

# Nursing Science Graduate (NSG)

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## Courses

### NSG A601 Advanced Pathophysiology 3 Credits

Provides for advanced analysis and critical review of autonomy, advanced pathophysiology and genetics/genomics of disease processes that result in abnormal functioning of the human body across the lifespan. Fosters refinement of critical thinking to interpret pathophysiologic changes that result in clinical manifestations of illness.

**Registration Restrictions:** Graduate standing or faculty permission

### NSG A602 Advanced Health Assessment in Primary Care 4 Credits

Provides a systematic approach to advanced physical assessment and differential diagnoses. Develops advanced skills building on basic assessment knowledge and documentation. Incorporates individual, psychological, sociocultural, developmental, spiritual and genetic components of health.

**Registration Restrictions:** Admission to graduate nursing program

### NSG A610 Pharmacology for Primary Care 3 Credits

Advanced level pharmacology course that assists health care professionals in selecting, prescribing and monitoring of pharmaceutical agents utilized in the primary care setting. Legend drugs, over-the-counter agents and some complementary therapeutics will be discussed. Emphasis is on the pharmacodynamics of medications most commonly prescribed.

**Registration Restrictions:** Admission to graduate nursing program and current license to practice as a registered nurse in the state of Alaska.

### NSG A611 Psychopharmacology for Advanced Nursing 3 Credits

Develops expertise in applied psychopharmacology, preparing providers to select, prescribe and monitor pharmaceutical agents used in primary and psychiatric care settings.

**Registration Restrictions:** Admission to graduate nursing program

### NSG A613 Advanced Practice Informatics 2 Credits

Provides an evidence-based foundation in informatics and technology for advanced practice. Emphasizes evolving technologies, health communications and clinical information systems. Evaluates impact of technology on safety, access to care and quality of health care outcomes.

**Registration Restrictions:** Admission to graduate nursing program

### NSG A614 Advanced Practice Ethics and Law 2 Credits

Provides a foundation in ethics and law for advanced practice. Analyzes ethical theories and principles and their application to decision making in practice. Explores the interface between ethical decision making, legal and regulatory requirements, and their effects on the conduct of research, the influence of technology, and access to care.

**Registration Restrictions:** Admission to graduate nursing program

### NSG A615 Health Services Organization and Finance 4 Credits

Synthesizes organizational theories in the health care context. Develops advanced practice role in complex health care organizations. Plans the design, implementation and evaluation of quality health care practices applying principles of finance, quality outcomes and cost analysis. Implements strategic findings for organizational change, system change and positive population health outcomes.

**Registration Restrictions:** Admission to graduate nursing program

### NSG A618 Role Development in Advanced Nursing 2 Credits

Enhances knowledge of the many roles of nursing in health care and educational settings. Incorporates the American Association of Colleges of Nursing Master's Essentials into the curriculum and discusses contemporary nursing issues.

**Registration Restrictions:** Admission to graduate nursing program.

### NSG A618A Advanced Nursing Leadership 2 Credits

Enhances leadership skills of advance practice nurses to guide health care improvement, systems change and safety. Develops collaborative knowledge and practice improvement with an emphasis on population health management.

**Registration Restrictions:** Admission to graduate nursing program

### NSG A619 Nursing Health Policy 2 Credits

Analyzes the procedures by which governmental and private agencies make decisions that affect the health of populations groups. Explores the influence of lay, professional and special interest groups in relation to legislation, allocation of resources and the setting of health priorities. Examines current issues in health policy, focusing on how policy is changed, interpreted and implemented.

**Registration Restrictions:** Admission to graduate nursing program.

### NSG A619A Health Economics 2 Credits

Critically appraises health system economics and explores its impact on health outcomes. Applies advocacy and leadership strategies to analyze and implement policies to promote positive societal and economic outcomes.

**Registration Restrictions:** Admission to graduate nursing program

### NSG A621 Knowledge Development for Advanced Nursing Practice 2 Credits

Integrates theory and clinical evidence from nursing and other disciplines to explain and predict human responses to health and illness. Explores multiple paradigms of knowledge development. Critically analyzes and explores translation of theory into knowledge to improve practice, clinical decision making and health.

