Anesthesia Practicum
NUR 885: - 1 credit
Tuesdays (Assigned Times)
Summer 2016

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.

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 used by the nurse anesthetist.
2. Position or supervise positioning of patients to optimize physiological function and promote injury prevention.
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 anesthesia with sedation 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. Demonstrate team performance behaviors by integrating situation monitoring, mutual support and effective communication strategies.

Prerequisites: NUR 879

Additional Prerequisites: Acceptance into the Nurse Anesthesia Program
Standards Documents: The curriculum is guided by the following documents:

   http://www.aacn.nche.edu/education-resources/MastersEssentials11.pdf


   http://www.aana.com/resources2/professionalpractice/Documents/PPM%20Code%20of%20Ethics.pdf

Course Faculty: Gayle Lourens, DNP, MS, CRNA  
   gayle.lourens@hc.msu.edu
   Office:  517-432-8163
   Cell:  517-862-5666
   A-121 Life Sciences
   Office Hours: Variable – Appointments arranged usually; however, available as needed for students in the Nurse Anesthesia Program to accommodate students’ schedules

   Lindsay Mason, MSN, CRNA  
   lindsay.mason@hc.msu.edu

Official Means of Communication – Electronic Mail:
  Electronic mail is an official means of written communication for all students, faculty and Staff at Michigan State University and the College of Nursing. Check your e-mail daily. Keeping up with changes in the course is the responsibility of the student.

Office Hours: Tuesdays, 12:30-1:30 pm & 3:30-4:30 pm

Change in Calendar
   The faculty reserves the right to alter the calendar as circumstances may dictate. All changes will be announced in class or posted in the course communication section on D2L.

Instruction:

a. Methodology: NUR 885 is a 1 credit class that applies didactic knowledge through simulated and classroom activities. Students are assigned to small groups of 3-5 students to facilitate knowledge acquisition, critical thinking and application of technical and non-technical skills. Preparation before to class is essential to maximize the learning experience. The following methods will be used to meet the objectives:
   - Low fidelity simulation
b. Required Texts:


c. Required Resources, References, and Supplies:

- Calculator
- Precordial stethoscope with child bell
- Regular stethoscope

d. Frequently Called Telephone Numbers:

- MSU Distance Learning Services (D2L Helpline)
  - Local: *(517)* 355-2345
  - Toll Free: *(800)* 500-1554
  - MSU D2L Contact form: [https://contact.cl.msu.edu/contact.php?service=DILSD2L](https://contact.cl.msu.edu/contact.php?service=DILSD2L)

- Stefanie Luna
  - Graduate Clinical Program’s Secretary
Phone: 517-432-0474  
E-mail: stefanie.abbey@hc.msu.edu

- Nikki O'Brien  
  Student Advisor, Academic Specialist  
  College of Nursing Student Support Services  
  Bott Building C-134  
  Phone: 517-355-8311  
  E-mail: obrienni@msu.edu

**e. Evaluation:** NUR 885 is graded as a “pass / no pass”. Students are individually evaluated on class preparation, participation, performance and professionalism.

  *A grading rubric is located on the D2L course site.*

**Professionalism:** Preparation as an advanced practice nurse requires more than the acquisition and application of knowledge. In addition to the academic standards listed, the student must demonstrate:

- Appropriate interpersonal relations and communications with peers, faculty and MSU College of Nursing staff
- Respect for faculty and classmates
- Honesty and integrity in all academic and professional matters
- The ability to interact with course faculty when there are questions and /or concerns regarding evaluation. The faculty of record or lead faculty should be contacted first.

**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 MSN Student Handbook: [http://nursing.msu.edu/MSN%20Programs/Handbooks/default.htm](http://nursing.msu.edu/MSN%20Programs/Handbooks/default.htm)
- Information for MSU Students: [http://www.msu.edu/current/index.html](http://www.msu.edu/current/index.html)
- Academic Programs: [http://www.reg.msu.edu/AcademicPrograms](http://www.reg.msu.edu/AcademicPrograms)
- Code of Teaching Responsibility and Student Assessments and Final Grades: [http://www.reg.msu.edu/AcademicPrograms/Print.asp?Section=514](http://www.reg.msu.edu/AcademicPrograms/Print.asp?Section=514)
- Integrity of Scholarship and Grades: [http://www.reg.msu.edu/AcademicPrograms/Print.asp?Section=534](http://www.reg.msu.edu/AcademicPrograms/Print.asp?Section=534)

**University 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 College 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 http://splife.studentlife.msu.edu/ 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 370. 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 https://www.msu.edu/unit/ombud/academic-integrity/index.html#regulations

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. See the Ombudsman’s web site for a discussion of student observance of major religious holidays, student-athlete participation in athletic competition, student participation in university-approved field trips, medical excuses and a dean's drop for students who fail to attend class sessions at the beginning of the semester.

