**NURS 980 TRANSLATIONAL RESEARCH I (4)** This scholarly initiative or action research is an individualized focus of study that demonstrates application and synthesis of the concepts of the doctorally prepared advanced nursing practice role. The clinically based initiative or study will culminate in a scholarly paper that will contribute to nursing knowledge on a topic or issue of significance to nursing. This scholarly paper will be prepared for presentation at a professional conference, or to be published in a nursing journal. The student is encouraged to collaborate with other advanced health providers and researchers in developing this initiative or study.

**NURS 990 TRANSLATIONAL RESEARCH II (4)** completes the scholarly initiative that was developed and implemented in the prerequisite course: NURS 980 Translational Research Scholarly Initiative: Development. Progress on this clinically based scholarly initiative or study should reflect the evaluation, documentation and dissemination phase of the project. This scholarly paper will be presented at a professional conference or it will be published in a nursing journal.

NURS 997 PRACTITIONER / EDUCATOR RESIDENCY (4) This course focuses on the continued development of the nurse educator, as students design, implement and evaluate educational plans for diverse populations and systems, in academic, acute care hospital and community education settings. Students will analyze various educational models and methods in application to the design of curricula in educational settings to create positive learning environments. Models are discussed in light of course content, objectives, goals, and current research. Focus on problem-solving common teaching/learning situations and the relationship between theory and practice. Online seminars synthesize knowledge from prior graduate nursing courses and explore approaches to the approaches to the teaching of nursing.

NURS 998 ADVANCED PRACTICE ROLE RESIDENCY (4) This course provides an intensive, focused residency designed to enable students to expand upon and further develop their advanced nursing practice skills and role. Under the guidence of their DNP faculty and preceptors, students will synthesize integrate and transform newly acquired knowledge and skills in a selected area of advanced clinical practice. Case presentation will be used to illustrate clinical trends, expert clinical judgement, and cultural competence in providing evidence-based quality health care that is population-focused and systems-based.

## **Physician Assistant Studies Courses (PAMS)**

**PAMS 600 INTRODUCTION TO THE PHYSICIAN ASSISTANT PROFESSION (2) Provides** an overview of the history of the Physician Assistant (PA) profession, practice regulations and demographics. Issues related to health care reimbursement systems, managed care, principles of quality assurance and risk management are also discussed. Emphasis is placed on the various roles of the PA in health care delivery as well as exploration of ethical and cultural issues related to the practice of medicine.

**PAMS 601 GROSS ANATOMY (7) Provides** a comprehensive study of human gross anatomy. A regional approach is used to study the structures and organ systems of the thorax, upper extremity, back, abdomen, pelvis, lower extremity, head and neck. The clinical significance of topographical and radiological anatomical features is emphasized. Lectures are complemented by the laboratory study of prosected cadavers, surface anatomy, anatomic models and computer dissection.

PAMS 604 PHARMACOTHERAPEUTICS I (4) The first in a three-course sequence designed to provide a solid foundation in pharmacokinetics, pharmacodynamics, and the physiology associated with drug action and interaction. Specific drug classes will be discussed, with attention given to individual drugs, their uses, side effects, similarities, and differences. Emphasis is placed on the most frequently prescribed agents for treatment of common diseases. Specific pharmacotherapeutic agents and/or disorders covered in this course include musculoskeletal/rheumatological disorders, neurological disorders, hematology and coagulation, and dermatological disorders. Prescription writing, dosing and calculations, autonomic pharmacology, pharmacogenomics, pharmacokinetics, toxicology, antimicrobials, vitamins and herbs are discussed in this first course.

PAMS 605 PHARMACOTHERAPEUTICS II (4) The second in a three-quarter course sequence designed to provide a solid foundation in pharmacokinetics, pharmacodynamics, and the physiology associated with drug action and interaction. Specific drug classes will be discussed, with attention given to individual drugs, their uses, side effects, similarities, and differences. Emphasis is placed on the most frequently prescribed agents for treatment of common diseases. Specific pharmacotherapeutic agents and/or disorders covered in this course include cardiovascular disorders, ENT disorders, pulmonary disorders, and infectious diseases.

