNS Practice I – Advanced Concepts for CNS Independent Practice

Course Credits: 4

Course Description: The major emphasis of this course is the introduction to advanced concepts supporting independent clinical practice in the role of the Clinical Nurse Specialist (CNS). During the course, students gain competencies designed to support all domains of the Clinical Nurse Specialist (CNS) role and those needed to support the Military Health System (MHS) Quadruple Aim to effectively manage quality care; analyze healthcare systems/processes to optimize patient outcomes; and guide change in support of high reliability organizations

undergirded by evidence-based practice to achieve consistent excellence across the organization. Students will complete clinical rotations that are developed to support clinical practice, education, consultation, research/evidence-based practice and administrative roles of the CNS with a focus on improved outcomes and risk reduction strategies for the adult and geriatric patient populations. Additionally, students will be part of interprofessional teams within the healthcare organization applying concepts of interprofessional patient-centered, collaborative practices. Evidence-based practice and technology interfaces (e.g., AHLTA, Essentris, CHCS II, CIS, EMR) are used to support direct care management and clinical decision making. Seminars augment the learning and are geared to advance the skills necessary to function in increasingly complex healthcare settings to optimize health system performance; improve patient safety, quality and outcomes; enhance the delivery of evidence-based care and improve the business side of healthcare focused on efficiency and productivity.

Course Number: CNS803

Course Title: DNP Practicum for CNS Practice II: Systems Assessment for High Reliable Organizations

Course Credits: 4

Course Description: This course develops advanced skills of systems/process assessments as a strategy to optimize health system performance supporting the Military Health System (MHS) Quadruple Aim, improve patient outcomes and guide change in support of high reliability organizations. During this systems-focused clinical course, students demonstrate knowledge of system and organizational level assessments related to policy and practice. As a foundation for all assessments, a thorough examination of the evidence supported by best practices and national standards will be conducted to benchmark and critically analyze current practices related to “hot topic” issues impacting the delivery of quality patient care. From the evidence in the literature, students develop assessment and/or audit tools necessary to examine policy and current practices; work collaboratively with subject matter experts, department and organizational leadership; perform an organizational assessment of targeted policies; and outline the current state related to key practice issues.

A thorough analysis of the data will be conducted to identify gaps in knowledge, policy, and practice when comparing current state to national practice standards. The course culminates in the development of evidence-based practice recommendations and dissemination of findings to the organizational leadership. Students will demonstrate competencies related to all domains of CNS practice across the three spheres of influence (patient/direct care, nurse/healthcare team, and the systems/organization), as they integrate the delivery of evidence into clinical practice and interact within the system to enhance patient care outcomes for the adult and geriatric population. Data collected in this course will provide the foundation for students Doctor of Nursing Practice projects.

Course Number: CNS804

Course Title: DNP Practicum for CNS Practice III: Strategic Planning in Healthcare

Course Credits: 3

Course Description: This is a strategic focused clinical course where students demonstrate knowledge of strategic planning in healthcare and strategic level assessments of policy and practice that supports the Military Health System (MHS) Quadruple Aim, improve patient outcomes and guide change in support of high reliability organizations. Students will examine and analyze strategic planning processes and issues with an emphasis on strategic decision making, plan making, and implementation in healthcare settings. This course is designed to help students develop an evidence-based framework to implement quality systems and execute strategic level organizational strategies. Quality management tools will be examined and blended

with strategic planning tools (dashboards, balance scorecards, organizational metrics, and audit tools) to ensure integration of organizational strategy and continuous process improvement programs. Students will gain knowledge of identifying organizational barriers, developing action and prioritization of plans, strategic decision-making and how to implement and execute strategic plans. Students will work collaboratively with subject matter experts and organizational leadership to perform an organizational assessment of policy and current state related to strategic level practice issues. From this, the student will analyze the findings and compare current state to evidence based recommendations to identify gaps in knowledge, policy, and practice. The course will culminate in the development of recommendations and dissemination of the findings to the organizational leadership in order to enhance patient outcomes for the adult and geriatric population.

Course Number: CNS805

Course Title: DNP Practicum for CNS Practice IV: Capstone Immersion for CNS Independent Practice

Course Credits: 6

Course Description: This is a clinical capstone course where students demonstrate competencies related to all domains of the Clinical Nurse Specialist (CNS) as well as those competencies needed to support the Military Health System (MHS) Quadruple Aim. In this full scope CNS immersion rotation, students develop inter-professional relationships between nurses, physicians, and key leaders within the healthcare organization to optimize health system performance and improve safety and outcomes for the adult and geriatric populations. During this course, students complete a "macro" and "micro" organizational assessment, critically analyze scientific literature, evaluate nursing and patient outcomes, and translate evidence to support clinical, fiscal, and managerial recommendations for process and system improvements. The culmination of these efforts results in the creation of a comprehensive Business Plan presented to the leadership with the goal to guide change, undergirded by evidence based practice, in support of high reliability organizations goal to achieve consistent excellence across the organization. The third order effect of these efforts, is the creation of a "current state map" with pre-intervention data points from which the organization can assess outcomes achieved once recommendations are implemented. This effort also demonstrates the magnitude of the impact the CNS has within an organization in transforming healthcare to improve safety and outcomes for our patients.

FNP/WHNP SPECIFIC COURSES

Course	FNP and WHNP Specialty Courses	Credits
GSN707	Integration and Application of Family Theory in Primary Care	2
GSN708	Advanced Diagnosis and Management in Adult Primary Care	5
GSN709	Advanced Diagnosis and Management in Geriatric Primary Care	1
GSN712	Primary Care of the Military Member	3
GSN713	Advanced Diagnosis and Management in Gynecology	2
GSN714	Advanced Diagnosis and Management in Pediatric Primary Care	5
GSN716	Advanced Diagnosis and Management in Embryology/Obstetrics	4
GSN717	Drugs in Pregnancy and Lactation	1
GSN718	Foundations of Independent Practice	4
GSN719	Advanced Concepts in Independent Practice	4
GSN720	Diagnostic & Therapeutic Approaches in Adv. Care of Women	1
GSN722	Military Sexual Assault (Response to Sexual Assault)	1
GSN723	Reflective Practice: Contextual Thinking	1
GSN801	DNP Practicum for Nurse Practitioner Practice I	4

Course	FNP and WHNP Specialty Courses	Credits
GSN802	DNP Practicum for Nurse Practitioner Practice II	4
GSN803	DNP Practicum for Nurse Practitioner Practice III	4
MM04001	Military Contingency Medicine / Bushmaster	6
FNP/WHNP Specialty Specific Total		52

Course Number: GSN707

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

Course Credits: 2

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: GSN708

Course Title: Advanced Diagnosis and Management in Adult Primary Care

Course 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, communication and assessment skills, interpretation of findings, application of laboratory diagnostic methods, development and evaluation of plans of care, and implementation of nursing strategies to promote the health of adults with common health problems. Operational readiness and deployment health care concerns are 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 and critical thinking are emphasized throughout the course.

