

GRADUATE NURSING (GRNS)

Courses

GRNS 5130. Gr Pathophysiology. 3 Credits.

Designed to provide the student with a working foundation of both pathophysiology and pharmacology. The phenomena that result in dysfunction in human physiologic response will be examined within a holistic context across the lifespan. An understanding of the basic concepts underlying common pathways in disease is emphasized. Credit not awarded for both GRNS 5130 and NURS 3220.

Prerequisite: Direct Entry to Professional Nursing, Direct Entry to Clinical Nurse Leader student. Co-requisite: GRNS 5280.

GRNS 5280. Pharmacology. 3 Credits.

Addresses pharmacological management pertaining to patients across the lifespan, while defining the professional nurse's role and responsibilities in drug therapy. Pharmacological principles such as; pharmaceutics, pharmacokinetics, and pharmacodynamics will be introduced, discussed and incorporated into instructional activities to ensure that students possess the knowledge necessary to actively apply pharmacological principles in the delivery. Credit not awarded for both GRNS 5280 and PRNU 3228. Prerequisite: Direct Entry to Professional Nursing, Direct Entry to Clinical Nurse Leader student. Co-requisite: GRNS 5130.

GRNS 5320. Science of Nursing:Children. 3 Credits.

Focuses on the human experience of children and adolescents with alterations in health. An integration of theory, research, and practice will be utilized to cover (1) illnesses, (2) anticipatory guidance with patients and their families for the purposes of disease prevention, and (3) deliver individualized nursing care according to the patient's needs. Credit not awarded for both GRNS 5320 and PRNU 3232.

Prerequisites: GRNS 5280, GRNS 5130; Direct Entry to Professional Nursing, Direct Entry to Clinical Nurse Leader standing.

GRNS 5990. Special Topics. 0.25-18 Credits.

See Schedule of Courses for specific titles.

GRNS 5993. Independent Study. 0.25-6 Credits.

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

GRNS 6000. Professional Nursing Issues. 2 Credits.

Issues affecting nursing practice provide framework for examination of and socialization into professional nursing. The historical, legal, ethical, cultural, structural, and economic aspects of nursing practice will be explored. Prerequisite: Admission to Direct Entry Program in Nursing. Co-requisites: GRNS 5280, GRNS 6020, GRNS 6030. Pre/co-requisite: GRNS 5130.

GRNS 6020. Sci Nsg:Adults Across Life I. 3 Credits.

Identification and treatment of human responses to pathophysiological problems in adults with acute, chronic, or terminal conditions, with principles of general acute nursing practice emphasized. Prerequisite: Admission to Direct Entry Program in Nursing. Co-requisites: GRNS 6000, PRNU 3228, GRNS 6030, NURS 3220.

GRNS 6030. Practicum:Adults Lifespan I. 3.75 Credits.

An initial experience in the simulation lab followed by a supervised practicum in which students care for adults with acute, chronic, and/or terminal conditions. During the instruction in the simulation lab, attention focuses on the development of scientific understanding of nursing practice, psychomotor skills, and communication skills.

Prerequisite: Admission to the Direct Entry Program in Nursing or Direct Clinical Nurse Leader program. Co-requisites: GRNS 6000, GRNS 5280, GRNS 6020, GRNS 5130.

GRNS 6040. Pract:Adults Lifespan II. 1.25 Credit.

Supervised clinical nursing practicum provides an 80 hour immersion experience in the medical/surgical acute care setting. Prerequisites: GRNS 6000, PRNU 3228, GRNS 6020, GRNS 6030, NURS 3220.

GRNS 6050. Pract: Cmplx Nsg Care Adults. 2.5 Credits.

Provides knowledge and skills while caring for adults with acute, chronic, and terminal health conditions. Students will develop skills in organizing and prioritizing care for multiple patients while demonstrating practice consistent with the ANA Scope and Standards of Practice (2010). Daily clinical discussions will provide an opportunity to process interpersonal and professional issues.

Prerequisite: GRNS 6020, GRNS 6030, GRNS 5130, GRNS 5280. Co-requisites: GRNS 6120.

GRNS 6060. Sci of Nsg: Mental Health. 3 Credits.