PAMS 606 ESSENTIALS OF CLINICAL LAB MEDICINE (4) Introduces the student to basic clinical laboratory diagnostic tests. Selection and interpretation of procedures most commonly used in a primary care setting are studied. Students will learn

techniques used to obtain, preserve and handle laboratory specimens as well as use clinical laboratory results to screen, diagnose, evaluate and monitor patients. Integration of lecture material will be enhanced by the use of case studies.

**PAMS 607 CLINICAL NUTRITION (2)** Examines nutrition for health maintenance and in specific clinical situations. Nutritional needs throughout the life cycle are discussed as well as topics related to specialized nutritional support and clinical conditions.

PAMS 608 MEDICAL PHYSIOLOGY I (4) The first in a two-course sequence designed to give students a detailed overview of human physiology and pathophysiology. Students will expand their knowledge of the normal functions of the human body essential for clinical practice. Emphasis is placed on homeostasis and the integration among body systems. These concepts will enable the student to create a framework for the understanding of disease processes and the signs, symptoms and lab findings that they produce. Specific topics covered in this course include immunology, neurophysiology, cardiovascular, muscle, and integumentary systems.

**PAMS 609 MEDICAL PHYSIOLOGY II (4)** The second in a two-course sequence designed to give students a detailed overview of human physiology and pathophysiology. Students will expand their knowledge of the normal functions of the human body that is essential for clinical practice. Emphasis is placed on homeostasis and the integration among body systems. These concepts will enable the student to create a framework for the understanding of disease processes and the signs, symptoms and lab findings that they produce. Specific topics covered in this course include cardiovascular (con't.), renal, respiratory, gastrointestinal, endocrine, and reproductive systems.

**PAMS 610 MEDICAL GENETICS (2)** Designed to give the student up-to-date genetics information. Topics include structure and function of genes and chromosomes, genetic variation, autosomal dominant and recessive inheritance, sex-linked and mitochondrial inheritance, clinical cytogenetics, biochemical basis of human disease, immunogenetics, developmental genetics and cancer genetics. In addition, degeneration, aging, death and causes of disease and illness will be discussed.

**PAMS 611 PHARMACOTHERAPEUTICS III** (4) The third in a three-course sequence designed to provide a solid foundation in pharmacokinetics, pharmacodynamics, and the physiology associated with drug action and interaction. Specific drug classes will be discussed, with attentions give to individual drugs, their uses, side effects, similarities, and differences. Emphasis is placed on the most frequently prescribed agents for treatment of common diseases. Specific pharmacotherapeutic agents and/or disorders covered in this course include chemotherapy agents, endocrine disorders, fluid and electrolytes, gastrointestinal disorders, genitourinary disorders, and renal disorders.

**PAMS 612 EPIDEMIOLOGY AND PUBLIC HEALTH (4)** Medicine and Public Health are complementary professions. Purposefully, this course provides PAs with a common understanding of population health, population health approaches and the synergistic collaborations necessary for applying a population perspective to medical practice and/or taking advantage of the opportunities inherent in medical practice to achieve community wide goals of public health.

**PAMS 614 BEHAVIORAL MEDICINE (4)** Provides students with an overview of behavioral medicine, broadly defined as an interdisciplinary field that aims to integrate the biological and psychosocial perspectives on human behavior and apply them to the evaluation, prevention, and treatment of physical disease or physiological dysfunction. The integration of mental disorders and behavioral problems into primary care medicine will be addressed.

PAMS 621 CLINICAL ASSESSMENT I (7) The first in a sequence of three courses designed to develop basic medical terminology, fundamental clinical skills and professional behavior necessary for practice as a physician assistant in primary care. Clinical Assessment I covers medical terminology, interview techniques, the general survey, vital signs, skin and HEENT exam. The weekly three-hour laboratory sessions will be utilized for instruction/practice in the procedural competencies necessary to correctly perform all the following: a) vital signs b) skin survey c) general survey and d) focused as well as comprehensive HEENT examinations. Weekly Clinical Problem Solving Skills (CPSS) sessions provide each student with the opportunity to explore "real-life" clinical case scenarios to develop critical thinking and medical problem solving techniques. CPSS utilizes case-based and problem-based learning techniques in combination with patient scenarios and standardized patients. Techniques to develop and evaluate student progress include all of the following: interviewing and focused exam skill practice with standardized patients, assignments that emphasize the written components of the SOAP note and verbal aspects patient case presentation, small group activities, written exams and skills tests with critiques by faculty evaluators.