Course Number: GSN709

Course Title: Advanced Diagnosis and Management in Geriatric Primary Care

Course 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: GSN712

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: GSN713

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: GSN714

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: GSN716

Course Title: Advanced Diagnosis and Management in Embryology/Obstetrics

Credits: 4

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: GSN717

Course Title: Drugs in Pregnancy and Lactation

Credits: 1

Course Description: This evidence-based course builds upon the foundational knowledge and skills acquired in basic science courses, advanced practice courses, pathophysiology, and pharmacology concepts in pre-conception, pregnancy, the developing fetus and during lactation. The focus is on demonstrating application of knowledge related to medications during this timeframe. This course uses case studies for the use and knowledge of teratology and fetotoxic drugs, pharmacokinetic changes during pregnancy, vitamin and mineral supplementation, treatment of common discomforts in pregnancy, chronic disease medical management, and Integrated Medicine (IM) in the antepartum setting. In addition, patient care scenarios will utilize evidence-based therapies, resources and guidelines for successful milk support, Galactagogues, IM therapies, common medications used postpartum and their effect on the neonate. This course will prepare students to care for pregnant and lactating women in the Military Health System (MHS) and while deployed.

Course Number: GSN718

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: GSN719

Course Title: Advanced Concepts in Independent Practice

Credits: 4

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: GSN720

Course Title: Diagnostic and Therapeutic Approaches in the Advanced Care of Women

Credits: 1

Course Description: This evidence-based course builds upon the knowledge and skills acquired across the program of study. The student will acquire deeper knowledge and competency in skills unique to caring for women. 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. This course is synergistic with Advanced Concepts of Independent Practice (ACIP). Students enrolled in this course, must also be enrolled in ACIP simultaneously.

Course Number: GSN722

Course Title: Military Sexual Assault

Credits: 1

Course Description: The online course is a multi-media, inter-professional, modular course on Military Sexual Assault (MSA) that will focus on the process of eliciting a MSA related H&P from both the victim (male or female) as well as legal considerations (to include restricted vs. unrestricted reporting), forensic evidence collection and interpretation, and treatment. This program takes an Inter-Professional education perspective and involves members of School of medicine and the Graduate School of Nursing.

This introductory course provides the foundation for students with the necessary content on the assessment and treatment of sexual assault to prepare them to function in an advanced practice registered nursing (APRN) role in the military setting. The course builds on core health assessment, adult primary care, and mental health diagnostic content from previous courses. The focus of this course is on the interaction between the victim (who suffered the trauma), the outcome (the justice system), and treatment options. Students will learn to synthesize evidence-based forensic science principles, assessment of the victim and/or suspect, diagnostic considerations, reporting and legal process, and treatment of the impact of the victimization related to health risks.

The interdisciplinary component is achieved in several ways: medical and nursing students will participate in a facilitator guided discussion in small groups involving the GSN and SOM after a Simulation Center event caring for the victims. Also, interdisciplinary collaboration will be met during a Bushmaster sexual assault scenario.

Course Number: GSN723

Course Title: Reflective Practice: Contextual Thinking

Course Credits: 1 credit

Course Description: This course explores the non-cognitive human elements present in every clinical encounter, and how these non-cognitive elements may impact a provider's cognitive process thereby influencing healthcare outcomes. Using personal experience, panel based sessions, online supplemental resources, written reflective essays, and small group discussions, students will be afforded the opportunity to consider their own reactions to various common and challenging situations in healthcare. They will thereafter examine their personal context, composed of one's unique and diverse life experiences, beliefs and values; analyze the implications of those reactions for patient care; and develop a plan to enhance the positive and mitigate the negative implications of those reactions. Through contemplation of the often unacknowledged assumptions and biases they bring into the clinical environment, students will increase their self-awareness, a critical skill for healthcare providers. Participation of students from the Graduate School of Nursing and the School of Medicine is designed to facilitate students' understanding that one's profession composes only a small part of one's personal context. Such understanding offers students the ability to identify their own predispositions to labeling others (patients and colleagues alike) based on a single identifiable factor and fosters an environment in which inter-professional education and thereafter inter-professional practice is most likely to be successful.

Course Number: GSN801

Course Title: DNP Practicum for Nurse Practitioner Practice I

Credits: 4

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 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: DNP Practicum for Nurse Practitioner Practice II

Credits: 4

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: DNP Practicum for Nurse Practitioner Practice III

Credits: 4

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 the care of individuals, populations and the systems in which they practice.

Course Number: MM04001

Course Title: Military Contingency Medicine / Bushmaster

Credits: 6

Course Description: Military Contingency Medicine (MM04001) is the capstone course for the four year integrated military medicine curriculum. MCM is four weeks long and features both classroom didactic teaching and the field training exercise: OPERATION BUSHMASTER. The Advanced Trauma Life Support (ATLS) course is a pre-requisite for the course and is provided by the Department of Surgery under the guidance of the American College of Surgeons during prescribed times for the School of Medicine curriculum.

MCM is structured around a simulated deployment to the notional developing country of *Pandakar*. The classroom portion of the course represents the pre-deployment work-up for the deployment and is designed to provide the opportunity for students to acquire/hone the critical knowledge, skills, and attitudes required for successful assignment and deployment as a tactical level military medical officer in their parent service. The course employs a variety of teaching methodologies ranging from lecture to small-group discussion, and applied practical exercises in order to build upon topics introduced throughout the entire four year USU military medical curriculum. Topics include, but are not limited to, military environmental medicine, applied field medicine, Health Service Support (HSS) planning, Military Decision Making, problem solving, leadership, personal and family readiness, mass casualty (MASCAL) incident preparation and response, stability operations, Tactical Combat Casualty Care (TCCC), and medical intelligence. All coursework is designed to emphasize learning objectives focused on the current operational environment.

OPERATION BUSHMASTER is a 5-day field training exercise (FTX) conducted as the capstone event of the Uniformed Services University of the Health Sciences' military unique curriculum. During this exercise, fourth year USU medical students, Graduate School of Nursing students, and international medical students and physicians are formally evaluated on their medical knowledge and leadership abilities in a simulated, resource constrained, far forward tactical field setting. Students assume leadership and medical positions within a non-service specific battalion aid station where they are presented with operationally current, reality-based missions and operational problems for which they must plan and/or execute while simultaneously managing the medical care of simulated Disease and Non-Battle Injury (DNBI) patients, combat stress casualties, and combat trauma casualties. Faculty members formally evaluate leadership skills, medical skills, combat stress casualty care and point of injury care.

Students must pass each component of MCM to pass the course, and they must pass the course to graduate from USU. Under service guidelines, USU graduates are exempt from the Combat Casualty Care Course (C4) on the basis of having completed MCM.

