

860. Problem Solving Techniques in Physical Science

Summer. 3 credits. P: NSC 861, NSC 862, NSC 863. R: Secondary certification in chemistry or physics or earth science or physical science, 3 years teaching experience. Approval of college. Measurement and analysis of chemical, physical, and geological phenomena.

861. Chemistry for Teachers

Summer. 2 credits. P: Secondary certification in chemistry or physics or earth science or physical science, 3 years teaching experience. R: Approval of college.

Intensive lecture and laboratory study of basic chemistry from a modern viewpoint.

862. Physics for Teachers

Summer. 2 credits. P: Secondary certification in chemistry or physics or earth science or physical science, 3 years teaching experience. R: Approval of college.

Intensive lecture and laboratory study of basic physics from a modern viewpoint.

863. Earth Science for Teachers

Summer. 2 credits. P: Secondary certification in chemistry or physics or earth science or physical science, 3 years teaching experience. R: Approval of college.

Intensive lecture and laboratory study of basic earth sciences from a modern viewpoint.

864. Interdisciplinary Seminar in Physical Science

Summer. 2 credits. P: NSC 860. R: Approval of college.

Interrelationships of the physical sciences. The role of society in regulation of science to technology transfer.

870. Teaching College Science

Spring. 2 credits. R: One year of graduate study in a biological or physical science. Approval of college.

Philosophies of education. Ethnic, gender, and cultural issues. Designing a laboratory course. Problems of class size. Instructional technologies. Assessment and evaluation.

889. Research for Inservice Teachers

Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 10 credits in all enrollments for this course. R: Open only to inservice K-12 teachers with baccalaureate degrees.

Research in faculty laboratories. Oral and written presentations.

899. Master's Thesis Research

Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 10 credits in all enrollments for this course. R: Open only to master's students in the College of Natural Science. Approval of college.

901. Frontiers in Biological Science

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 36 credits in all enrollments for this course. R: Secondary certification in chemistry or physics or earth science or physical science or biology, 3 years teaching experience. Approval of college.

Weekend workshops with research faculty exploring background and latest findings in their area of research.

902. Frontiers in Physical Science

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 40 credits in all enrollments for this course. R: Open only to students with secondary teacher certification in chemistry or physics or earth science or physical science or biology and 3 years of teaching experience. Approval of college.

Weekend workshops with research faculty exploring background and latest findings in their area of research.

NEUROSCIENCE

College of Natural Science

806. Advanced Neuroscience Techniques Laboratory

Summer. 3(0-9) Interdepartmental with Psychology. P: (NEU 804 or concurrently) (PHM 827 and ANT 839 and PSY 811) R: Open only to doctoral students in the Neuroscience major.

Methods of neuroscience research and the underlying principles on which these methods are based.

999. Doctoral Dissertation Research

Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 99 credits in all enrollments for this course.

NURSING

College of Nursing

202. Introduction to Nursing Practice I

Fall. 3(2-3) R: Open only to students in the College of Nursing except students in PreNursing and Registered Nurses.

Theoretical concepts of nursing necessary for professional practice. Assessment, interpersonal communication, documentation and decision-making.

204. Introduction to Nursing Practice II

Spring. 4(2-6) P: (NUR 202)

Application of introductory nursing practice concepts in simulated and clinical practice settings. Development of introductory nursing practice psychomotor skills.

303. Concepts of Nursing Care of the Adult

Fall, Spring. 4(4-0) P: (NUR 204 and NUR 341) C: NUR 304 concurrently.

Family centered nursing care for adults at various levels of health and illness. Prototype health states with emphasis on associated nursing diagnosis and professional standards of care.

304. Practicum in Nursing Care of the Adult

Fall, Spring. 4(0-12) P: (NUR 204 and NUR 341) C: NUR 303 concurrently.

Nursing care of the adult client with an emphasis on health promotion, disease prevention, care in acute and chronic illness, and rehabilitation.

NEU

NUR

305. Concepts of Nursing Care of the Childbearing Family

Fall, Spring. 2(2-0) P: (NUR 204 and NUR 341) C: NUR 306 concurrently.

Concepts of holistic nursing care with culturally diverse childbearing families during the prenatal, intrapartum, and postpartum periods. Concepts of health promotion and risk factors in client care situations.

306. Practicum in Nursing Care of the Childbearing Family

Fall, Spring. 3(0-9) P: (NUR 204 and NUR 341) C: NUR 305 concurrently.

Practicum in nursing care with culturally diverse childbearing families during the prenatal, intrapartum and postpartum periods. Implementation of nursing process in various settings. Levels of risk reduction and health promotion.

