

Anesthesia Practicum I

NUR 885: - 1 credit

Thursdays 12:40 – 3:30 - Lab

Summer 2009

Catalog Course Description: Design and management of the operating room. Principles and techniques of sterility, intravenous and arterial cannulation, and course of anesthesia. Basic drugs and monitors, anesthesia management plan, documentation and ethical consideration in anesthesia practice.

Course Objectives: At the completion of this course the student will be able to:

1. Develop perioperative anesthesia management plans at the basic level for a variety of clinical settings.
2. Apply knowledge of self and the individual to the practice of perioperative anesthesia management.
3. Assess the influence of the individual's health status on the delivery of perioperative anesthesia nursing care.
4. Discuss policies and procedures of the operating room environment that affect perioperative anesthesia care and management.

Prerequisites: NUR 879

Standards Documents: The curriculum is guided by the following documents:

1. The American Association of Colleges of Nursing (1996). *The Essentials of Masters Education for Advanced Practice Nursing*. Washington, D.C.
2. The American Nurses Association Code of Ethics (<http://www.nursingworld.org>)
3. Scope and Standards for Nurse Anesthesia Practice
4. Code of Ethics for the Certified Registered Nurse Anesthetist

Course Faculty: Gayle Lourens, MS, BSN, CRNA

gayle.loniewski@hc.msu.edu

Office: 517-432-8163

A-121 Life Sciences

Office Hours: Variable – Appointments arranged usually; however, available as needed by students in the Nurse Anesthesia Program to accommodate student schedules

Instruction:

a. Required Text:

Morgan, G.E., Mikhail, M. S., Murray, M.J.; *Clinical Anesthesiology, 4th ed.*, New York, New York: McGraw Hill Medical Publishing Company.
ISBN: 0-8385-1553-3.

Barash, P.G., Cullen, B.F., Stoelting, R.K.; *Clinical Anesthesia, 5th ed.*, Philadelphia, Pennsylvania: Lippincott, Williams and Wilkins Publishing Company. ISBN: 0-7817-5745-2.

Nagelhout, J.J., Plause, K. L.; *Nurse Anesthesia, 4th ed.*, Philadelphia, Pennsylvania: Elsevier Saunders Publishing Company. ISBN:0-7216-0363-7.

Stoelting, R.K., Hillier, S.C.; (2006) *Pharmacology and Physiology in Anesthetic Practice, 4th ed.*, Baltimore, Maryland: Lippincott, Williams and Wilkins Publishing Company. ISBN: 0-7817-5469-0.

Optional Texts:

Miller, R.D.; (2005) *Miller's Anesthesia, 6th ed.* Philadelphia, Pennsylvania: Elsevier Saunders Publishing Company. ISBN: 0-4430-6618-3 (set).

c. Required Resources, References, Supplies:

Evaluation:

a. Learning Assessments and Grading:

All practicum courses are sequential, progressively more demanding, and will require satisfactory completion of the competency objectives to progress to subsequent practica. Punctual attendance is expected at all scheduled clinical practica and other scheduled clinical activities as may be announced. Evaluation is done via weekly clinical evaluations and discussions with the supervising CRNA or anesthesiologist. This course is graded on a Satisfactory or Unsatisfactory system. Students are responsible for knowing their daily assignments, equipment setup, pre- and post-anesthesia patient evaluations, the anesthesia management plan, and for following directions of the CRNA or Anesthesiologist preceptor. Active participation is expected and students are responsible for obtaining and maintaining accurate daily clinical performance and case count records.

University & College Policies:

The College of Nursing expects that students will demonstrate professional behavior in all situations. Specific expectations for clinical and other professional venues can be found in the appropriate handbook. You are responsible for reviewing and acting in accordance with the policies and procedures found in the following sources, including the following topics: Professionalism, Academic Integrity, Accommodations for Students with Disabilities, Disruptive Behavior, Attendance, Compliance, and Progression.

- CON Student handbook <http://nursing.msu.edu/handbooks.asp>
- MSU Spartan Life Student Handbook and Resource Guide <http://www.vps.msu.edu/SpLife/index.htm>
- Information for Current Students—including Rights, Responsibilities and Regulations for Students <http://www.msu.edu/current/index.html>
- Academic Programs <http://www.reg.msu.edu/UCC/AcademicPrograms.asp>

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Additional Course Objectives: At the completion of this course the student will be able to:

1. Familiarize self with the role of the SRNA, the operating room and basic medication classes utilized in the operating room setting by the anesthetist.
2. Position or supervise positioning of patients demonstrating personal and professional integrity and the ability to interact on a professional level to assure optimal physiological function and safety to prevent injury.
3. Identify and take appropriate action when confronted with anesthetic equipment-related malfunctions.
4. Develop a safe anesthetic plan based on the patient's medical history, physical exam, cultural background and surgical procedure.
5. Plan, prepare, administer and vigilantly manage local anesthesia with sedation, regional anesthesia and general anesthesia.
6. Demonstrate skill in inducing and administering an anesthetic for the patient presenting with a full stomach within medically established guidelines.
7. Apply pharmacologic, anatomic, and technical foundations to perform and manage peripheral nerve and major conduction blocks for anesthesia and perioperative pain management.
8. Evaluate practice and integrate current research as related to anesthesia for the purpose of continuous improvement.