CRNA SPECIFIC COURSES

Course	Nurse Anesthesia (RNA) Specialty Specific Courses	Credits
RNA602	Applied Biochemistry for Nurse Anesthetists	3
RNA605	Prin of Anesthesia, Pharmacology & Coexisting Disease in Clinical Practice I	4
RNA606	Prin Anesthesia, Pharmacology & Coexisting Disease in Clinical Practice II	5
RNA607	Principles of Regional Anesthesia and Vascular Access	1
RNA608	Prin Anesthesia, Pharmacology & Coexisting Disease in Clinical Practice III	3
RNA801	DNP Clinical Practicum and Seminar for Nurse Anesthesia Practice I	1
RNA802	DNP Clinical Practicum and Seminar for Nurse Anesthesia Practice II	8
RNA803	DNP Clinical Practicum and Seminar for Nurse Anesthesia Practice III	8
RNA804	DNP Clinical Practicum and Seminar for Nurse Anesthesia Practice IV	5
RNA805	DNP Clinical Practicum and Seminar for Nurse Anesthesia Practice V	8
RNA806	DNP Clinical Practicum and Seminar for Nurse Anesthesia Practice VI	8
	CRNA Specialty Specific Total	54

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: RNA605

Course Title: The Principles of Anesthesia, Pharmacology & Coexisting Disease in Clinical Anesthesia Practice I

Credits: 4 credits

Course Description: This course integrates the basic principles of anesthesia with pharmacology, technology and coexisting disease. This course is designed to develop and analyze anesthesia specific content and relate it to the pharmacology 1 course and pathophysiology 1 course taught concurrently during the semester. Topic areas will include: anesthesia equipment and machine, cardiopulmonary disease and pharmacology, pharmacology of induction and inhaled anesthetics, airway management and preoperative/anesthetic planning.

Course Number: RNA606

Course Title: The Principles of Anesthesia, Pharmacology & Coexisting Disease in Clinical Anesthesia Practice II

Credits: 5

Course Description: The Principles of Anesthesia, Pharmacology & Coexisting Disease in Clinical Anesthesia Practice – 2 sequentially builds upon the content taught in The Principles of Anesthesia – 1 course. This course will develop the basic content previously covered and apply it to advanced topics in anesthesia, pharmacology and disease. Students will apply this knowledge and develop the skills to create anesthetic care plans for a variety of specialty populations and surgical procedures in hospital and austere environments.

Course Number: RNA607

Course Title: The Principles of Regional Anesthesia and Vascular Access

Credits: 1

Course Description: This course integrates basic and advanced principles of anesthesia with the intent to expose the student to advanced concepts of regional anesthesia and vascular access for clinical practice. This course will integrate anesthesia relevant procedures and therapy with anatomy, physiology, acute and chronic pain management. Topic areas will include: ultrasound and nerve stimulation technology, nerve and vascular anatomy of peripheral and neuraxial structures and hands on practicum on cadaver, human, and simulation devices.

Course Number: RNA608

Course Title: The Principles of Anesthesia, Pharmacology & Coexisting Disease in Clinical Anesthesia Practice III

Credits: 3

Course Description: The Principles of Anesthesia, Pharmacology & Coexisting Disease in Clinical Anesthesia Practice – III, sequentially builds upon the content taught in The Principles of Anesthesia – I & II courses. This course integrates the basic and advanced principles of anesthesia and pharmacology and synthesizes these concepts with advanced surgical procedures and complex coexisting disease states.

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 airway management and induction/emergence sequences will be integrated into the course through a simulation lab experience. 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. This course is designed to give the student practical information regarding the administration of safe anesthesia with a significant amount of preceptor intervention. Progressive, guided instruction will be provided for the clinical management of patients undergoing all forms of anesthesia.

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 in which the student will continue to progress toward greater independent practice. Emphasis is on management of advanced anesthetic principles. 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. Students continue out rotations in specialty areas and are formally evaluated at the end of each rotation. This semester will include a Professional Aspects/Wellness Focused project.

Course Number: RNA805

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

Credits: 8

Course Description: This clinical course is a continuation of advanced clinical nurse anesthesia administration in which the student will continue to progress toward greater independent practice. Students should be preparing for entry into practice. The didactic review for this semester will focus on Cardiac/Neuro/Renal and Trauma Anesthesia. Students develop and utilize practical clinical applications of nurse anesthesia theory. Students continue out rotations in specialty areas and are formally evaluated at the end of each rotation. This semester will include a written case report that will be a part of the student's DNP portfolio, two simulations, and two discussion board sessions.

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 final 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 didactic review for the semester will focus on trauma, resuscitation, emergency anesthesia and critical care. The student will also be focused on preparing for the National Board Certification Exam. Students continue out rotations in specialty areas and are formally evaluated at the end of each rotation.

PMHNP SPECIFIC COURSES

Course	Psychiatric Mental Health (PMH) Specialty Specific Courses	Credits
PMH601	Foundations of Advanced Practice Psychiatric Nursing	5
PMH602	Advanced Diagnosis of Mental Disorders Across the Lifespan	4
PMH603	Therapeutic Modalities	3
PMH604	Psychopharmacology	5
PMH605	Advanced Practice Psychiatric Nursing Specialty Practicum	1
PMH606	Operational Readiness for Advanced Psychiatric Practice	5
PMH607	Treatment of Substance Abuse Disorders Across the Lifespan	2
GSN707	Integration and Application of Family Theory in Primary Care	2
GSN722	Military Sexual Assault	1
GSN801	DNP Practicum for Nurse Practitioner Practice I	4
GSN802	DNP Practicum for Nurse Practitioner Practice II	4
GSN803	DNP Practicum for Nurse Practitioner Practice III	4
PMH803	Applied Clinical Concepts I	4
PMH804	Applied Clinical Concepts II	3
PMH805	Applied Clinical Concepts III	4
PMHNP Specialty Specific Total		51

Course Number: PMH601

Course Title: Foundations of Advanced Practice Psychiatric Nursing

Course 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

Course 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

Course 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

Course 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

Course 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, posttraumatic 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

Course 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

Course 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: GSN707

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

Course Credits: 2

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: GSN722

Course Title: Military Sexual Assault

Course Credits: 1

Course Description: The online course is a multi-media, inter-professional, modular course on Military Sexual Assault (MSA) that will focus on the process of eliciting a MSA related H&P from both the victim (male or female) as well as legal considerations (to include restricted vs. unrestricted reporting), forensic evidence collection and interpretation, and treatment. This program takes an Inter-Professional education perspective and involves members of School of medicine and the Graduate School of Nursing. This introductory course provides the foundation for students with the necessary content on the assessment and treatment of sexual assault to prepare them to function in an advanced practice registered nursing (APRN) role in the military setting. The course builds on core health assessment, adult primary care, and mental health diagnostic content from previous courses. The focus of this course is on the interaction between the victim (who suffered the trauma), the outcome (the justice system), and treatment options. Students will learn to synthesize evidencebased forensic science principles, assessment of the victim and/or suspect, diagnostic considerations, reporting and legal process, and treatment of the impact of the victimization related to health risks. The interdisciplinary component is achieved in several ways: medical and nursing students will participate in a facilitator guided

discussion in small groups involving the GSN and SOM after a Simulation Center event caring for the victims. Also, interdisciplinary collaboration will be met during a Bushmaster sexual assault scenario.