307. Concepts of Nursing Care of Children and Their Families

Fall, Spring. 2(2-0) P: (NUR 204 and NUR 341) C: NUR 308 concurrently.

Theory and concepts related to the holistic care of children (infancy through adolescence) and their families.

308. Practicum in Nursing Care of Children and Their Families

Fall, Spring. 3(0-9) P: (NUR 204 and NUR 341) C: NUR 307 concurrently.

Clinical application of the theoretical concepts presented in NUR 307. Variety of health settings will be utilized for clinical practice.

314. Transition to Professional Nursing

Fall, Spring. 4(3-3) R: Open only to Registered Nurses in the College of Nursing.

Concepts and practicum for role transition for Registered Nurse seeking degree completion. Assessment, documentation, interpersonal skills and concepts of aging with emphasis on clinical decision making and socialization to professional role.

319. Introduction to Nursing Theory and Research

Spring. 3(3-0) P: (STT 300 or STT 201) and completion of Tier I writing requirement. R: Open only to students in the College of Nursing except students in PreNursing.

Major nursing theories and their application to practice. The research process, terminology and investigations undertaken in nursing.

341. Clinical Problems in Adaptation

Spring. 3(3-0) R: Open only to students in the College of Nursing except students in PreNursing.

Theoretical concepts related to individual's adaptive-maladaptive responses to stress. Emphasis on pathophysiology.

409. Concepts of Psychiatric, Mental, and Community Health Nursing

Fall, Spring. 4(4-0) P: Completion of Tier I writing requirement. R: Open only to students in the College of Nursing except students in PreNursing.

Health care trends and issues in public and mental health. Role, responsibilities, and activities of nurses in the provision of care in public and mental health.

Descriptions—Nursing of Courses

410. Practicum in Community Health Nursing

Fall, Spring. 3(0-9) P: Completion of Tier I writing requirement. R: Open only to students in the College of Nursing except students in PreNursing. C: NUR, 409 concurrently.

Clinical experience in community health nursing focusing on application of public health and nursing principles in the care of individuals, families and aggregates in a variety of settings.

412. Practicum in Psychiatric and Mental Health Nursing

Fall, Spring. 3(0-9) R: Open only to students in the College of Nursing except students in PreNursing. C: NUR, 409 concurrently.

Theoretical perspectives of behavior applied to mental health nursing in a practice setting. Advanced concepts of communication. Use of self, group and milieu are used to define the nurse's role.

413. Issues in Professional Nursing

Fall, Spring. 2(2-0) P: Completion of Tier I writing requirement. R: Open only to students in the College of Nursing except students in PreNursing.

Past, current, and future impact of selected legal, economic, educational, social, political, ethical, and professional forces on health care and nursing practice at local, national, and international levels.

420. Senior Practicum in Nursing

Fall, Spring. 4(1-9) R: Open only to students in the College of Nursing except students in PreNursing.

Synthesis and application of nursing concepts as they relate to health care delivery in a variety of health care settings.

422. Nursing in Great Britain

Summer. 5(5-0) Given only in London, England. R: Approval of College.

Historical evolution of nursing in the National Health Service: British nursing education, hospital and community health nursing, standards of care, research, and management. Influence of professional nursing upon British national health policies.

430. Nursing Care of the Critically Ill Client

Fall. 3(2-3) P: (NUR 304 and NUR 306 and NUR 308)

Advanced medical-surgical nursing concepts. Preceptored practicum.

490. Independent Study in Nursing

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Open only to students in the College of Nursing except students in PreNursing. Approval of college.

Individualized area of study in Nursing.

491. Special Topics

Fall, Spring, Summer. 2 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to students in the College of Nursing except students in PreNursing.

Exploration of selected issues in nursing.

801. The Advanced Practice Nurse in Primary Care

Fall. 2(2-0) R: Open only to master's students in the College of Nursing or approval of college.

The role of advanced practice nurses and the concept of primary care. Health care concepts related to the delivery of primary care services. Current health policies, legislative issues, and reimbursement mechanisms relevant to advanced practice nursing.

SA: NUR 501

803. Conceptual Frameworks for Advanced Practice Nursing

Fall. 3(3-0) R: Open only to master's students in the College of Nursing or approval of college.

Core conceptual and theoretical frameworks for advanced practice nursing in primary care. Basic philosophical tenets used to examine the applicability of those frameworks.

SA: NUR 505, NUR 513, NUR 521, NUR 531

805. Pathophysiology for Advanced Practice Nursing

Fall. 3(3-0) R: Open only to master's students in the College of Nursing or approval of college.