**PAMS 622 CLINICAL ASSESSMENT II (7)** The second in a sequence of three courses designed to develop fundamental clinical skills and professional behavior necessary for practice as a physician assistant in primary care. Clinical Assessment II continues with medical terminology, interview techniques, medical history and the neuromuscular and cardiopulmonary exams.

The weekly three-hour laboratory sessions will be utilized for instruction/practice in the procedural competencies necessary to correctly perform all of the following: a) comprehensive and focused cardio-pulmonary exam, b) comprehensive and focused musculoskeletal exam and c) comprehensive and focused neurologic exam. Weekly Clinical Problem Solving Skills (CPSS) sessions provide each student with the opportunity to explore "real-life" clinical case scenarios to develop critical thinking and medical problem solving techniques. CPSS utilizes case-based and problem-based learning techniques in combination with patient scenarios and standardized patients. Techniques to develop and evaluate student progress include all of the following: interviewing and focused exam skill practice with standardized patients, assignments that emphasize the written components of the SOAP note and verbal aspects patient case presentation, small group activities, written exams and skills tests with critiques by faculty evaluators.

PAMS 623 CLINICAL ASSESSMENT III (7) The last in a sequence of three courses designed to develop fundamental clinical skills, and professional behavior necessary for practice as a physician assistant in primary care. Clinical Assessment III continues with medical terminology, interview techniques, medical history and the physical exams for abdomen, vascular system, male and female genitalia along with basic introduction to pediatric, obstetric and geriatric assessments. The weekly three-hour laboratory sessions will be utilized for instruction/practice in the procedural competencies necessary to correctly perform all of the following: a) comprehensive and focused abdominal exams, b) comprehensive and focused peripheral vascular exams c) comprehensive and focused male and female GU exams.

**PAMS 626 ESSENTIALS OF RADIOLOGY (4)** Course provides students with a systematic method of interpreting common imaging studies seen in the primary care and emergency setting. Students will learn to appropriately select, and correctly interpret imaging modalities including radiography, computerized tomography, ultrasonography, magnetic resonance imaging and nuclear medicine imaging.

**PAMS 627 CLINICAL PEDIATRICS (4)** Provides an introduction to the fundamentals of pediatric medicine, covering the age span from neonate through adolescence. Childhood growth and development, preventative care, anticipatory guidance, and diagnosis and management of common pediatric illnesses encountered in clinical practice will be discussed.

**PAMS 630 DISEASES OF ORGAN SYSTEMS I (4)** The first in a three-course sequence that uses a systems-oriented approach to focus on the etiology, pathophysiology, diagnosis, treatment and prognosis for musculoskeletal/rheumatological, neurological, dermatological disorders and hematology/coagulopathies, including metabolic and infectious processes.

**PAMS 631 DISEASES OF ORGAN SYSTEMS II (4)** Is the second in a three-course sequence that uses a systems-oriented approach to focus on the etiology, pathophysiology, diagnosis, treatment and prognosis for cardiovascular, ENT, pulmonary disorders, and infectious diseases.

**PAMS 632 DISEASES OF ORGAN SYSTEMS III (4) Is** the third in a three-course sequence that uses a systems-oriented approach to focus on the etiology, pathophysiology, diagnosis, treatment and prognosis for renal, gastrointestinal, genitourinary and endocrine disorders, including metabolic and infectious processes.

PAMS 635 FUNDAMENTALS OF SURGERY (4) Designed to give an introduction and overview to the discipline of surgery, as well as principles of pre- and post-operative management of surgical patients. The course covers management of acute surgical problems, critical illness, malignancy and elective surgical procedures. Additionally, specific technical skills and bedside procedures will be taught, including suturing, sterile technique, universal precautions, nasogastric intubation, urinary catherization and chest tube placement.

PAMS 636 OBSTETRICS & GYNECOLOGY (4) Designed to provide the physician assistant student with an understanding of the medical problems encountered in the areas of women's health (Gynecology) and maternal and fetal well-being (Obstetrics) inclusive of the biological and psychological changes commonly associated with puberty, reproduction and menopause. The course provides knowledge, focused physical exam skills and communication skills needed to provide care and enhance health maintenance for acute and chronic medical problems commonly encountered in gynecology and obstetrics. The overall goal is to provide students with the foundation for competent and compassionate care of female patients.