Course Number: GSN801

Course Title: DNP Practicum for Nurse Practitioner Practice I

Course Credits: 4

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 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: DNP Practicum for Nurse Practitioner Practice II

Course Credits: 4

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: DNP Practicum for Nurse Practitioner Practice III

Course Credits: 4

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 the care of individuals, populations and the systems in which they practice.

Course Number: PMH803

Course Title: Applied Clinical Concepts I

Course 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: Applied Clinical Concepts II

Course 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: Applied Clinical Concepts III

Course 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.

MASTER OF SCIENCE IN NURSING PROGRAM

NURSING CORE COURSES

Course	Title	Credits
GSN701	Advanced Practice Role	1
GSN702A	Organizational and Systems Leadership in Healthcare	3
GSN703	Ethics and Policy in Federal Health Systems	3
GSN900	Healthcare Research	1
GSN901	Evidence Based Practice	2
GSN902	Statistical Measures & Analytical Methods: Application and Critique	2
GSN904	Clinical Inquiry Project	4
DNP Nursing Core Total		16

Course Number: GSN701

Course Title: Advanced Practice Role

Course Credits: 1 credit

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: GSN702A

Course Title: Organizational and Systems Leadership in Healthcare

Course Credits: 3 credits

Course Description: 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

Course Credits: 3 credits

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 policy.

Course Number: GSN900

Course Title: Healthcare Research

Course Credits: 1 credit

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.

Course Number: GSN901

Course Title: Evidence Based Practice

Course Credits: 2 credit

Course Description: The content in this core course builds on the subject matter from GSN 900 Healthcare Research. 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. 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

Course Credits: 2 credit

Course Description: The content in this core course builds on the subject matter from GSN900 Healthcare Research and GSN901 Evidence Based Practice. The focus of this course is the development of critical appraisal skills, to include statistical reasoning, in advanced practice nursing students through the critique of analytic methods and statistical measures used in the healthcare literature. In a mentored setting, 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: GSN904

Course Title: Clinical Inquiry Project

Course Credits: 4 credits

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.

ADVANCED PRACTICE CORE COURSES

Course	Title	Credits
GSN601	Advanced Anatomy	3
GSN602	Advanced Health Assessment	3
GSN603	Advanced Physiology	3
GSN606	Advanced Pathophysiology I	2
GSN608	Advanced Pathophysiology II	2
GSN607	Advanced Pharmacology I	2
GSN609	Advanced Pharmacology II	2
GSN710	Bedside Ultrasonography	1
GSN711	Integrative Medicine Methodologies	1
GSN809	Concepts in Operational Leadership & Readiness	2
APRN Core Total		21

Course Number: GSN601

Course Title: Advanced Anatomy

Course Credits: 3 credits

Course Description: This foundational didactic and human dissection course is designed to facilitate a thorough understanding of human anatomy. It is a specialized course building on basic knowledge attained in undergraduate nursing courses to expand the understanding and integration of human anatomy into clinical practice of the advanced practice nurse. This knowledge is expected to enhance understanding of human anatomy across the spectrum in the student’s advanced practice clinical settings as well as courses in physiology, pathophysiology, and patient assessment. The course will be presented in several different modalities including didactic lectures and laboratory experiences to include cadaveric pro-sections and dissections with the assistance of a web-based dissecting guide and learning platform. Clinical application of anatomical structures for each advanced practice nursing specialty will be discussed throughout the course, as will operational readiness issues.

Course Number: GSN602

Course Title: Advanced Health Assessment

Course Credits: 3 credits

Course Description: This course explores advanced health assessment; the foundational health history and physical examination tools needed by all advance 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

Course Credits: 3 credits

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: GSN606

Course Title: Advanced Pathophysiology I

Course Credits: 2 credits

Course Description: In this the first in two core course sequence in which 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: GSN608

Course Title: Advanced Pathophysiology II

Course Credits: 2 credits

Course Description: In this the second in two core course in a two course sequence in which 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: GSN607

Course Title: Advanced Pharmacology I

Course Credits: 2 credits

Course Description: This is the first of two pharmacology courses and will be taught in Fall 1 and delivered concurrently with pathophysiology. 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: GSN609

Course Title: Advanced Pharmacology II

Course Credits: 2 credits

Course Description: This is the second of two pharmacology courses taught in the first spring semester that runs concurrent with pathophysiology. 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: GSN710

Course Title: Bedside Ultrasonography

Course Credits: 1 credit

Course Description: This vertical, integrated bedside ultrasound course is designed to enhance and augment concepts learned in foundational science courses such as anatomy, physiology, pathology and supports clinical decision-making. The content reinforces the military-specific applications and aspects of ultrasound that can be especially useful in primary care, inpatient as well as austere settings such as combat and humanitarian assistance environments. Basic principles of ultrasonography are interwoven with hands-on experiences to offer students the opportunity to experience a number of different bedside ultrasonography assessments including FAST (Focused Assessment with Sonography in Trauma), RUSH (Rapid Ultrasound in Shock and Hypotension), Musculoskeletal, Cardiology, Deep Vein Thrombosis, Renal, Airway/Ventilation, Thoracic Trauma, Ocular, Aorta, Hepatobiliary, Thyroid and Female Pelvic Assessments.

Course Number: GSN711

Course Title: Integrative Medicine Methodologies

Course Credits: 1 credit

Course Description: This introductory course is designed to expand student understanding of treatment options with the goal of improving patient outcomes. Course content introduces aspects of integrative medicine that are useful in all settings, as well as techniques that have been found to be particularly useful in military settings. Basic principles of integrative medicine are interwoven with hands on application of techniques such as acupuncture, guided imagery and progressive relaxation. Students will be asked to apply Evidenced Based principles to enhance their understanding of how these alternative approaches to healthcare can be effectively integrated into clinical practice.

Course Number: GSN809

Course Title: Concepts in Operational Leadership and Readiness

Course Credits: 2 credits

Course Description: This interprofessional course is designed to expand understanding of clinical, leadership and readiness concepts, preparing students for more advanced operational and leadership content as well as positioning them for successful leadership and clinical roles in future austere, deployed, or humanitarian settings.