Theories of human behavior form the foundation for understanding mental health and acute and chronic mental illnesses. Focus on assessment, treatment, and nursing care. Prerequisites: GRNS 5280, GRNS 5130, GRNS 6020, GRNS 6030. Co-requisite: GRNS 6120.

GRNS 6070. Practicum: Mental Health. 1.5 Credit.

The implementation of holistic nursing care for clients with mental illness based on theoretical and conceptual models and rationale. Faculty supervise students in complex practice settings using all steps of the nursing process based on psychiatric-mental health scope and standards. Collaboration is emphasized with all members of the interprofessional team. Prerequisites: GRNS 6050, GRNS 6060.

GRNS 6080. Sci of Nsg: Gyn Care & Family. 3 Credits.

Focus on healthy maternal-newborn care, and promotion of wellness and family integrity during transition within a family-centered framework. Prerequisites: GRNS 5280, GRNS 5130, GRNS 6020, GRNS 6030. Co-requisite: GRNS 5320.

GRNS 6090. Practicum:Women & Newborns. 1.25 Credit.

Attention is focused on provision of nursing care to the expectant, laboring, or post-partum mother and to the newborn infant. Pre/Co-requisite: GRNS 6080.

GRNS 6110. Practicum: Children. 1.25 Credit.

Faculty guide students in clinical settings to maximize exposure to all aspects of the nursing process with children having selected pathophysiological problems. Prerequisite: GRNS 5320. Pre/co-requisites: GRNS 6070, GRNS 6140, GRNS 6150.

GRNS 6120. Sci of Nsg: Adults Lifespan II. 2 Credits.

Continued exploration of pathophysiological phenomena of health conditions commonly experienced in an acute care setting. Prerequisite: GRNS 5130, GRNS 5280, GRNS 6020, GRNS 6030. Co-requisite: GRNS 6050.

GRNS 6140. Public Health Nursing. 2 Credits.

Emphasis on the epidemiological and biostatistical indicators of population health, methods of community health analysis, structure and function of federal, state and local health organizations. Prerequisites: GRNS 5320, GRNS 6110, GRNS 6120. Co-requisite: GRNS 6150.

GRNS 6150. Practicum: Public Health Nurs. 1 Credit.

Statewide population-focused public health nursing experience involving needs assessment, program development, case management, health promotion, disease prevention, and protection strategies, with opportunities for interdisciplinary collaboration. Co-requisite: GRNS 6140.

GRNS 6210. Professional Role Development. 3 Credits.

Examination of role development in advanced generalist and advanced nursing practice; including the development of competencies, licensing, and other specialized roles in nursing.

GRNS 6220. Org, Deliv & Finance Hlth Care. 3 Credits.

Structure, organization, financing, and delivery of health care through complex systems in the United States. Focus on economic, social, ethical, political, and global structures. Prerequisite: Registered nurse licensure or Graduate Nursing student.

GRNS 6240. Theoretical Foundation Nsg Sci. 3 Credits.

Exploration of philosophy of science, theory, and development of nursing knowledge. Nursing and non-nursing philosophies and theories relevant to advanced nursing practice will be discussed.

GRNS 6250. Genetics for Clinicians. 3 Credits.

This course provides an overview of contemporary human genetics and genomics with application to clinical practice. Cross-listed with: PATH 6250.

GRNS 6260. Hlth Care Eth,Policy,Politics. 3 Credits.

Examination of the processes of policy analysis and development with focus on advocacy. Prerequisite: Registered nurse licensure or Graduate Nursing student.

GRNS 6270. Adv Topics in Hlth Informatics. 3 Credits.

This course provides an overview of informatics, the transformation of data into information, knowledge, decisions and actions to improve outcomes. This course offers the student an opportunity to study advanced topics in health informatics. Topics vary by offering; periodic offering at intervals that may exceed four years. Pre/Co-requisites: GRNS 6220, GRNS 7000.

GRNS 6280. Quality in Healthcare. 3 Credits.

Introduces students to the principles and practices of health care quality and quality improvement. Principles in the design and management of continual improvement activities will be presented and applied. Cross-listed with: CTS 6020.

GRNS 6300. Adv Concepts in HAPP. 5 Credits.

Designed to provide students with the knowledge, skills, and competencies necessary for providing exceptional patient-centered care. Students will delve deep into various aspects of advanced pathophysiology, pharmacology, and health assessment, fostering effective interdisciplinary collaboration, and ensuring ethical and legal competence for advanced nursing practice. Prerequisite: Direct Entry to Master of Science in Nursing or Master of Science in Nursing student.

