# NURSING/GRADUATE NURSE ANESTHESIA (NGNA)

## Courses

#### NGNA 571. Advanced Role for the Nurse Anesthetist I. 2 Units.

Examines advanced practice registered nursing roles, with an emphasis on the role of the nurse anesthetist, issues relevant to nurse anesthesia practice, and wellness.

#### NGNA 572. Advanced Role for the Nurse Anesthetist II. 2 Units.

Examines the regulation of nurse anesthesia practice, ethical and legal aspects of nurse anesthesia practice, the business of anesthesia, and the various roles of the nurse anesthetist. Prerequisite: NGNA 571.

**NGNA 573. Scientific Foundations of Nurse Anesthesia Practice. 4 Units.** Focuses on the application of principles of chemistry and physics to the practice of anesthesia.

#### NGNA 574. Anesthesia Equipment and Technology. 2 Units.

Examines various equipment and technology utilized in anesthesia practice. Prerequisite: NGNA 573.

#### NGNA 575. Advanced Clinical Anatomy for the Nurse Anesthetist I. 2 Units.

Emphasizes the clinical significance of selected respiratory, nervous, vascular, and musculoskeletal system anatomical structures and associated functional aspects as they relate to the practice of anesthesia.

#### NGNA 576. Advanced Clinical Anatomy for the Nurse Anesthetist II. 2 Units.

Emphasizes the clinical significance of selected respiratory, nervous, vascular, and musculoskeletal system anatomical structures and associated functional aspects as they relate to the practice of anesthesia.

### NGNA 577. Advanced Physiology for the Nurse Anesthetist. 4 Units.

Examines selected aspects of advanced cell biology and systems physiology that are related to homeostasis and foundational to the practice of anesthesia.

# NGNA 578. Advanced Physiology and Pathophysiology for the Nurse Anesthetist I. 4 Units.

Examines normal human physiology and the causes, processes, and clinical manifestations of disease. Focuses on pathophysiology of the cardiovascular, pulmonary, musculoskeletal, and neuromuscular systems, as well as the anesthesia management of patients with associated disorders. Prerequisite: NGNA 577.

#### NGNA 579. Advanced Physiology and Pathophysiology for the Nurse Anesthetist II. 4 Units.

Examines normal human physiology and the causes, processes, and clinical manifestations of disease. Focuses on pathophysiology of the endocrine, gastrointestinal, hepatic, and renal systems, as well as the anesthesia management of patients with associated disorders. Also examines pediatric and obstetric physiology and pathophysiology relevant to the practice of anesthesia. Prerequisite: NGNA 577, NGNA 578.

#### NGNA 580. Advanced Health Assessment for Nurse Anesthetists. 4 Units.

Focuses on health history and physical assessment as they relate to the perioperative patient population. Includes invasive and noninvasive systems assessment and diagnostic methods. Principles and application of health promotion strategies for the CRNA population.

### NGNA 581. Advanced Pharmacology for the Nurse Anesthetist I. 6 Units.

Applies principles of pharmacology to the practice of anesthesia, including the pharmacodynamics, pharmacokinetics, pharmacotherapeutics, and toxicology of inhalation anesthetics, intravenous anesthetics, opioid agonists and antagonists, non-opioid analgesics, neuromuscular blocking agents, and anesthetic adjuncts.

#### NGNA 582. Advanced Pharmacology for the Nurse Anesthetist II. 2 Units.

Applies principles of pharmacology to the practice of anesthesia, including the pharmacodynamics, pharmacokinetics, pharmacotherapeutics, and toxicology of local anesthetics and anesthetic adjuncts. Prerequisite: NGNA 581.

# NGNA 583. Advanced Pharmacology for the Nurse Anesthetist III. 2 Units.

Applies principles of pharmacology to the practice of anesthesia, including the pharmacodynamics, pharmacokinetics, pharmacotherapeutics, and toxicology of autonomic agents and additional drugs of interest. Prerequisite: NGNA 582.