**Registration Restrictions:** Admission to the Master of Science in Nursing Science

### NSG A627 Practice Inquiry I: The Nature of Evidence 3 Credits

Explores the nature of evidence and appraises scholarly evidence-based projects focusing on problems of practice within specific health care populations. Employs research critiques, evidence tables and integrative evidence reviews.

**Registration Restrictions:** Graduate standing or instructor permission, and a minimum grade of C in undergraduate research/statistics course within the past five years

**Prerequisites:** NSG A621 with a minimum grade of B.

**NSG A628 Practice Inquiry II: Design and Methods 3 Credits**

Explores advanced research design and methods. Develops acquisition of knowledge and skills appropriate to an advanced evidence-based clinical inquiry project, including conceptual, design and methodological technique.

**Registration Restrictions:** Admission to graduate nursing program. Baccalaureate to Doctor of Nursing Practice students must take NSG A627 prior to NSG A628.

**NSG A629 Practice Inquiry III: Proposal Development 2 Credits**

Operationalizes clinical evidence-based practice project. Refines project to incorporate appropriate conceptual frameworks, designs and methods. Prepares written project proposal to address significant clinical, health policy, leadership or advanced nursing practice problem relevant to stakeholders.

**Registration Restrictions:** Admission to graduate nursing program  
**Prerequisites:** NSG A628 with a minimum grade of B.

**NSG A633 Statistics for Advanced Practice 3 Credits**

Explores bio-statistical methods used in nursing and health care research for clinical decision making, evidence-based practice, and program and policy evaluations. Emphasizes selection of appropriate statistical tests and interpretation and critique of data related to clinical practice and program assessment. Focuses on conceptual understanding rather than mathematical computation.

**Registration Restrictions:** Admission to graduate nursing program or graduate dietetics program

**NSG A634 Epidemiology for Advanced Practice 2 Credits**

Explores epidemiologic techniques and methods. Analyzes clinical data sets. Critiques epidemiological study designs in clinical scenarios. Assesses causality and risk in clinical situations. Analyzes and interprets screening and diagnostic tests for advanced practice. Evaluates clinical practice using epidemiologic methods and statistical process controls to improve patient outcomes.

**Registration Restrictions:** Admission to graduate nursing program  
**Prerequisites:** NSG A633 with a minimum grade of B.

**NSG A637 Data Analysis: Qualitative 1 Credit**

Emphasizes qualitative research principles and methods of analysis. Applies qualitative analytic methods to clinical data sets. Focuses on ensuring validity, credibility and dependability. Facilitates interpretation and dissemination of qualitative research study findings.

**Registration Restrictions:** Admission to graduate nursing program  
**Prerequisites:** NSG A628 with a minimum grade of B.

**NSG A640 Teaching and Learning in the Professional Context 3 Credits**

Explores the role and expected competencies of the working professional as educator. Examines continuing professional education and addresses incorporation of adult learning theory and pedagogy into teaching practice for a variety of teaching environments within the professions. Focuses on planning lifelong learning and professional development for the nurse or other educator in the professions.

**Special Note:** Graduate students from other disciplines may take the course on a space-available basis and with instructor permission; coursework will be individualized to reflect the learner's profession of origin.

**Registration Restrictions:** Graduate standing in nursing or instructor permission

**NSG A641 Developing Curriculum for Nursing and Other Professions 3 Credits**

Applies adult learning theory and pedagogy to design and develops curriculum with an emphasis on learner-centered instruction within the conceptual framework of nursing and other professions. Applies prominent design frameworks to ensure high-quality learner experience and achievement of learning objectives. Examines internal and external factors that drive or impact the curriculum.

**Special Note:** Graduate students from other disciplines may take the course on a space-available basis and with instructor permission; coursework will be individualized to reflect the learner's profession of origin.