GRNS 6301. Research, QI & EBP. 3 Credits.

Provides nursing professionals with the knowledge and skills to critically appraise, conduct, apply, and disseminate research in healthcare settings. Students will integrate and apply advanced research, quality improvement methodologies, and evidence-based practice principles to develop the conceptual basis and methodological approach to their master's project or thesis. Principles of ethics, interprofessional, and collaborative practice are incorporated in proposal development. Prerequisite: STAT 5000. Co-requisite: GRNS 6302.

GRNS 6302. Quality & Informatics. 3 Credits.

Nursing professionals play a pivotal role in delivering high-quality patient care while harnessing the power of technology and data-driven insights. This course is designed to empower students with the knowledge and skills necessary to excel in a dynamic healthcare environment. Students will be introduced to core concepts from both the informatics and quality domains, allowing them to integrate new concepts and apply reflective practice to the ways in which they use these skills every day. Prerequisite: STAT 5000. Co-requisite: GRNS 6301.

GRNS 6303. Mindfulness & Compassion. 2 Credits.

Critically examines the current body of knowledge associated with the development of compassion fatigue and professional burnout. Students will evaluate and apply integrative health practices that promote nurse, healthcare provider, and patient wellness. With an emphasis on reflective practice, students will contribute to an environment that promotes self-care, personal health, and wellbeing for self and others.

GRNS 6304. Planetary Health for HCP. 3 Credits.

Delves into the nexus between population health and the Earth, emphasizing the repercussions of human-induced environmental degradation, climate change, and biodiversity loss on planetary well-being. Students will grasp the intricacies of these challenges and develop strategies to foster a sustainable, equitable, and just future that safeguards the health and flourishing of not only humans but also non-human species and the Earth itself, broadening the scope of care to encompass the entire ecosystem.

GRNS 6305. Transformational Leadership. 3 Credits.

Delves into the dynamic and evolving field of nursing leadership. Through comprehensive study and critical analysis, students explore innovative leadership models, ethical dilemmas, and effective communication strategies specific to healthcare settings. By integrating theory and practice, this course empowers nursing professionals to become transformational leaders capable of driving positive change within healthcare organizations. Prerequisite: Passing comprehensive exam. Pre/co-requisite: GRNS 6306.

GRNS 6306. Project & Thesis Seminar. 1 Credit.

Builds on previous work completed in Research, Quality Improvement Methods, and Evidenced Based Practice course. Students refine and operationalize their master's thesis or project. Through class discussions, peer feedback, and faculty guidance, students focus on finalizing their pre-proposal as well as formulating a thesis or project committee and an appropriate timeline for completion of key elements and criterion. Prerequisites: STAT 5000, GRNS 6301, GRNS 6302, GRNS 6240.

GRNS 6350. Adv Pathophysiology. 3 Credits.

In-depth examination of the biological and physical manifestations of disease as they correlate with pathophysiology to guide clinical decision making of the APRN and CNL. Prerequisite: Registered Nurse license or completion of Direct Entry Program in Nursing. Pre/Co-requisite: GRNS 7040.

GRNS 6392. Master's Project Research. 1-3 Credits.

Self-designed clinical paper or innovative production pertinent to advanced nursing practice. Prerequisites: Instructor permission. Pre/Co-requisite: Comprehensive Exam (completed prior to project presentation).

GRNS 6430. CNL Project Seminar I. 1 Credit.

Provides an overview of the role of the Clinical Nurse Leader as a change agent at the point of care. Prerequisites: GRNS 6270, GRNS 6350. Co-requisites: GRNS 6280, NH 6899.

GRNS 6440. CNL Practicum I. 1 Credit.

Students explore the clinical microsystem and identify areas to improve patient safety and health care outcomes. Students complete a minimum of 120 practicum hours in a practice setting(s) with clinical mentor(s) agreed upon by the student and the course faculty. Pre/Co-requisites: GRNS 6260, GRNS 6270, GRNS 6280, GRNS 6350, GRNS 6430, NH 6899.

GRNS 6450. CNL Project Seminar II. 1 Credit.