Additional Prerequisites: Acceptance into the Nurse Anesthesia Program

Instruction:**a. Methodology:**

Independent study, classroom activities, lectures, assignments, exams, internet assignments, self-evaluation, computer-aided instruction and student/faculty conferences.

Professionalism:**A. General Statement**

The student is held accountable and responsible for the all policies in the most current version of The Michigan State University Student Handbook and Resources Guide (The Spartan Life: <http://www.vps.msu.edu/SpLife/acfree.htm>), The College of Nursing Handbook (<http://nursing.msu.edu>), and the Nurse Anesthesia Program Supplement.

B. Progression in the Major

NUR 885 is a required course in the nurse anesthesia curriculum.

C. Change in Calendar

The faculty reserves the right to alter the calendar as circumstances may dictate. All changes will be announced in class, posted on the College of Nursing website, or via College of Nursing email. Students not present in class are responsible for obtaining this information.

D. Official Means of Written Communication-Electronic Mail

Keeping up with changes or news from Michigan State University and the College of Nursing is the responsibility of the student. Electronic mail or e-mail is an official means of written communication for all students, faculty, and staff.

Policies:

Academic Integrity: Article 2.3.3 of the [Academic Freedom Report](#) states that "The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards." In addition, the (insert name of unit offering course) adheres to the policies on academic honesty as specified in General Student Regulations 1.0, Protection of Scholarship and Grades; the all-University Policy on Integrity of Scholarship and Grades; and Ordinance 17.00, Examinations. (See [Spartan Life: Student Handbook and Resource Guide](#) and/or the MSU Web site: www.msu.edu). Therefore, unless authorized by your instructor, you are expected to complete all course assignments, including homework, lab work, quizzes, tests and exams, without assistance from any source. You are expected to develop original work for this course; therefore, you may not submit course work you completed for another course to satisfy the requirements for this course. Also, you are not authorized to use the www.allmsu.com Web site to complete any course work in NUR 885. Students who violate MSU rules may receive a penalty grade, including--but not limited to--a failing grade on the assignment or in the course. Contact your instructor if you are unsure about the appropriateness of your course work. (See also <http://www.msu.edu/unit/ombud/honestylinks.html>)

Accommodations for Students with Disabilities: **Students with disabilities should contact the Resource Center for Persons with Disabilities to establish reasonable accommodations. For an appointment with a disability specialist, call 353-9642 (voice), 355-1293 (TTY), or visit MyProfile.rcpd.msu.edu.**

Disruptive Behavior: Article 2.3.5 of the [Academic Freedom Report](#) (AFR) for students at Michigan State University states: "The student's behavior in the classroom shall be conducive to the teaching and learning process for all concerned." Article 2.3.10 of the AFR states that "The student has a right to scholarly relationships with faculty based on mutual trust and civility." [General Student Regulation 5.02](#) states: "No student shall . . . interfere with the functions and services of the University (for example, but not limited to, classes . . .) such that the function or service is obstructed or disrupted. Students whose conduct adversely affects the learning environment in this classroom may be subject to disciplinary action through the Student Faculty Judiciary process.

Attendance: Students whose names do not appear on the official class list for this course may not attend this class. Students who fail to attend the first four class sessions or class by the fifth day of the semester, whichever occurs first, may be dropped from the course.

Course Calendar:(date of final examination, scheduled according to the *University final exam schedule*, and tentative dates of required assignments, quizzes, and tests, if applicable)

GROUP 1	GROUP 2
Nate Bentz Sam McCarthy Tim Turner Patrick Sarsozo Jennifer Georgivski	Jennifer Patrick Cheryl Adams Pam Supernois Skip Shipley Stacey DeVries

**NUR 885
Anesthesia Practicum**

Date / Group #	Practicum / Skill	Preparation, Assignment	Objectives
5/21/09 Both Groups Meet in Room 107	Introduction to the course Introduction to the OR environment <ul style="list-style-type: none"> - Sterile / Nonsterile - Proper attire - OR room layout - Draping 		<ol style="list-style-type: none"> 1. Describe the overall lay out of most operating room departments. 2. Identify areas in the OR departments that are sterile and nonsterile. 3. Define proper OR attire. 4. Recognize areas within the OR suite that are sterile versus nonsterile. 5. Demonstrate proper gowning of OR personnel and sterile patient draping.
5/27 *** Group 1 Meet in Anesthesia Simulation Room	Basic Airway Skills <ul style="list-style-type: none"> - Opening the airway - Oral airways - Nasal airways - EOA - BVM 		<ol style="list-style-type: none"> 1. Recites limitations of the nasal cannula, simple mask, nonrebreather and bag-valve mask 2. Demonstrates proper placement of the oral and nasal airways. 3. Demonstrate proper maneuvers used to open an airway. 4. Compare and contrast the basic airway equipment and the use. 5. Identify airway anatomy. 6. Demonstrate proper BVM technique. 7. Identify potential complications of the BVM technique and discuss the management of each.
5/28 Group 2	Basic Airway Skills (see above)		
6/4 Group 1	Advanced Airway Airway assessment LMA Intubation		<ol style="list-style-type: none"> 1. Perform an airway assessment, identifying key features of the airway and discuss the implications of each. 2. Describe the components of the