#### NGNA 584. Principles of Nurse Anesthesia Practice I. 4 Units.

Examines basic principles of anesthesia related to the perianesthetic management of patients undergoing surgical, diagnostic, and therapeutic procedures, culminating in the creation and implementation of a simulated anesthetic plan of care.

#### NGNA 585. Principles of Nurse Anesthesia Practice II. 4 Units.

Builds upon basic principles of anesthesia and introduces advanced concepts in the individualized perianesthetic management of patients with cardiovascular, pulmonary, and neurological disorders. Culminates in the creation and implementation of an anesthetic plan of care, including the diagnosis and treatment of simulated altered physiological responses coincident to the provision of anesthesia services and cardiovascular and/or pulmonary complications. Prerequisite: NGNA 584.

#### NGNA 586. Principles of Nurse Anesthesia Practice III. 4 Units.

Focuses on the individualized perianesthetic management of patients with various coexisting diseases across the life span, including neonatal, pediatric, obstetric, and geriatric patient populations. Prerequisite: NGNA 584, NGNA 585.

#### NGNA 587. Principles of Nurse Anesthesia Practice IV. 4 Units.

Focuses on the perianesthetic management of special patient populations and surgical subspecialties. Prerequisite: NGNA 584, NGNA 585, NGNA 586.

#### NGNA 591. Clinical Practicum I. 2 Units.

Introduces the clinical setting through preceptored experiences in the management of patients throughout the perianesthetic continuum. Prerequisite: NGNA 584, NGNA 585.

#### NGNA 592. Clinical Practicum II. 2 Units.

Preceptored clinical experience in the full scope of nurse anesthesia practice. Focuses on basic principles of anesthesia, including preparation of the anesthetizing area and successful creation and implementation of an anesthetic plan of care. Prerequisite: NGNA 591.

#### NGNA 593. Clinical Practicum III. 2 Units.

Preceptored clinical experience in the full scope of nurse anesthesia practice. Focuses on basic principles of anesthesia, emphasizing refinement of anesthetic management to improve patient safety and prevent iatrogenic complications. Prerequisite: NGNA 591, NGNA 592.

#### NGNA 594. Clinical Practicum IV. 2 Units.

Preceptored clinical experience in the full scope of nurse anesthesia practice. Focuses on predicting and preventing anesthetic management issues in cases with increasing complexity. Prerequisite: NGNA 591, NGNA 592, NGNA 593.

#### NGNA 595. Clinical Practicum V. 4 Units.

Preceptored clinical experience in the full scope of nurse anesthesia practice. Focuses on basic and advanced principles of anesthesia through the introduction of specialty rotations. Prerequisite: NGNA 591, NGNA 592, NGNA 593, NGNA 594.

#### NGNA 596. Clinical Practicum VI. 4 Units.

Preceptored clinical experience in the full scope of nurse anesthesia practice. Focuses on refinement of anesthetic management skills through continued participation in specialty clinical rotations. Prerequisite: NGNA 591, NGNA 592, NGNA 593, NGNA 594, NGNA 595.

#### NGNA 597. Clinical Practicum VII. 4 Units.

Preceptored clinical experience in the full scope of nurse anesthesia practice. Focuses on the development and implementation of anesthetic care plans using all major techniques for all surgical specialties. Prerequisite: NGNA 591, NGNA 592, NGNA 593, NGNA 594, NGNA 595, NGNA 596.

#### NGNA 598. Clinical Practicum VIII. 4 Units.

Provides preceptored clinical experience in the full scope of nurse anesthesia practice. Focuses on refinement of decision-making with increased flexibility and speed. Prerequisite: NGNA 591, NGNA 592, NGNA 593, NGNA 594, NGNA 595, NGNA 596, NGNA 597.

#### NGNA 599. Clinical Practicum IX. 4 Units.

Culminating clinical course focusing on refinement and demonstration of requisite knowledge, skills, and competences necessary for entry into practice. Prerequisite: NGNA 591, NGNA 592, NGNA 593, NGNA 594, NGNA 595, NGNA 596, NGNA 597, NGNA 598.