Focuses on further refinement and completion of the Clinical Nurse Leader project proposal. The Clinical Nurse Leader project emphasis is on unit and organizational culture, structure and function, and effectiveness while considering relevant cost, quality, and patient outcome data. Prerequisites: GRNS 6430, GRNS 6280. Co-requisites: GRNS 6210, GRNS 6220, GRNS 7060.

GRNS 6460. CNL Practicum II. 0.75 Credits.

Students explore the clinical microsystem and identify areas to improve patient safety and health care outcomes in the inpatient and outpatient setting to inform the Clinical Nurse Leader project. A minimum of 90 practicum hours will be completed in a setting(s) with clinical mentor(s) agreed upon by the student and the course instructor. Prerequisites: GRNS 6430, GRNS 6440. Co-requisites: GRNS 6210, GRNS 6220, GRNS 7060.

GRNS 6470. CNL Project Seminar III. 0.5 Credits.

Students complete the implementation phase of the Clinical Nurse Leader project and initiate project evaluation measures. Details of process measures and outcomes, observed associations between outcomes, interventions, and relevant contextual elements, consequences of project implementation, and analytic strategies will be emphasized. Prerequisites: GRNS 6450, GRNS 6460. Co-requisite: GRNS 6480.

GRNS 6480. CNL Clin Immersion Practicum. 2.5 Credits.

Designed to implement and evaluate the Clinical Nurse Leader quality improvement project. Students will implement and evaluate the select microsystem change aimed to improve patient safety and outcomes. Students will evaluate the impact of the practice change and disseminate findings and implications for practice change. Prerequisite: GRNS 6460. Co-requisite: GRNS 6430.

GRNS 6990. Special Topics. 0.25-18 Credits.

Topics of interest to Graduate Nursing which are based on theory, research or advanced practice. Course content will deal with topics beyond the scope of existing formal courses or Doctor of Nursing Practice project. Prerequisite: Instructor permission.

GRNS 6993. Independent Study. 0.25-18 Credits.

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

GRNS 6995. Graduate Independent Research. 1-18 Credits.

Graduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

GRNS 7000. Population-Based Hlth for APN. 3 Credits.

The role of advanced practitioners in the care of populations with an emphasis on the U. S. health care system.

GRNS 7010. Leadership of HlthCare Systems. 3 Credits.

Planning and implementation of programs, projects or systems of health care delivery. Prerequisite: GRNS 6220.

GRNS 7040. Adv Pharmacology APRN. 3 Credits.

In-depth examination of the pharmacokinetics and pharmacodynamics of select drugs for acute and chronic health conditions. Ethical and legal standards of prescriptive authority explored. Pre/Co-requisite: GRNS 6350.

GRNS 7050. Adv Neuropsychopharmacology. 3 Credits.

In-depth examination of the pharmacokinetics and pharmacodynamics of drugs used to treat individuals with acute and chronic pain, neurologic and psychiatric illnesses across the lifespan. Prerequisites: GRNS 6350, GRNS 7040.

GRNS 7060. Adv Hlth Assessment. 3 Credits.

Development of advanced knowledge and skills in systematic collection, organization, interpretation, and communication of data necessary for formulation of nursing and medical diagnoses. Lab fee required. Prerequisite: Basic physical examination course. Pre/co-requisite: GRNS 6350.

GRNS 7070. Opt Hlth & Mgt Com Hlth Issues. 2 Credits.

Assessment and optimization of health of adolescents and adults. Diagnostic reasoning and management of common acute health conditions. Prerequisites: GRNS 6350, GRNS 7040, GRNS 7060. Co-requisites: GRNS 7050, GRNS 7080.

GRNS 7080. Prac:Opt Hlth&Mgt Com Hlt Iss. 1 Credit.

Assessment and optimization of health of adolescents and adults. Diagnostic reasoning and management of common acute health conditions. Prerequisites: GRNS 6350, GRNS 7040, GRNS 7060. Co-requisites: GRNS 7050, GRNS 7070.

GRNS 7090. Pediatric Concepts APRN. 3 Credits.

APN care to children and their families with an emphasis on the developmental, psychosocial, cultural, ethical, and spiritual needs of children and families. Pre/Co-requisites: GRNS 7050, GRNS 7070, GRNS 7080.

GRNS 7100. Primary Care Mgmt Child & Adol. 3 Credits.