**PAMS 654 TOPICS IN CONTEMPORARY MEDICINE (4)** The focus of this course will be to introduce biomedical ethics, including personal and professional values, the history of ethics, philosophical underpinnings, and a beginning exploration of approaches for working through moral dilemmas.

**PAMS 660 DIDACTIC SUMMATIVE EVALUATION (5)** A summative course that reviews physical exam skills, clinical conditions and laboratory techniques in preparation for clinical rotations. Clinical review is focused on the following systems:

cardiac (integration of clinical conditions with EKG findings), common emergency medicine scenarios (derm, respiratory and GU) and orthopedics which incorporates clinical conditions with x-rays. The lab sessions incorporate basic eye skills, casting and splinting, blood draw, injections and ECG interpretation with BLS and ACLS training and certification.

**PAMS 696 RESEARCH FOUNDATIONS (2)** Provides a basis for future work. Time and attention will be given to research methodologies, inquiry, reliability and validity, and statistics. The student will also learn about scientific writing, hypotheses, proposals, human volunteers, and animal rights oversight committees.

**PAMS 697 STUDY OF MEDICAL LITERATURE (2)** Dedicated to the study and understanding of the medical literature. The student will read and discuss qualitative, single subject and experimental literature. A crucial component of this course is evidence - based medicine. A focus will be the transformation from the critical appraisals of evidence into direct clinical action. Practice in searching the medical databases will provide the student with confidence for their future medical work.

**PAMS 698 RESEARCH INDEPENDENT STUDY (2) Provides** an opportunity to work independently with the research track course instructor(s) and the student advisor to decide, define, and write a research proposal.

**PAMS 700 INTERNAL MEDICINE (8)** Provides the PAMS student with the opportunity to diagnose, manage and treat patients in a wide range of acute and chronic medical problems encountered in internal medicine. Exposure is provided at the level of a primary care physician assistant.

**PAMS 705 GENERAL SURGERY (8)** Provides the PAMS student with the opportunity to be involved in the direct care of patients undergoing surgery including both pre-operative evaluation and post-operative maintenance. If possible, the rotation will emphasize surgical conditions and disease entities commonly encountered in the rural primary care setting.

**PAMS 710 FAMILY MEDICINE (8)** Provides the PAMS student with experience in a primary care setting and focuses on medical problems and aspects of disease prevention most commonly encountered by the primary care provider. All disciplines of healthcare are represented; however emphasis is placed on their application to the primary care setting with awareness of the individual's psychosocial needs.

**PAMS 715 EMERGENCY MEDICINE (8)** Provides the PAMS student with exposure to the diagnosis and treatment of patients presenting to the emergency department. Emphasis is placed on developing skills in recognizing signs and symptoms of common emergencies; taking appropriate action to sustain life; collecting relevant data; and providing accurate assessment and management of a variety of acute and life threatening medical, surgical and psychiatric illnesses and injuries.

**PAMS 720 WOMEN'S HEALTH (8)** Provides the PAMS student with exposure to the spectrum of women's health care. A primary care emphasis is given to the evaluation and treatment of common ambulatory gynecological problems, family planning, recognition and treatment of sexually-transmitted diseases, cancer screening, routine care options for the older female patient, and the care of the pregnant patient including, pre-, intra-, and postpartum care.

**PAMS 725 PEDIATRICS (8)** Provides the PAMS student with exposure to the care of the pediatric patient in health and disease from birth to adolescence. A primary care emphasis is given to normal child development and the recognition and management of common childhood illness, as well as well-child care, immunization updates and patient education.

**PAMS 735 BEHAVIORAL ASPECTS OF MEDICINE (8)** Introduces the PAMS student to the practice of Behavioral Medicine in a comprehensive health delivery system. The rotation will provide the student with an understanding of the variety of emotional states, basic psychopathology and pharmacotherapeutics. The student will develop the skills to make a psychiatric assessment. Emphasis will be placed on developing the skills and knowledge that will be useful in a primary care setting.

**PAMS 750 ELECTIVE CLINICAL ROTATION (8)** Can be conducted in such areas as dermatology, cardiology, geriatrics, orthopedics, or rural medicine. Other elective rotations may be developed by the clinical coordinator and/or upon student request and as approved by the program director.