**Registration Restrictions:** Graduate standing in nursing or instructor permission

**NSG A643 Course and Curriculum Evaluation for Professionals 4 Credits**

Focuses on application of evaluation concepts, principles and evidence-based practices to develop appropriate metrics that assess learning outcomes, learner experiences, and instructional effectiveness in nursing and other professions. Applies professional and design quality standards and metrics to assess key educational components such as alignment, effectiveness and contextuality of the curriculum. Appraises teaching practice, cultural sensitivity and the overall learner experience. Examines evaluation at both the course and program levels.

**Special Note:** Graduate students from other disciplines may take the course on a space-available basis and with instructor permission; coursework will be individualized to reflect the learner's profession of origin.

**Registration Restrictions:** Graduate standing in nursing or instructor permission

**NSG A644 Technology for Learning and Collaboration 2 Credits**

Acquires knowledge and understanding of methods and strategies for the incorporation of appropriate technology in continuing and professional education. Applies technological strategies to the development of learning units, including a rationale for the selection of technology. Incorporates discussion of relevance and staying abreast of current trends in nursing and other professional contexts.

**Special Note:** Graduate students from other disciplines may take this course on a space-available basis and with instructor permission; coursework will be individualized to reflect the learner's profession of origin.

**Registration Restrictions:** Graduate standing in nursing or instructor permission.

**Prerequisites:** NSG A640 with a minimum grade of B and NSG A641 with a minimum grade of B.

**NSG A647 Evidence-Based Practicum for Nursing 3 Credits**

Applies leadership skills and evidence-based practice in a variety of nursing education or administrative settings. Develops and implements an evidence-based project. Participates in seminar to identify, analyze and solve education or administrative problems related to practicum.

**Registration Restrictions:** Graduate standing in nursing or instructor permission. Prior completion of required core and specialty courses with grade of B.

**NSG A648 Nurse Leader and Educator Role 3 Credits**

Examines core concepts and health care trends that are essential to performing the role of nurse educator in an academic setting. Explores advanced nursing knowledge and leadership skills emphasizing quality and safety, health and nursing workforce policy, and nursing ethics. Develops organizational and system change strategies.

**Registration Restrictions:** Graduate standing and admission to the Master of Science in Nursing Science

**NSG A649 Best Practices in Teaching and Learning in Nursing Education 4 Credits**

Explores the role of nurse educators and the competencies used to design courses. Applies learning science to the nurse educator role in a variety of settings.

**Registration Restrictions:** Graduate standing and admission to the Master of Science in Nursing Science

**NSG A650 Evidence-Based Practice for Nursing Leaders 3 Credits**

Emphasizes advanced competencies in evidence-based nursing practice. Focuses on becoming a competent and ethical leader and educator.

**Registration Restrictions:** Graduate standing and admission to the Master of Science in Nursing Science

**NSG A651 Advanced Pathophysiology, Pharmacology, and Health Assessment for Nurse Educators 4 Credits**

Synthesizes advanced knowledge of pathophysiology, pharmacology, and health assessment using an integrated approach for patient care. Explores teaching undergraduate nursing concepts and content emphasizing connections between the three subject areas. Includes a virtual laboratory experience.

**Registration Restrictions:** Graduate standing and admission to the Master of Science in Nursing Science

**NSG A652 Technology and Informatics for Nurse Educators 3 Credits**

Explores the role of technology and informatics in nursing education and evidence-based practice. Stresses the legal and ethical use of informatics and technology to foster learning and improve healthcare outcomes. Explores ways to improve practice outcomes through effective collection and analysis of nursing data.

**Registration Restrictions:** Graduate standing and admission to the Master of Science in Nursing Science

**NSG A653 Leadership Focus in Population Health 3 Credits**

Introduces epidemiologic principles and their applications to improve population health. Explores the social determinants of health and nurse leadership actions that influence nursing education, practice, and policy. Focuses on concepts in population health assessment, program design and development, and evaluation.