	<ul style="list-style-type: none"> - Airway anatomy - ETTs - DVL equipment 		<p>laryngoscope.</p> <ol style="list-style-type: none"> 3. Discuss the features of the various blades. 4. Identify key features of the ETT and the purpose. 5. Demonstrate proper preparation of intubating equipment. 6. Complete a safe intubation. 7. Assess adequacy of tube placement. 8. Secure ETT properly. 9. Identify key features of the LMA. 10. Discuss advantages and limitations of the LMA and ETT 11. Perform a proper placement of an LMA 12. Assess adequacy of LMA placement.
6/11 Group 2	Advanced Airway (see above)		
6/18 NO LAB			Review the components of the above. I am available, Monday 15 – all day if you need additional exposure.
6/24 *** Group 2	Positioning in the OR <ul style="list-style-type: none"> - supine (arms extended) - supine (arms tucked) - lateral - prone - lithotomy - other misc. 		<ol style="list-style-type: none"> 1. Identifies specific positions used in the OR. 2. Discusses potential injury associated with each position. 3. Discusses and demonstrates challenges associated with moving a patient from the supine to prone position after induction.
6/25 Group 1	Positioning in the OR (see above)		
7/2 Group 1	Table Top Set Up Intro to Anesthesia Drugs Room Set up Patient preparation in OR Induction sequences		<ol style="list-style-type: none"> 1. Identifies cases where an inhalation induction can be used. 2. Gathers equipment necessary for an inhalation induction. 3. Discusses ventilatory parameters (PAP), FiO2, Volatile %, nitrous, maximum suction prior to induction 4. Demonstrates a proper inhalation induction. 5. Identifies cases where a non rapid IV induction can be performed. 6. Gathers medication and equipment necessary to perform NRIVI. 7. Discusses role of preoxygenation and denitrogenation prior to induction. 8. Discusses sequence and doses of medication given for NRIVI.

			<p>9. Performs NRIVI with manikin (with intubation)</p> <p>10. Identifies cases where a rapid sequence induction should be performed.</p> <p>11. Demonstrates proper Selleck;s maneuver.</p> <p>12. Identifies and gathers medications and equipment necessary to perform the RSIVI.</p> <p>13. Demonstrates a proper RSIVI with intubation</p>
7/9 Group 2	Table Top Set Up (see above)		.
7/15 *** Group 1	Simple Scenarios Putting the above together		<p>1. Demonstrates proper table top set up</p> <p>2. Verbalizes components of the machine check</p> <p>3. Discusses appropriate equipment in room for scenario case.</p> <p>4. Performs patient assessment .</p> <p>5. Demonstrates proper positioning and protects from harm.</p> <p>6. Utilizes monitoring effectively.</p> <p>7. Demonstrates patient based induction sequence.</p> <p>8. Performs appropriate airway maneuvers.</p>
7/16 Group 2	Simple Scenarios (see above)		
7/29 *** Group 2	Pediatric Airway		<p>1. Identifies differences between the adult and infant airways.</p> <p>2. Identifies challenges associated with the assessment of a child's airway.</p> <p>3. Demonstrates proper placement of adjunct airways.</p> <p>4. Discusses and demonstrates proper LMA sizes in infants and children.</p> <p>5. Gathers equipment necessary to intubate safely.</p> <p>6. Discusses limitations of Macintosh and Miller blades in the infant and small children.</p> <p>7. Demonstrates proper technique for intubation of the infant and small child</p> <p>8. Describes techniques for suctioning and placing OG and NG tubes in infants and small children.</p>
7/30 Group 1	Pediatric Airway (see above)		
8/5 *** Group 1	Simple Scenarios		<p>1. Demonstrates proper table top set up</p> <p>2. Verbalizes components of the machine check</p> <p>3. Discusses appropriate equipment in room for scenario case.</p> <p>4. Performs patient assessment .</p> <p>5. Demonstrates proper positioning and protects from harm.</p>

			6. Utilizes monitoring effectively. 7. Demonstrates patient based induction sequence. 8. Performs appropriate airway maneuvers
8/6 Group 2	Simple Scenarios (see above)		
8/13 AANA Convention San Diego No Lab	Management Plans	Management Plan Reviewed in 882	1. Develop a scenario based management plan 2. Incorporate airway assessment, fluid management, physiology, pathophysiology principles 3. Discuss potential anesthesia related concerns 4. Identify potential intraoperative and post operative complications and the anesthetic prevention or management. 5. Extend critical thinking skills from the didactic arena to a scenario based arena.
8/19 Individual A sign up sheet will be available mid semester based on other final exam schedule	Individual Check Offs: <ul style="list-style-type: none"> - basic airway skills - advanced airway skills - table top set up - room preparation - induction sequence 		

Congratulations!!!!!!!