AG-CNS MSN SPECIALTY SPECIFIC COURSES

Course	Adult-Gerontology Clinical Nurse Specialist (AG-CNS MSN)	Credits
CNS600	Principles of Outcomes Management for CNS Practice	2
GSN601	CNS Role Application across the 3 Spheres of Influence	4
CNS603	Business Administration for Highly Reliable Healthcare Organizations	3
CNS605	Medical Facility Design: Maximizing Patient Outcomes	3
CNS606	Trauma Management in CNS Practice	2
CNS608	Performance Metrics in Outcomes Management	3
CNS609	Clinical Practicum I – Advanced Concepts for CNS Independent Practice	4
CNS610	Advanced Diagnosis and Management in Adult-Geriatric Acute Care	3
GSN708	Advanced Diagnosis and Management in Adult Primary Care	5
GSN709	Advanced Diagnosis and Management in Geriatric Primary Care	1
GSN723	Reflective Practice: Contextual Thinking	1
CNS801	Clinical Practicum II: Capstone Immersion for CNS Independent Practice	7
GSN904	Clinical Inquiry Project	4
AG-CNS Role/Population Specific Total		42

Course Number: CNS 600

Course Title: Principles of Outcomes Management for CNS Practice

Course Credits: 2

Course Description: Outcomes management (OM) is critical to assessing interventions, identifying effective practices, and identifying practices that need improvement. The requirement to measure outcomes by federal and state regulatory agencies has spurred organizations to actively monitor outcomes as a means for evaluation and as a requirement for accreditation and certification. As such, management of outcomes in CNS practice is critical to demonstrate the impact of CNS contributions to the organization. This course will provide the foundation for measuring outcomes related to CNS competencies and the three spheres of influence (patient/client, nurse, and organization/system) of CNS practice. Students will be introduced to the practical application of OM including methods to collect, analyze, and share outcome data.

Course Number: CNS 601

Course Title: CNS Role Application across the 3 Spheres of Influence

Course Credits: 4

Course Description: This course allows students to engage in systems thinking within the domains of CNS practice across the three spheres of influence (patient, nurse, organization). Students will engage in consultative/collaborative relationships with inter-professional health care team members focusing on comprehensive wellness/illness assessments, education, clinical management, and problem solving activities for the Adult/Gerontology patient population. Incorporating adult learning principals, change management theory, and cultural awareness students will design an evidence-based patient education brochure/pamphlet to increase the patient's knowledge of the perioperative process. Additionally, to support perioperative patient

care on a national level, students will develop and present a professional nursing education activity through the Association of perioperative Nurses (AORN) via Webinar.

Within the context of the course, students will research critical processes, review/analyze regulatory and practice guidelines, and evaluate patient safety programs according to Joint Commission standards for the Adult/Gerontology patient population within the perioperative environment. Incorporating federal/national regulations, organizational practice standards, and evidence-based practice students will conduct a system level assessment of current policy and practice to identify weaknesses/gaps and provide leadership with an analysis of current state and recommendations for improvement. Additionally, students will collaborate with hospital professionals utilizing the Association for Professionals in Infection Control (APIC) surveillance guidelines to identify and minimize the potential for hospital acquired infections with particular attention to surgical site 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 (CNS) throughout the perioperative environment.

In support of the development of advanced practice clinical skills and expertise, students will utilize evidence-based techniques and synthesize assessment data using critical thinking and clinical judgment to formulate differential diagnoses amenable to CNS intervention for the Adult/Gerontology patient population. Student's knowledge in support of direct care will be enhanced as they conduct comprehensive, surgically focused exams throughout the entire perioperative continuum of care (pre-operative, intra-operative, and post-operative). Strategies will be utilized to meet the multicultural and diverse needs of the Adult/Gerontology 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 (CNS) in the perioperative environment.

Course Number: CNS603

Course Title: Business Administration for Highly Reliable Healthcare Organizations

Course 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 and improving patient outcomes. Students will utilize critical thinking skills that incorporate evidence to support best practices in the development of strategies focused on improving manpower and resource utilization. They will also critically analyze financial information and its impact on operational performance. The culmination of this course is the creation of a comprehensive business plan that demonstrates competencies supporting efficient and effective administration of resources for quality health care delivery across the organization.

Course Number: CNS605

Course Title: Medical Facility Design: Maximizing Patient Outcomes

Course 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: Trauma Management in CNS Practice

Course Credits: 2

Course Description: This course exposes students to the management of patients in contingency and trauma environments. The clinical nurse specialist (CNS) must have a keen understanding of patient management across the continuum of care supporting combat, peace-keeping and humanitarian missions. The foundation of this course is based on a combination of teaching techniques using scenarios supporting simulation exercises and student led classroom seminars to enhance the student's critical thinking and advanced clinical practice. Students will examine the evidence related to the management of trauma patients as well as management of personnel, scarce resources, equipment and supplies in austere environments. To promote a team approach to management of trauma patients, students will participate in a simulated trauma scenarios that incorporate elements of TeamSTEPPS and support the role of the CNS. To enhance their clinical skills as advanced practitioners, students will also perform simulated lifesaving interventions on manikins and/or simulators (i.e., needle decompression, chest tube insertion, and lower leg fasciotomy). Additionally, students will identify outcome measures to ensure quality patient care is delivered across the patient, nurse, and organization spheres of influence with a focus on adherence to professional practice standards.

Course Number: CNS608

Course Title: Performance Metrics in Outcomes Management

Course Credits: 3

Course Description: This is a capstone course that demonstrates student attainment of Clinical Nurse Specialist (CNS) competencies supporting outcomes management. Students will create numerous comprehensive dashboards across the continuum that incorporates quality indicators with outcome metrics supported by professional standards and best practices. Demonstrating advanced clinical knowledge, students will critique the delivery of care within the acute care environment and develop clinical questions targeting opportunities to improve the care process for the adult and geriatric patient populations. Rounding out this course, students expand their management acumen by discovering the "evidence" in evidence-based design initiatives to support efficiency, productivity, and positive patient outcomes across the CNS spheres of influence.

Course Number: CNS609

Course Title: Clinical Practicum I – Advanced Concepts for CNS Independent Practice

Course Credits: 4

Course Description: The major emphasis of this course is on the integration of the role of the Clinical Nurse Specialist (CNS) into practice across the wellness to acute care continuum within three spheres of influence: Patient (direct care), Nurse (healthcare team), and the System (organization). Students complete multiple rotations across the continuum supporting clinical practice, education, consultation, research/evidence-based practice and administrative roles with a focus on improved outcomes and risk reduction strategies for the adult and geriatric patient populations. Evidence-based practice and technology interfaces (e.g., AHLTA, Essentris, CHCS II, CIS, EMR) are used to support direct care management and clinical decision making. Seminars augment the learning and support based clinical management of complex adults and geriatric patient populations. Students will also analyze organizational issues to improve patient outcomes in both acute and primary care settings.

Course Number: CNS610

Course Title: Advanced Diagnosis and Management in Adult-Geriatric Acute Care

Course Credits: 3

Course Description: This course is designed to build on GSN602, Advanced health Assessment; GSN708, Advanced Diagnosis and Management in Adult Primary Care: and GSN709, Advanced Diagnosis and Management in Geriatric Primary Care and build on the foundations of CNS practice. The course will develop, expand, and evaluate competence related to the student's ability to develop a differential diagnosis and implement a patient specific plan of care for the Adult/Gerontology patient population within the perioperative environment of care. This course challenges the student's critical thinking and problem solving abilities, as they integrate knowledge from health assessment, pathophysiology, and pharmacology to diagnose, and manage acute health conditions of the Adult/Gerontology surgical patients incorporating both pharmacologic and non-pharmacologic interventions.