**Registration Restrictions:** Graduate standing and admission to the Master of Science in Nursing Science

**NSG A654 Assessing Learning in Nursing Education 3 Credits**

Focuses on application of evaluation concepts, principles, and evidence-based practices. Develops appropriate metrics that assess learning outcomes, learner experiences, and instructional effectiveness in nursing education. Emphasizes test development, analysis, and the use of rubrics to assess performance and enhance learning.

**Registration Restrictions:** Graduate standing and admission to the Master of Science in Nursing Science

**NSG A655 Curriculum Design and Program Assessment 3 Credits**

Focuses on curriculum design and program assessment in nursing. Examines concept-based and competency-based curriculum frameworks. Explores internal and external factors that drive or impact the curriculum. Emphasizes regulatory and accreditation standards used to develop a systematic plan for program assessment.

**Registration Restrictions:** Graduate standing and admission to the Master of Science in Nursing Science

**NSG A656 Clinical Teaching, Simulation, and Evaluation 4 Credits**

Examines models of clinical learning in undergraduate nursing education. Applies best practices to clinical teaching and the design of simulation-based learning experiences. Focuses on supportive and ethical strategies to evaluate students' attainment of course outcomes and progress toward developing clinical competency.

**Registration Restrictions:** Graduate standing and admission to the Master of Science in Nursing Science

**NSG A660 Family Nurse Practitioner I 5 Credits**

Develops advanced skills needed in primary care of pediatric patients and developing families, including advanced history and physical assessment skills for all pediatric age groups. Focuses on acquisition of skills and diagnostic evaluation methods required for management of pediatric patients and families. Explores influence of genetics and genomics on health.

**Registration Restrictions:** Admission to the Master of Science in Nursing Science Family Nurse Practitioner option or the Graduate Certificate in Family Nurse Practitioner

**Prerequisites:** NSG A661 with a minimum grade of B.

**NSG A661 Family Nurse Practitioner II 4 Credits**

Develops advanced skills needed in primary care of female patients and their families, including history and physical assessment skills for women's health throughout the lifespan. Clinical focus and experience include acquisition of skills and diagnostic evaluation methods required for management of women's health and obstetric patients. Explores influence of genetics and genomics on women's health status.

**Registration Restrictions:** Admission to the Master of Science in Nursing Science Family Nurse Practitioner option or the Graduate Certificate in Family Nurse Practitioner

**Prerequisites:** NSG A602 with a minimum grade of B.

**NSG A662 Family Nurse Practitioner III 5 Credits**

Continues preparation for advanced nursing practice. Concentrates on assessment, diagnosis, evidence-based management or the referral of adult and geriatric clients. Focuses on acute and chronic illnesses in adults but may include care of clients throughout the lifespan. Incorporates influence of genetics and genomics on health status.

**Registration Restrictions:** Admission to the Master of Science in Nursing Science Family Nurse Practitioner option or the Graduate Certificate in Family Nurse Practitioner

**Prerequisites:** NSG A661 with a minimum grade of B.

**NSG A663 Family Nurse Practitioner IV 7 Credits**

Capstone course in preparation for family nurse practitioner role. Intensive clinical practicum incorporates professional and practice principles into primary care role. Focus includes common procedures and diagnostics as well as the influence of genetics and genomics on health status of clients throughout the lifespan.

**Registration Restrictions:** Admission to the Master of Science in Nursing Science Family Nurse Practitioner option or the Graduate Certificate in Family Nurse Practitioner

**Prerequisites:** NSG A662 with a minimum grade of B.

**NSG A670 Advanced Practice Psychiatric and Mental Health Nursing I 6 Credits**

Develops advanced skills needed for the psychiatric mental health nurse practitioner role. Focuses on acquisition of knowledge related to assessment, diagnosis, treatment and evaluation. Emphasizes management of individuals across the lifespan at risk of experiencing mental health problems.