PAMS 790 COMPREHENSIVE CLINICAL REVIEW (2) Provides a final review and assessment of the student's knowledge of core competencies. Students will participate in a 3-day board review course. The assessment phase will involve student participation in an OSCE + SOAP note/oral presentation and prescription writing, dermatology identification, interpretation of EKGs, radiographs and lab values, and suturing skills. A comprehensive written examination will provide for the review and assessment of students' knowledge of day-to-day clinical problems that present in clinical practice. Students will also take the current Physician Assistant Clinical Knowledge and Assessment Tool (PACKRAT). This comprehensive

examination is representative of the knowledge base that a graduate Physician Assistant should possess and offers a way to specifically identify areas of strength and weaknesses through a detailed process.

**PAMS 799 CAPSTONE RESEARCH PROJECT (2)** a synthesis of problem solving, research methodologies, evidence-based critical thinking and hard work. The students will collaborate with the research tract course instructor(s) and faculty advisors for their project. This clinically based project can take the form of a literature review, case study, a scientific experiment or other suggested forms with the approval of the course instructor.

## **Regional Education Courses (REAL)**

**REAL 600 STANDARD AND PROPOSITION NB (3)** Prepares participants to fully investigate the 5 Core Propositions and the National Board for Professional Teaching Standards (NBPTS) in their selected area of certificate. Participants will analyze their own teaching to identify the 5 Core Propositions as well as NBPTS standards in their learning environments. Once identified, participants are expected to be reflective practitioners and move toward incorporating developing accomplished teaching practices in daily teaching.

REAL 601 ANALYZING CURRICULUM PLAN NBPTS (3) prepares participants to analyze and reflect on their planning, instruction, and assessment within their own learning environment. Participants will utilize the Architecture of Teaching and the NBPTS in their certificate area to reflect on student learning. Reflection of integration of curricular areas is expected with this course. In addition, analyzing student work samples to enhance instruction and improve student learning is expected as part of this course requirement.

**REAL 602 REFLECTING ON YOUR TEACHING NB (3)** prepares participants to utilize video-taping to reflect on their own teaching practices. Through video-taping, participants will analyze their teaching to improve classroom instruction and student learning. NBPTS will be utilized throughout this process as teachers reflect on their teaching using national teaching standards.

REAL 603 COLLABORATIVE RELATIONSHIPS-NB (3) prepares participants to identify and analyze past and current collaborative relationships as members of learning communities. Collaboration with families and the school's community will be identified and analyzed with regards to the impact on student learning. Participants will also recognize the contributions to the school community, leadership opportunities, and personal accomplishments and the impact on their teaching and student learning. NBPTS will be utilized throughout this process as teachers reflect on their collaboration using national teaching standards.

**REAL 604 ASSESSMENT CENTER PREP –NB (3)** prepares participants for the NBPTS Assessment Center in their area of certification. Participants will utilize the NBPTS Assessment Center exercises in their certificate area to identify what is known and what needs additional research and studying. Participants will utilize the Assessment Center rubrics to identify the expectations of the assessment center.

REAL 605 DIFFERENTIATING FOR DIVERSE LEARNERS (3) examines the process of education and explores the best practices that will improve the delivery of knowledge to student of all ages. Research clearly states that the brain development of our students is very different than it was just a few year ago. Children have become digital learners. This drastically changes the rubric for delivering the curriculum to our tech-save students. This course will assist teachers with their instructional strategies to keep abreast of the current challenges that they face in the ever changing classroom environment that impacts student learning.

**REAL 611 PROJECT CRISS (2)** prepares participants of all abilities learn content information across the curriculum and throughout the grade levels

**REAL 612 EDUCATING FOR CHARACTER (3)** Studies the historical, philosophic and psychological foundations upon which character education is based. The history of character education in the United States and in other countries will be examined. Different theories of character education will be matched with their corresponding philosophic basis. Democratic ideals, ethical codes and professional standards will be examined. The psychological foundations of moral education will be identified.

**REAL 613 COMP INTERVENTION: ZIGGURAT MODEL (3)** This course will explore a framework for developing individualized comprehensive plans for children with Autism Spectrum Disorders. The Ziggurat Model uses a framework with 5 levels of structure including: a) social differences and biological needs, b) reinforcement, c) structure and visual supports, d)