Anesthesia

Chair
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Faculty: https://medicine.uiowa.edu/anesthesia/people/
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Courses

Anesthesia Courses

ANES:6004 Scientific Principles for Anesthesia Practice  4 s.h.
Applicable chemical and physical properties of molecules
important in anesthesia; technological principles and
equipment used to safely deliver those molecules to patients
and monitor patients during anesthesia; topics include basic
chemical and physical calculations, properties of substances
in solution, measurement, behavior of gases and other fluids,
effects of heat transfer, and the specific chemistry of inhaled
and intravenous anesthetics and adjuvant drugs. Corequisites:
NURS:6006. Same as NURS:6004.

ANES:6006 Pharmacology of Anesthesia Practice  3 s.h.
Builds on content from foundational graduate pharmacology
course; focus on safe prescribing, administration, and
management of medications used to provide general,
regional, or local anesthesia and analgesia for all patient
populations across lifespan undergoing varied surgical,
obstetrical, or other procedures in any health care setting.
Prerequisites: PCOL:6204 with a minimum grade of B-.
Requirements: enrollment in anesthesia nursing program.
Same as NURS:6006.

ANES:6007 Basic Principles of Anesthesia Practice 5 s.h.
Overview and integration of anesthetic agents and
techniques; patient assessment, preoperative airway
evaluation, anesthetic planning, principles of fluid
management, and arterial blood gas interpretation; principles
of general and regional anesthesia and techniques as they
pertain to each surgical specialty; Occupational, Safety and
Health Administration (OSHA), The Joint Commission (TJC),
and institutional regulations and requirements pertinent
to anesthesia practice. Prerequisites: NURS:6004 with a
minimum grade of B- and NURS:6006 with a minimum grade
of B-. Same as NURS:6007.

ANES:6010 Advanced Principles of Anesthesia Practice I  4 s.h.
Special needs and intraoperative anesthetic management
of complex patient populations and those with advanced
pathologic states; anesthetic techniques for specific surgical
subspecialties including pediatrics, obstetrics, neurosurgery,
cardiac, vascular, thoracic, transplant, trauma, EENT, dental,
and aesthetic or reconstructive procedures; pertinent
pathophysiology and anesthetic monitoring and management
techniques; clinical case conferences provide opportunities
to discuss perianesthetic complications and challenges.
Prerequisites: NURS:6007 with a minimum grade of B- or
ANES:6007 with a minimum grade of B-. Same as NURS:6010.

ANES:6012 Advanced Principles of Anesthesia Practice II  1 s.h.
Acute and chronic pain treatment modalities for all patients
presenting for a variety of medical or surgical procedures
across the lifespan. Prerequisites: NURS:6007 with a minimum
grade of B- or ANES:6007 with a minimum grade of B-. Same
as NURS:6012.

ANES:6050 Introductory Clinical Anesthesia  2 s.h.
Initial mentorship in clinical anesthesia; development of
basic clinical skills needed for a career as nurse anesthetist;
application and integration of theoretical knowledge in
clinical setting. Prerequisites: NURS:6004 and NURS:6006.
Corequisites: NURS:6007. Same as NURS:6050.

ANES:6051 Clinical Anesthesia I  2 s.h.
Mentored clinical anesthesia experience; advancement and
enhancement of clinical skills in providing anesthesia for
various surgical subspecialties including general, orthopedic,
pediatric, geriatric, gynecologic, urologic, dental, EENT,
ambulatory surgery, and invasive diagnostic procedures.
Prerequisites: NURS:6050 or ANES:6050. Corequisites:
NURS:6010. Same as NURS:6051.

ANES:6052 Clinical Anesthesia II  2 s.h.
Additional mentored clinical anesthesia experience;
advancement and enhancement of clinical skills in providing
anesthesia for various surgical subspecialties including
general, orthopedic, pediatric, geriatric, gynecologic, urologic,
dental, EENT, ambulatory surgery, and invasive diagnostic
procedures. Prerequisites: NURS:6051 or ANES:6051. Same as
NURS:6052.

ANES:6053 Advanced Clinical Anesthesia  2 s.h.
Mentored clinical anesthesia experience at selected sites; development of
advanced clinical skills and critical thinking by providing anesthesia for all surgical specialties and invasive diagnostic
procedures in all anesthetizing locations; providing anesthesia for all patients in all settings, including on call emergency
surgeries. Prerequisites: NURS:6052. Same as NURS:6053.

ANES:6054 Obstetrical Anesthesia  2 s.h.
Experience delivering analgesia and anesthesia for parturients
during labor and delivery process. Prerequisites: NURS:6052.
Same as NURS:6054.

ANES:6055 Rural Anesthesia  2 s.h.
Opportunity to develop experience providing anesthesia and
associated health care services at UI-affiliated clinical sites in
rural settings. Prerequisites: NURS:6052. Same as NURS:6055.

ANES:8301 Clinical Anesthesia  2 s.h.
Clinical instruction in perioperative care of the surgical
patient; preoperative evaluation, consideration of coexisting
medical problems, intraoperative care, postoperative
management; basic airway management; introduction to
clinical management of acute and chronic pain; case
conferences, simulator training.

ANES:8401 Clinical Anesthesia Senior  arr.
Advanced clinical experience in anesthesia management of
surgical patients with coexisting medical problems;
clinical experience in various forms of anesthesia; general,
regional (spinal, epidural, peripheral nerve block) anesthesia;
practical experience in airway management; mask ventilation,
endotracheal intubation, LMA placement, other alternative
airway techniques; medical management of surgical patient
under anesthesia; pharmacology, cardiovascular and
pulmonary physiology; case conferences.
ANES:8402 Surgical and Neurosciences Intensive Care  
Evaluation and treatment of critically ill neurological and post-surgical patients; evaluation of pulmonary function, ventilator management, monitoring and management of hemodynamics, fluid balance, acid-based problems, acute kidney injury, acute neurological events, and advanced monitoring techniques.

ANES:8403 Chronic Pain Management  
2 s.h.
How to interview and assess patients with pain, work with a multidisciplinary team to determine the type of pain and/or diagnosis, and develop a multimodal treatment plan; readings, classroom discussions, and experiential activities.

ANES:8495 Intensive Care Off Campus  
Evaluation and treatment of seriously ill patients in an intensive care unit (other than University of Iowa Hospitals and Clinics); artificial ventilation, evaluation of pulmonary function, monitoring of cardiovascular status, fluid balance and acid base problems, advance monitoring techniques. Prerequisites: ANES:8401. Requirements: 4 s.h. of ANES:8401.

ANES:8497 Research in Anesthesia  
arr.
Medical research, clinical or laboratory projects; individual study.

ANES:8498 Anesthesia On Campus  
arr.
Well defined research project relating to anesthesia; arranged by student with departmental approval.

ANES:8499 Anesthesia Off Campus  
arr.
Knowledge development in anesthesia work and monitor use; ability to identify respiratory, cardiovascular, and neurologic effects of anesthetic agents; skill in airway management; basic skills in general, spinal, epidural, and peripheral nerve block anesthesia.