Alterations of various physiological systems. Pathophysiology of frequently encountered primary care conditions across the life span and special populations. In-depth case analysis of risk factors, pathophysiological changes, and associated clusters of signs and symptoms. Pathophysiological theories and research as a basis for advanced practice nursing.

SA: NUR 511

807. Clinical Decision Making

Spring. 3(2-3) P: (NUR 805) and (NUR 820 or NUR 830) R: Open only to master's students in the College of Nursing.

Clinical decision making in advanced practice nursing. Decision theory and related concepts. Application of critical thinking and clinical judgment to differential diagnoses of common primary care conditions.

809. Applied Pharmacology for Primary Care

Spring. 3(3-0) P: (NUR 805)

Clinical application of advanced pharmacology and pharmacotherapeutics for common disease conditions encountered in primary care settings. Principles of altered pharmacodynamics relative to age, race, and ethnic groups. Cost/benefit aspects of pharmacological interventions.

811. Research and Evaluation for Advanced Practice Nurses

Spring. 3(3-0) R: Open only to master's students in the College of Nursing or approval of college.

Principles of scientific research including principles of research design encountered in clinical literature and evaluation research.

SA: NUR 507

813. Applied Nursing Research and Evaluation

Summer. 4(3-3) P: (NUR 811)

Use of clinical data for evaluating clinical outcomes in primary care practice. Problems associated with collecting and assembling reliable, usable data.

SA: NUR 509

820. Health Assessment of the Family

Fall. 2(0-6) R: Open only to master's students in the College of Nursing or approval of college.

Collection of comprehensive subjective and objective data for practice as a family advanced practice nurse. Development of advanced health history and physical assessment skills across the lifespan. Interview, communication, and psychomotor skill development.

SA: NUR 500

821. Primary Care Management of the Family I

Summer. 3(3-0) P: (NUR 801 and NUR 803 and NUR 807 and NUR 809 and NUR 811 and NUR 820)

Principles and issues of health care management for family advanced practice nurses in primary care. Health promotion, disease prevention, and single acute problems of individuals across the life span and for diverse populations. Analysis of primary care practice topics using family frameworks and evidence based research.

SA: NUR 522

822. Practicum I: Primary Care for the Family

Fall. 6(0-18) P: (NUR 813 and NUR 821)

Integration of assessment and applied theory in primary care management of clients across the life span. Collaborative model of primary care practice. Health promotion, health maintenance management, and risk reduction strategies for individuals within the context of family. Single acute condition focus. Problem oriented format for organizing client data.

SA: NUR 522

823. Primary Care Management of the Family II

Fall. 2(2-0) P: (NUR 813 and NUR 821)

Principles and issues of health care management for family advanced practice nurses in primary care. Health care management of clients across the lifespan with chronic, stable and/or multiple complex problems. Integration and synthesis of relevant frameworks.

SA: NUR 524

824. Practicum II: Primary Care for the Family

Spring. 7(0-21) P: (NUR 822 and NUR 823)

Integration of assessment and applied theory in primary care management of clients across the lifespan. Collaborative model of primary care practice. Health care management of chronic, stable and/or multiple complex problems of individuals within the context of family. Increasingly independent decision making with preceptor validation.

SA: NUR 524

830. Health Assessment of Older Adults

Fall. 2(0-6) R: Open only to master's students in the College of Nursing or approval of college.

Collection of comprehensive subjective and objective data for practice as a gerontological advanced practice nurse. Development of advanced health history and physical assessment skills of adults, focusing on older adults. Interview, communication, and psychomotor skill development.

SA: NUR 500

831. Primary Care Management of Older Adults I

Summer. 3(3-0) P: (NUR 801 and NUR 803 and NUR 807 and NUR 809 and NUR 811 and NUR 830)

Principles and issues of health care management for gerontological advanced practice nurses in primary care. Research based biological, pharmacological, and psychosocial factors and theories of aging. Health promotion. Evaluation, coordination, and treatment of infectious states. Care of chronic, stable conditions. Common age changes and social networks. Professional, legal, ethical, and political issues impacting the role of advanced practice nurses in primary care.

SA: NUR 532

832. Practicum I: Primary Care for Older Adults

Fall. 6(0-18) P: (NUR 813 and NUR 831)

Integration of assessment and applied theory in primary care management of older clients from a variety of ethnic and cultural groups. Collaborative model of primary care practice. Evaluation and treatment of infectious states. Care of chronic, stable conditions. Practice issues including the ethical, legal, and political aspects of the role of advanced practice nurses.

SA: NUR 532

833. Primary Care Management of Older Adults II

Fall. 2(2-0) P: (NUR 813 and NUR 831)

Principles and issues of health care management for gerontological advanced practice nurses in primary care. Management of the older client with complex health problems and functional losses. Research based biological, pharmacological, and psychosocial theories of aging. Coordination of care involving multiple health care agencies.