The student's 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 the Adult/Gerontology population using literature supporting evidence synthesis, and clinical guidelines/care pathways. Students will incorporate the development of clinical questions using the PICOT format to guide in the delivery of care for the Adult/Gerontology patient population across the Perioperative continuum of care. Within the context of the clinical activities, students will be exposed to patients in high acuity specialty areas including the cardiovascular, neurosurgery, diabetes, and oncology units/clinics. Student activities culminate in the ability to present a patient case study using evidence-based literature supporting the development of a plan of care that spans the entire perioperative continuum of care.

Course Number: GSN708

Course Title: Advanced Diagnosis and Management in Adult Primary Care

Course 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: GSN709

Course Title: Advanced Diagnosis and Management in Geriatric Primary Care

Course 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: GSN723

Course Title: Reflective Practice: Contextual Thinking

Course Credits: 1 credit

Course Description: This course explores the non-cognitive human elements present in every clinical encounter, and how these non-cognitive elements may impact a provider's cognitive process thereby influencing healthcare outcomes. Using personal experience, panel based sessions, online supplemental resources, written reflective essays, and small group discussions, students will be afforded the opportunity to consider their own reactions to various common and challenging situations in healthcare. They will thereafter examine their personal context, composed of one's unique and diverse life experiences, beliefs and values; analyze the implications of those reactions for patient care; and develop a plan to enhance the positive and mitigate the negative implications of those reactions. Through contemplation of the often unacknowledged assumptions and biases they bring into the clinical environment, students will increase their self-awareness, a critical skill for healthcare providers. Participation of students from the Graduate School of Nursing and the School of Medicine is designed to facilitate students' understanding that one's profession composes only a small part of one's personal context. Such understanding offers students the ability to identify their own predispositions to labeling others (patients and colleagues alike) based on a single identifiable factor and fosters an environment in which inter-professional education and thereafter inter-professional practice is most likely to be successful.

Course Number: CNS801

Course Title: Clinical Practicum II: Capstone Immersion for CNS Independent Practice

Course Credits: 7

Course Description: This is a clinical capstone course where students demonstrate competencies related to the domains of the Clinical Nurse Specialist (CNS) across the three areas of influence. During their clinical rotation, students will integrate evidence into clinical practice and interact within the system to enhance outcomes for the adult and geriatric populations. In this full scope CNS immersion experience, students will complete an organizational assessment and identify opportunities for process improvements in the form of a comprehensive business plan. In performing the activity, students will demonstrate "how" the CNS improves outcomes for the individual, family, and populations; analyze healthcare systems/processes to optimize patient outcomes; and guide change for organizational success in the provision of evidence-based/quality patient care. It also serves as a means to perform a current state analysis from which programs for improvement can be identified and provides pre-intervention data points from which to assess outcomes achieved. The goal of this capstone course is to demonstrate the magnitude of the impact the CNS can have in support of the patient, healthcare team and the organization and ultimately support the VALUE the CNS brings to the organization.

Course Number: GSN904

Course Title: Clinical Inquiry Project

Course 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.

DOCTOR OF PHILOSOPHY IN NURSING PROGRAM

PhD Core Courses

Course	Title	Credits
PHD800	The Scholarship of Discovery in Nursing Science	3
PHD811	Research Ethics	3
PHD812	Public Policy in the Contest of Military & Federal Health Care	3
PHD814	Philosophy of Science	3
PHD820	Research Experience I	1
PHD821	Research Experience II	1
PHD822	Research Experience III	1
PHD823	Research Internship I	2
PHD824-6	Research Internship II-IV [later courses are elective]	2
PHD830	Approaches to Scientific Inquiry	3
PHD831	Qualitative Research Methods	3
PHD840-5	Emerging Scholars	1
PHD880	Professional Issues in Scholarship	3
PHD881	Principles of Scholarly Writing	3
PHD882	Proposal Development and Grantsmanship	3
PMO503	Biostatistics I	4
PMO504	Biostatistics II	4
PHD911-91X	Dissertation Seminar	1
PhD Core Total		47-60

Course Number: PHD800

Course Title: The Scholarship of Discovery in Nursing Science

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: PHD811

Course Title: Research Ethics

Credits: 3

Course Description: This required PhD core 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.

Course Number: PHD812

Course Title: Public Policy in the Contest of Military & Federal Health Care

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: PHD814

Course Title: Philosophy of Science

Credits: 1

Course Description: This course integrates basic and advanced principles of anesthesia with the intent to expose the student to advanced concepts of regional anesthesia and vascular access for clinical practice. This course will integrate anesthesia relevant procedures and therapy with anatomy, physiology, acute and chronic pain management. Topic areas will include: ultrasound and nerve stimulation technology, nerve and vascular anatomy of peripheral and neuraxial structures and hands on practicum on cadaver, human, and simulation devices.

Course Number: PHD820-822

Course Title: Research Experience I-III

Credits: 1

Course Description: During this course, students participate in supervised research experiences. Although each experience differs, all students are introduced to 1) the research process, 2) scientists with active programs of research, 3) research resources, 4) research infrastructures and facilities, 5) the principles of research ethics, integrity, and accountability; and 6) legal and regulatory research requirements. Experiences will pertain to one or more focus areas of the Graduate School of Nursing Signature Curriculum: 1) Operational Readiness in the Changing Environment, 2) Clinical Decision Making in the Federal Health Care Delivery System, and 3) Global, Environmental, Cultural, and Political Context; and one or more of the following: Evidence- Based Practice and Research; Leadership and Health Policy; Transition of Technology to Practice and Education; Health Promotion for Warriors and Families; and Patient Safety. The intent is to provide opportunities for students to engage in diverse, intensive, and rigorous clinical, translational, biomedical, behavioral, and social science research environments.

Accordingly, students complete 48 contact hours (12 weeks x 4 hours/week x 1 credit), negotiating hours that are suitable to faculty members and scientists. Students are encouraged to complete additional hours as opportunities arise. This real-world experiential learning experience comprises learning opportunities which are not possible in a classroom alone.

Course Number: PHD823-826

Course Title: Research Internship I-IV

Credits: 2

Course Description: During this course, students complete a research immersion experience with a senior scientist in a research setting of specific interest. Although each placement and experience differs, all enable students to 1) immerse themselves in an active research setting, 2) participate in supervised scientific research, 3) develop skills needed to conduct independent research, and 4) learn basic knowledge regarding how to perform as an independent scientist. This real-world experiential learning experience comprises learning opportunities which are not possible in a classroom. Students are responsible to identify a research internship opportunity. If students have difficulty securing a research internship with a senior scientist, the Course Director will help the students explore viable options.