Application in a clinical setting(s): assessment, evaluation, diagnostic reasoning, and management of common episodic and chronic health conditions in provision of primary care to children and adolescents. Prerequisites: GRNS 7050, GRNS 7070, GRNS 7080, GRNS 7090. Co-requisite: GRNS 7110.

GRNS 7101. Radiology for Primary Care. 0.5 Credits.

Focuses on the basic and applied principles of ordering and interpreting radiologic studies within the clinical setting. Focus on the understanding of basic principles of interpretation primarily of plain film, but will touch on CT, MRI and ultrasound evaluation as well, and how these diagnostic strategies may be wisely used in a clinical setting. Prerequisites: GRNS 7070, GRNS 7080, GRNS 7300.

GRNS 7102. EKG for Primary Care. 0.5 Credits.

Provides students with the fundamental skills and knowledge necessary to interpret and analyze electrocardiograms (EKGs) in a primary care setting. Through a combination of lectures, hands-on practice, and case studies, participants will gain proficiency in identifying common cardiac arrhythmias, recognizing ischemic changes, and assessing the overall cardiac health of their patients. Prerequisites: GRNS 7070, GRNS 7080, GRNS 7300.

GRNS 7103. Procedures for Primary Care. 0.5 Credits.

Provides hands on instruction using a combination of lectures, task trainers, and simulation to learn the indications for, techniques of, and application of common office procedures in the primary care setting. Prerequisites: GRNS 7070, GRNS 7080, GRNS 7300.

GRNS 7110. Practicum: Child & Adolescents. 1 Credit.

Application in a clinical setting(s): assessment, evaluation, diagnostic reasoning, and management of common episodic and chronic health conditions in provision of primary care to children and adolescents. Prerequisites: GRNS 7050, GRNS 7070, GRNS 7080, GRNS 7090. Co-requisite: GRNS 7100.

GRNS 7120. Adv Nsg Prac of Older Adult. 3 Credits.

Focus on health and disease and associated care and treatment of older persons by the advanced practice nurse. Prerequisites: GRNS 6350, GRNS 7040, GRNS 7060, GRNS 7070, GRNS 7080. Pre/Co-requisite: GRNS 7050.

GRNS 7130. Practicum: Nursing Older Adult. 0.5 Credits.

Practice assessment and care coordination skills in a practicum working with older adults in a variety of settings. Prerequisites: GRNS 7070, GRNS 7080. Co-requisite: GRNS 7120.

GRNS 7140. Prim Care Acute&Comm Hlth Cond. 3 Credits.

Focus will be on the assessment, evaluation and management of common episodic conditions in primary care in the Family Nurse Practitioner and Adult/Gerontology Nurse Practitioner tracks. Prerequisites: GRNS 7070, GRNS 7080, GRNS 7170, GRNS 7180. Co-requisite: GRNS 7150.

GRNS 7150. Practicum:Acute&Com Cond AGNP. 1 Credit.

Practicum experience for assessment, evaluation and management of common episodic conditions in primary care in the Adult/Gerontology Nurse Practitioner track. Prerequisites: GRNS 7070, GRNS 7080, GRNS 7170, GRNS 7180. Co-requisite: GRNS 7140.

GRNS 7160. Practicum:Acute&Com Cond FNP. 1 Credit.

Practicum experience for assessment, evaluation and management of common episodic conditions in primary care in the Family Nurse Practitioner track. Prerequisites: GRNS 7070, GRNS 7080, GRNS 7090, GRNS 7100, GRNS 7110, GRNS 7170, GRNS 7180. Co-requisite: GRNS 7140.

GRNS 7170. Mgt Women & Gendered Hlth Care. 2.25 Credits.

Advanced nursing practice focusing on the assessment, diagnosis, management, and evaluation of acute and chronic health conditions commonly encountered in the area of women's and gendered related health conditions. Prerequisites: GRNS 7070, GRNS 7080, GRNS 7120. Co-requisite: GRNS 7180.

GRNS 7180. Women & Gender Incl Hlth. 0.5 Credits.

Focuses on the healthcare needs and disparities that affect individuals across the gender spectrum, with an emphasis on the health of individuals assigned female at birth (AFAB). Through a combination of interactive seminars and hands-on practicum experiences, participants will gain the expertise needed to provide culturally humble, evidence-based care in diverse clinical settings. Prerequisites: GRNS 7070, GRNS 7080. Co-requisite: GRNS 7170.