**Registration Restrictions:** Admission to the Master of Science in Nursing Science Psychiatric Mental Health Nurse Practitioner option or the Graduate Certificate in Psychiatric Mental Health Nurse Practitioner

**Prerequisites:** NSG A602 with a minimum grade of B.

**NSG A671 Advanced Practice Psychiatric and Mental Health Nursing II 5 Credits**

Develops, applies and adapts advanced skills for practice as a psychiatric mental health nurse practitioner caring for families and groups. Focuses on acquisition of clinical knowledge and skills for evidence-based practice and promotion of mental health.

**Registration Restrictions:** Graduate standing and admission to the Master of Science in Nursing Science Psychiatric Mental Health Nurse Practitioner option or the Graduate Certificate in Psychiatric Mental Health Nurse Practitioner

**Prerequisites:** NSG A670 with a minimum grade of B.

**NSG A672 Advanced Practice Psychiatric and Mental Health Nursing III 4 Credits**

Introduces the consultant/liaison role in organizational settings. Analyzes organizational approaches to plan, implement and evaluate population-focused mental health services. Identifies and evaluates fiscal and social policies, community resources, and research findings.

**Registration Restrictions:** Graduate standing and admission to the Master of Science in Nursing Science Psychiatric Mental Health Nurse Practitioner option or the Graduate Certificate in Psychiatric Mental Health Nurse Practitioner

**Prerequisites:** NSG A671 with a minimum grade of B.

**NSG A673 Advanced Practice Psychiatric and Mental Health Nursing IV 6 Credits**

Capstone course in preparation for psychiatric mental health practitioner role. Intensive clinical practicum provides context for integration, synthesis and application of theory, research and clinical findings to facilitate mental and functional well-being in individuals, families and groups throughout the lifespan. Includes seminar to explore advance practice issues.

**Registration Restrictions:** Admission to the Master of Science in Nursing Science Psychiatric Mental Health Nurse Practitioner option or the Graduate Certificate in Psychiatric Mental Health Nurse Practitioner and graduate standing

**Prerequisites:** NSG A672 with a minimum grade of B.

**NSG A684 Clinical Concentration 2-4 Credits**

Provides final integration of advanced practice skills and evidence-based knowledge in a practice environment of interest to the student. May include focused project implementation.

**Special Note:** May be repeated for a maximum of 4 credits.

**Registration Restrictions:** Graduate standing and admission to the Doctor of Nursing Practice in Nursing Science

**NSG A695A Clinical Practicum in Population Health 2 Credits**

Develops competency in managing a population's health. Emphasizes population assessment, identification of problems/risks, developing interventions and evaluating program outcomes. Addresses change theories to promote health outcomes and equity in collaboration with populations, other health care professions, and organizations.

**Registration Restrictions:** Graduate standing and admission to the Master of Science in Nursing Science

**NSG A695B Teaching Practicum 4 Credits**

Develops, implements, and evaluates learning experiences appropriate to meet course outcomes. Engages in teaching experiences, including classroom, clinical, skills, and simulation laboratory. Includes a two-day on-campus intensive focused on simulation.

**Registration Restrictions:** Graduate standing and admission to the Master of Science in Nursing Science

**NSG A696A Practice Inquiry IV A: Capstone Project 2 Credits**

Develops evidence-based practice project in a clinical setting reflecting a topic of current concern within the specialty.

**Registration Restrictions:** Graduate standing and admission to the Doctor of Nursing Practice in Nursing Science

**NSG A696B Practice Inquiry IV B: Capstone Project 2 Credits**

Implements evidence-based practice project in a clinical setting reflecting a topic of current concern within the specialty.

**Registration Restrictions:** Graduate standing and admission to the Doctor of Nursing Practice in Nursing Science

**Prerequisites:** NSG A696A with a minimum grade of B.

**NSG A696C Practice Inquiry IV C: Capstone Project 2 Credits**

Collects and analyzes data for evidence-based practice project to generate findings and conclusions related to clinical practice. Defends capstone project and disseminates findings.

**Registration Restrictions:** Graduate standing and admission to the Doctor of Nursing Practice in Nursing Science

**Prerequisites:** NSG A696B with a minimum grade of B.