College of Nursing Policies: Professional Development Guidelines are found in CON Student Handbooks at CON website. Students are responsible for the information found in the CON Masters of Science in Nursing Handbook and the Nurse Anesthesia Supplement Handbook.
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<th>Weekly Topic</th>
<th>At the end of the session, the student will be able to:</th>
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| Week 1       | 1. Discuss the role of the SRNA in the OR.  
2. Identify sterile versus nonsterile areas in the OR department and the OR suite.  
3. Discuss proper and improper surgical dress  
4. Demonstrate an understanding of the OR table and its function.  
5. Demonstrate proper draping and hand-off techniques  
6. Describe how universal precautions are used in the operating room setting  
7. Perform a proper time out procedure in the simulated OR environment |
| Week 2       | 1. Recite limitations of adjunct airway equipment (nasal cannula, simple mask, non-rebreather, bag-valve mask, nasal and oral airways)  
2. Demonstrate proper airway patency maneuvers  
3. Demonstrate proper placement of nasal and oral airways  
4. Demonstrate proper airway equipment set up  
5. Demonstrate proper ventilation techniques using BVM & anesthesia bag |
| Week 3       | 1. Gather equipment necessary for intubation.  
2. Demonstrate proper technique intubating with Macintosh and Miller blades.  
3. Validate proper ETT placement.  
4. Demonstrate proper insertion of the LMA and discusses limitations of the LMA.  
5. Properly secures ETT / NTT and identifies risks associated with securing an ETT or LMA device |
| Week 4       | 1. Identify specific positions used in the OR.  
2. Discuss potential injury associated with each position.  
3. Demonstrate proper lithotomy, supine, sitting, extremity tuck and prone positioning.  
4. Utilize strategies to reduce patient complications and injury  
5. Discuss physiological changes associated with each position |
| Week 5       | 1. Prepare a complete tabletop set up.  
2. Demonstrate proper airway and ETT selection based on given scenario  
3. Compare NRIVI, RSIVI and inhalation induction sequencing  
4. Synthesize an induction plan based on patient history, case risk / complications and common physiological changes associated with anesthetics.  
5. Calculates drugs accurately and adheres to sefe practices in medication preparation  
6. Demonstrates nasal tracheal intubation and proper securing of a NTT |
| Week 6       | Calculate ideal body weight, hourly IV fluid rate, NPO deficit, EBV, EBL and identify a transfusion trigger.  
2. Correlate pathophysiologial conditions with fluid and blood product administration goals  
3. Calculate BMI, IBW  
4. Demonstrate an ability to perform medication calculations; gram %, mcg/kg/min; toxic doses |
|             | OBSERVATION DAY:  
1. Identify areas in the operating room considered “sterile” and “unsterile”  
2. Observe how the anesthesia providers assemble equipment and prepares a table top set up |
| **OBSERVATION IN OR #1** | 3. Correlate components of patient positioning to interventions that prevent incidence of iatrogenic complications  
4. Study how anesthesia providers remain vigilant despite many room distractions |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| **Week 7 Induction Sequences** | 1. Demonstrate a non-rapid sequence induction  
2. Demonstrate a rapid sequence induction  
3. Chose an induction sequence based on a simple history and provide a rational  
4. Communicate plan with faculty using SBAR format  
4. Provide constructive feedback to other team members |
| **Week 8 OR Observation #2** | 1. Observe how induction sequences are chosen based on the patient’s assessment and medical history  
2. Study how the anesthesia provider prepares the patient for induction  
4. Observe care after induction  
5. Observe a pre-operative assessment and a PACU handoff |
| **Week 9 Adult Scenarios Vent Modes Airway Complications** | 1. Prepare a complete table top set up  
2. Perform a preoperative assessment  
3. Synthesize an induction plan based on patient history, case risk / complications  
4. Communicate expectations to each of the OR “team”.  
5. Demonstrate a proper RSIVI and NRSIVI  
6. Correlate airway complications with airway, monitor and ventilator pressure signs |
| **Week 10 Pediatric Scenarios** | 1. Compare the child’s airway to the adult’s airway.  
2. Demonstrate proper placement of adjunct airways.  
3. Select proper airway equipment based on pediatric patient size (nasal airways, oral airway, LMAs, Laryngoscope equipment and ETTs)  
4. Utilize formulas to calculate proper equipment sizing.  
5. Discuss limitations of Macintosh and Miller blades in the infant and small child.  
6. Position infant properly for intubation.  
7. Demonstrate proper technique for intubation of the infant and small child  
8. Describe techniques for suctioning and placing OG and NG tubes in infants and small children.  
9. Demonstrate proper technique for an inhalation induction  
10. Demonstrate an IV start using the techniques shown in lab  
12. Demonstrate the proper technique to manage a laryngospasm |
| **Week 11 PUTTING IT ALL TOGETHER** | 1. Prepare a complete table top set up  
2. Calculate appropriate doses  
3. Perform a preoperative assessment  
3. Synthesize an induction plan  
4. Clearly communicate plan for induction  
5. Communicate expectations to each of the OR “team”  
6. Demonstrate a proper inhalation, RSIVI and NRSIVI.  
7. Provide an accurate hand-ff to PACU using the SBAR format  
**8. Critically evaluate performance; verbalizing goals for improvement** |
| **Week 12** | 1. Prepare a complete table top set up  
2. Calculate appropriate doses |
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<td><strong>FINAL EXAMS</strong></td>
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