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 Research 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 and research designs with special emphasis on qualitative paradigm participant and researcher specific ethical issues, as well as 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., Ethnograph, 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: PHD840-845

Course Title: Emerging Scholars

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: PHD880

Course Title: Professional Issues in Scholarship

Credits: 3

Course Description: This course integrates the dynamic elements of practice, theory, and research to explore the roles of the PhD prepared nurse in the university and federal research settings. The history of the establishment of universities and specifically the research university will be discussed in detail. Also, the role of the military scholar will be addressed. Included is the identification of facilitators for and barriers to the implementation of the role of a scientist and faculty member and, strategies involved in developing collaborative research across disciplines.

Course Number: PHD881

Course Title: Principles of Scholarly Writing

Credits: 3

Course Description: Course Description:

This course is designed to foster development of scholarly writing skills. In this course, students explore elements of professional writing, writing for publication, and the basics of grantsmanship. Faculty-facilitated seminar topics include topic selection, the publishing cycle, components of varied types of papers, responsibilities of authors, journal selection, author guidelines, strategies to overcome barriers to successful writing, and writing at the doctoral level. The Course Directors and each student will negotiate a major writing assignment that is relevant to the student's topic of interest. In accordance with the type of paper (e.g., concept analysis paper, integrative review paper, theoretical review paper, measurement paper), students will explicitly identify the purpose of the paper, develop a logical argument or synthesize literature, and write a well-organized, concise, and scholarly paper that is supported by the literature and suitable for publication. Course faculty, Graduate School of Nursing (GSN) faculty, and other subject matter experts will review student papers and provide constructive feedback.

Course Number: PHD882

Course Title: Proposal Development and Grantsmanship

Credits: 3

Course Description: This course builds on previous work in Scientific Inquiry, Philosophy of Science, Qualitative Methods, and Statistics; and focuses on the nature and characteristics of conceptualizing a significant research question, developing and writing a research proposal. Students are expected to develop a grant proposal application in compliance with the instructions for submission to a governmental or private funding agency. Proposal development will also familiarize students with careful adherence to guidelines, iterative review and revision, grant submission and peer review processes.

Course Number: PMO503

Course Title: Biostatistics I

Credits:4

Course Description: This course instructs students in the application of elementary statistical procedures commonly used in biomedical and public health research. Topics include techniques of exploratory data analysis, probability, discrete and continuous statistical distributions, sampling procedures, confidence intervals, hypothesis testing, and sample size determination for experiments and observational studies.

Course Number: PMO504

Course Title: Biostatistics II

Credits: 4

Course Description: This continuation of PMO503 covers many of the advanced statistical procedures commonly used in biomedical and public health research. Statistical methods include techniques for the analysis of contingency tables or frequency data, non-parametric methods, simple linear regression and correlation, analysis of variance, multiple regression, logistic regression, and analysis of survival data. Prerequisites: PMO503

Course Number: PHD911-91X

Course Title: Dissertation Seminar

Credits: 9

Course Description: The major part of this course is the conduct of the dissertation research project under the direction of the dissertation chair and committee. In addition, the yearlong seminar section of this course is intended to for students in from initial candidacy until the completion of their dissertation research and final dissertation defense. The purpose is to take students from their approved dissertation proposal through the development of a solid structure, research strategy and drafting of framing chapters. In the first quarter following entry to candidacy students will prepare presentations and short summaries of research progress outlining key features of their dissertation, which will then be discussed in class. Students are then expected to revise their presentations and summary notes in response to critique over the course of the term, submitting revisions by the end of term. The success of this class will depend to a large extent on the extent to which we can build a community of researchers that are able and willing to support each other in the development of research plans over the coming year. To do so we will require that the candidates think hard throughout the course of term not only about their own projects but also about those of their colleagues. A strength and challenge of this course will be that research projects from all sub-fields of nursing science will be represented in the course; in some cases then active engagement will then involve thinking about issues far from their own specialties. For this reason we recommend that when presenting work in the fall term students provide alongside their own write ups a key article on the topic from their subfield that will help other students get up to speed on the section of the literature. The student's dissertation chair is involved as the student progresses through the quarter and year.

PhD Elective Courses

Course	Title	Credits
PHD813	Developing and Testing Theoretical Frameworks	3
PHD832	Foundations of Survey Methodology [U of M Summer Institute]	3
PHD833	Analytic Approaches to Data Analysis & Interpretation	3
PHD834	Mixed Methods Research: Design & Analysis [U of M Summer Institute]	4
PHD848	Teaching Principles and Practice	2
PHD851	Stress & Trauma in the Military Context	2
PHD852	Military Women in Contemporary Society	2
PHD853	Methods & Measures in Psychophysiology	1
PHD873	Population Health and Outcomes	3
PHD874	Secondary Data Analysis Quantitative Data: Methodological Consideration	3
PMO502	Introduction to SAS [required if registering for PMO 508]	1
PMO508	Biostatistics III	5
PHD891	Directed Study	Variable
PhD Elective Total		40-60

Course Number: PHD813

Course Title: Developing and Testing Theoretical Frameworks

Credits: 3

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: PHD832

Course Title: Foundations of Survey Methodology [U of M Summer Institute]

Credits: 3

Course Description: This introduction to survey methodology is developed in collaboration with the distinguished faculty from the University of Wisconsin at Madison. The course is specifically designed for USU PhD students by compressing a full term course into an intensive 3-days of instruction (24hours) will follow on time to complete group and individual assignments

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 field of survey methodology draws on theories and practices developed in such academic disciplines as mathematics, statistics, psychology, sociology, computer science, and economics. This course helps to prepare researchers to become more accomplished professionals in the

survey research field. The scope of this course introduces and examines a body of research literature as well as experiences in designing, conducting, and analyzing surveys. Key concepts in survey methodology are addressed: inference and error in surveys, modes of data collection, interviewers and interviewing, questionnaire design, question evaluation, item construction, and addressing non-response in surveys. Students will be exposed to both observational and experimental methods to test key hypotheses about the nature of human behavior that affect the quality of survey data.

Course Number: PHD833

Course Title: Analytic Approaches to Data Analysis & Interpretation

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: PHD834

Course Title: Mixed Methods Research: Design & Analysis [U of M Summer Institute]

Credits: 3

Course Description: This course is provided collaboratively by the PhD Program at the Uniformed Services University and the ICPSR Summer Program at the Institute for Social Research (ISR) in Ann Arbor. As the second in a series of advanced and specialized methodology courses (the first was Fundamentals of Survey Methods), this course is offered to provide instruction in the emerging mixed methods approach designed to combine, integrate, merge and connect data from qualitative and quantitative sources. Using this contemporary approach, the course will focus on the philosophical and paradigmatic foundations instrumental in designing a mixed methods proposal, steps in designing an analysis plan, analyzing the data from different sources, and preparing data for dissemination.