SA: NUR 534

834. Practicum II: Primary Care for Older Adults

Spring. 7(0-21) P: (NUR 832 and NUR 833)

Integration of assessment and applied theory in primary care management of older clients from a variety of ethnic and cultural groups. Health care management of clients with complex health problems and functional losses. Collaborative model of primary care practice. Development and evaluation of long term management plans. Coordinating care involving multiple agencies.

SA: NUR 534

841. Contemporary Issues Impacting Advanced Practice Nursing

Spring. 2(2-0) P: (NUR 822 and NUR 823) or (NUR 832 and NUR 833)

Economic, political, and organizational issues affecting day to day advanced practice nursing. Organizational systems and approaches directly impacting advanced practice nursing. Transition into the role of advanced practice nurses.

SA: NUR 503

843. Human Sexuality and Health

Spring. 3(3-0) R: Open only to seniors or graduate students.

Physiological and psychosocial components of sexual function. Clinical assessment and interventions for sexual problems common in primary care.

845. Women and Health in the United States: A Sociological and Nursing Perspective

Spring. 3(3-0) R: Open only to seniors or graduate students.

Health status of contemporary women. Role of women as consumers and providers of health care. Health care delivery in the U.S.

SA: NUR 541

890. Special Problems

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 24 credits in all enrollments for this course. R: Open only to master's students in the College of Nursing or approval of college.

Individual or group in-depth study of specific areas in nursing. Independent study.

SA: NUR 590

891. Selected Topics

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Open only to master's students in the College of Nursing or approval of college.

Selected issues, trends, programs, or theories in nursing.

SA: NUR 591

898. Master's Scholarly Project

Fall, Spring. 1 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P:NM: NUR 507. R: Approval of college.

A planning, implementing, and evaluating project that addresses a significant clinical nursing problem relevant to primary care and advanced practice.

Approved through Spring semester 2001

899. Master's Thesis Research

Fall, Spring. 1 to 6 credits. A student may earn a maximum of 24 credits in all enrollments for this course. P: (NUR 811) R: Open only to master's students in the College of Nursing. Approval of college.

901. Knowledge Development in Nursing

Spring. 3(3-0) R: Open only to doctoral students in the College of Nursing or approval of college.

Development and growth of substantive knowledge within nursing. Middle range theories. Strategies for concept development and theory testing in nursing research for understanding health status and health outcomes for individuals, families and community-based primary care.

910. Health Status Outcomes: The Individual and Family

Fall. 3(3-0) R: Open to all doctoral students or approval of college

Measurement and conceptual underpinnings of health status outcomes for individuals and families across the life span. Focus on well-being in health and illness within community based primary care.

911. Health Status Outcomes: Community/Primary Care

Spring. 3(3-0) R: Open to all doctoral students or approval of college.

Measurement of health status outcomes for populations across the life span within the community based primary care systems. This includes measurement and evaluation issues related to the costs of intervention to impact outcomes.

920. Translation of Research and Scientific Knowledge to a Community Setting

Spring. 3(2-3) R: Open only to doctoral students in the College of Nursing or approval of college.

The systematic application of scientific knowledge to inform clinical practice, policy and delivery system changes to enhance the health status and health outcomes of community populations. Translation strategies include dissemination, networking, program development and evaluation. Opportunities for translation will occur in primary health care, organizational and governmental systems.

930. Methods In Clinical Research

Fall. 3(2-3) R: Open to all doctoral students or approval of college.

Advanced research designs, measurement and data collection strategies. Draws on a broad range of behavioral and health disciplines relevant to nursing. Logic of statistical models used in the evaluation of research designs and measures.

940. Research Practicum

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Open only to doctoral students in the College of Nursing or approval of college.

Practical experiences as a researcher through participation in ongoing research of nursing faculty and as a member of an interdisciplinary research team.

999. Doctoral Dissertation Research

Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 48 credits in all enrollments for this course. R: Open only to doctoral students in the College of Nursing or approval of college.

Original research of student under supervision of major advisor.

**OBSTETRICS,
GYNECOLOGY, AND
REPRODUCTIVE
BIOLOGY**

OGR

**Department of Obstetrics,
Gynecology, and
Reproductive Biology
College of Human Medicine**

608. Obstetrics and Gynecology Required Clerkship

Fall, Spring, Summer. 6 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P: FMP 602. R: Open only to graduate-professional students in College of Human Medicine.

Obstetrics and gynecology in inpatient and ambulatory settings. Clinical experiences, didactic sessions, hospital rounds discussions. Case write-ups and presentations.