GRNS 7181. PRAC: Care of Indiv AFAB. 0.25 Credits.

Delve into the multifaceted realm of individuals assigned female sex at birth (AFAB), guided by a lens that prioritizes inclusivity and sensitivity. Through this experience, actively participate in patient care, concentrating on the comprehensive assessment, diagnosis, management, prevention, and evaluation of both acute and chronic health conditions prevalent in AFAB. Prerequisites: GRNS 7070, GRNS 7080. Pre/Co-requisites: GRNS 7170, GRNS 7180.

GRNS 7190. Prim Care Chron/Cmplx Hth Cond. 3 Credits.

Focuses on the refinement diagnostic and therapeutic interventions in the provision of primary health care to individuals and families with chronic and complex health conditions. Prerequisites: GRNS 7140; GRNS 7150 or GRNS 7160; Comprehensive Exam. Co-requisites: GRNS 7200 or GRNS 7210.

GRNS 7200. Practicum:Chrn&Cplx Cond AGNP. 2.5 Credits.

Practicum focuses on the refinement diagnostic and therapeutic interventions in the provision of primary health care to individuals and families with chronic and complex health conditions. Prerequisites: GRNS 7120, GRNS 7140, GRNS 7150. Co-requisite: GRNS 7190.

GRNS 7210. Practicum:Chrn&Cmplx Cond FNP. 2.5 Credits.

Focuses on the refinement diagnostic and therapeutic interventions in the provision of primary health care to individuals and families with chronic and complex health conditions. Prerequisites: GRNS 7140, GRNS 7160. Co-requisite: GRNS 7190.

GRNS 7220. DNP Project Seminar I. 1 Credit.

Provides structure for the development of a conceptual framework and methodological approach to the Doctor of Nursing Practice project, a project where a clinically relevant problem is addressed through application of the best evidence. Prerequisites: GRNS 6210, GRNS 6240, NH 6899, GRNS 6260, GRNS 6270. Pre/Co-requisite: GRNS 6280.

GRNS 7230. DNP Project Practicum I. 1-6 Credits.

This practicum guides project initiation including summary tasks and milestones, business plan, identification of resources assigned to tasks, and task interdependencies. Project monitoring, reporting, and management are required. Prerequisite: GRNS 7220.

GRNS 7240. DNP Project Seminar II. 1 Credit.

Students will prepare and implement the Doctor of Nursing Practice project. Prerequisites: GRNS 7220, GRNS 7230. Co-requisite: GRNS 7250.

GRNS 7250. DNP Project Practicum II. 1-6 Credits.

Doctor of Nursing Practice project will be implemented including critical analysis of data and evidence for improving nursing practice. Project monitoring, reporting, and management are required. Prerequisites: GRNS 7220, GRNS 7230. Co-requisite: GRNS 7240.

GRNS 7260. DNP Project Seminar III. 1 Credit.

Requires the analysis, completion, and dissemination of the Doctor of Nursing Practice project for the preparation of advanced practice nurse with the practice doctorate. Prerequisites: GRNS 7240, GRNS 7250; GRNS 7270 or GRNS 7280.

GRNS 7270. Ex Nurse Leader Role Transform. 1-6 Credits.

This individualized practicum focuses on synthesis and application of prerequisite learning in a mentored nurse executive role.

GRNS 7280. Executive Nurse Leader Immersi. 1-6 Credits.

A continuation of the Executive Nurse Leader Role Transformation Practicum learning experience. Prerequisite: GRNS 7270.

GRNS 7300. Practicum: Clin Immersion APRN. 0.5 Credits.

Provides an immersion clinical practicum of 60 hours for the primary care management of acute and common health problems encountered in primary care. To provide an opportunity for the student to promote optimal levels of well-being and functioning. Prerequisites: GRNS 7070, GRNS 7080, GRNS 7120, GRNS 7170, GRNS 7180.

GRNS 7491. Doctoral Dissertation Research. 1-18 Credits.**GRNS 7990. Special Topics. 0.25-18 Credits.**

See Schedule of Courses for specific titles.

GRNS 7995. Graduate Independent Research. 1-18 Credits.

Graduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.