The course is designed to begin at USU with two-two hour class sessions to provide an orientation and preparation for the intensive week long session (30 hours) at the Institute for Social Research in Ann Arbor. The Ann Arbor session of the course focuses on the integration of survey methods with multiple alternative methods to achieve a single data collection approach using the strengths of some methods to compensate for the weaknesses of other methods. The methods of focus will be unstructured or in-depth interviews, semi-structured interviews, focus groups, participant observation, archival research, and survey interviews. Emphasis will be placed on the specific contribution of each different method as well as the use of combined methods to advance specific research questions in unique ways. This course is designed for those with a specific causal research question in mind. Throughout the course, students will be asked to design multi-method approaches to a research question of their choice. By the end of this module, students will have an overview of multi-method research that will enable them to design, understand, and evaluate multi-method approaches within a single project. Students will develop a mixed methods research plan tailored to a research question of their choice.

Course Number: PHD848

Course Title: Teaching Principles and Practice

Credits: 3

Course Description: This elective course is designed to provide USU graduate students a context for applying teaching and learning concepts in health care education. The course will provide the learner with the opportunity to explore the role and expectations of an academe. Further, students will be afforded the opportunity to explore their philosophical view of higher education. In addition to teaching and learning concepts, students will gain access to resources and training regarding the integration of the Institute of Medicine's (IOM) core competencies into the curricula of graduate, health professional education and training.

Key design features when developing and evaluating courses will be examined in addition to the best practices and evidence-based benchmarks. Teaching strategies and guidelines for the educator to use in her/his own instructional setting will be reviewed. Finally, students will have the opportunity to experience the diverse expectations of the teaching role and explore different teaching approaches in the classroom. Students from all health care disciplines are welcome

Course Number: PHD851

Course Title: Stress & Trauma in the Military Context

Credits: 3

Course Description: This interdisciplinary course is designed to provide a sound theoretical exploration of stress and trauma as a foundation for future scientific investigations relevant to the military context. The course is designed for PhD students in clinical psychology and nursing interested in the phenomena of stress and trauma and their diverse manifestations throughout the lifespan conceptualized through the lens of the military environment.

Course Number: PHD852

Course Title: Military Women in Contemporary Society

Credits: 3

Course Description: This interdisciplinary course is designed to address issues of relevance to military women from a social, political, psychological and behavioral perspective. With the support of guest speakers, contemporary film and literature, as well as relevant scientific literature, the course will explore the history of women in the military to include the explicit inclusion of gender in doctrine and policies affecting military women. The impact of these social and political changes will be addressed in relation to more contemporary topics including: (1) women's gender-specific health issues including reproduction and childbearing, (2) the impact of deployment on marriage and children, (3) the work environment including job performance standards, promotion opportunities, and harassment, and (4) women's psychological recovery from deployment separations, combat exposure, other traumatic exposures including sexual assault, rape and violence. The course provides a forum for an in-depth and scholarly exploration of gender issues from multiple perspectives to prepare both clinicians and scientists to take an informed leadership role in today's armed forces.

Course Number: PHD853

Course Title: Methods & Measures in Psychophysiology

Credits: 3

Course Description: This course will describe the methods of psychophysiology. It will be shown that these methods can be used to construct quantitative physiological metrics that are useful in clinical psychology and neuropsychiatry. It will be argued that while the nonspecificity of these measures typically precludes diagnostic utility, their longitudinal application may provide a means of assessing the response to treatment. Additionally, research will be reviewed indicating that it may be possible to construct physiologically based measures of psychological

resilience. Clinical areas emphasized in the course will include traumatic brain injury, depression, post-traumatic stress disorder and pediatric/adolescent polytrauma.

The course will include laboratory demonstrations of computer based neuropsychological assessments, heart rate variability recordings, EEG recordings and the recording of event related potentials in the Traumatic Injury Research Program Laboratory in Building B.

The following technologies will be introduced: heart rate variability, electroencephalography (EEG), quantitative electroencephalography (qEEG), event related potentials (ERPs), eye tracking, magnetoencephalography (MEG), computed axial tomography (CAT), magnetic resonance imaging (MRI), and positron emission tomography (PET).

Course Number: PHD873

Course Title: Population Health and Outcomes

Credits: 3

Course Description: This course builds on previous work in Theoretical Frameworks and Research Methods and provides opportunities for students to broaden their knowledge base and research experience in relation to population health, health care costs, quality and outcomes, and principles of epidemiology. A population health approach focuses on assessing and improving health status and quality of care and services, monitoring and managing costs, and improving outcomes, for entire populations. This course provides an overview of major concepts, issues and frameworks associated with a population health approach, and measurement of quality, costs, and outcomes. Students will be guided in the examination of research/clinical/policy problems from a perspective that considers the links between health and political, social, economic, and environmental factors.

Course Number: PHD874

Course Title: Secondary Data Analysis of Quantitative Data: Methodological

Credits: 3

Course Description: Secondary analysis is the re-analysis of existing data using different techniques or different research questions, and/or analysis of data collected for purposes other than research. There are a number of types of data sets that can be used for secondary analysis. This course will focus on secondary analysis of quantitative data available in large data sets, and will include an overview of the common uses, advantages, limitations, methodological and interpretative issues associated with secondary analysis of quantitative data. In order to gain theoretical and practical experience with secondary data analysis students will: establish a set of criteria to critically evaluate a large quantitative data set; identify and critically evaluate use of a specific large data set with potential application to the Federal/Military Health System; facilitate a seminar in secondary data analysis featuring discussion of potential research questions, data quality methodological considerations, and interpretative issues associated with that data set; and design and present a research plan for secondary analysis of a large data set with potential application to the Federal/Military Health System.

Course Number: PMO502

Course Title: Introduction to SAS [required if registering for PMO 508]

Credits: 1

Course Description: This hands-on course is designed for students who want to perform statistical analyses using SAS, a popular statistical software package. The course will cover basic skills in writing SAS programs, managing data, and performing various statistical procedures covered in PMO504. Concepts and techniques covered will also be useful when using other statistical software packages. Prerequisites: PMO503, PMO504 concurrently.

Course Number: PMO508

Course Title: Biostatistics III

Credits: 5

Course Description: This course instructs students in understanding the concepts of more advanced statistical methods, and learning how to obtain and interpret results from the computer output of performing suitable statistical procedures by using statistical software, SAS on: basic concepts of matrix algebra used in biostatistics, introduction to generalized linear models, , maximum likelihood estimation, advanced analysis of multiple linear regression, analysis of covariance, Poisson regression, advanced binary logistic regression, multinomial logistic regression, logistic regression for matched study, and generalized estimating equations (GEE). Prerequisites: PMO502 and 504

Course Number: PHD891

Course Title: Directed Study

Credits: Variable

Course Description: A directed study is a well-defined and substantive academic activity designed to meet the specific needs of a student or students that is not currently available in the core or cognate courses. The course provides an opportunity for students to work under the close guidance of a selected faculty member with a clearly identified area of expertise that supports a program of study.