Principles of Anesthesia III
NUR 884 - 001
Room A-107 Life Sciences Building
Tuesdays, 8:00 am – 9:20 am and 2:00-3:20
3 credits
Spring 2013

Catalog Course Description: Foundations for the clinical practice of anesthesia. Integrating physiologic patient parameters, didactic knowledge, and technical skills in simulated and clinical environments.

Course Objectives: At the completion of this course, students will:
1. Describe plan for anesthetizing obstetrical patients presenting during emergency labor.
2. Describe plan for anesthesia delivery to trauma, burn, and difficult airway patients.
3. Develop an anesthetic plan for patients having adverse intraoperative complications.
4. Describe anesthetic considerations for major head and neck surgery.
5. Compare and contrast anesthetic management of various disease states.

Prerequisites: NUR 883

Co-requisites: None

Professional Standards & Guidelines: The curriculum is guided by the following documents:

Faculty Contact Information:

Gayle Lourens, MS, BSN, CRNA
gayle.lourensi@hc.msu.edu
Office Location: A-121 Life Science Building
Office Phone: 517-432-8163
Cell Phone: 517-862-5666

Office Hours: Arranged; however, available as needed by students in the Nurse Anesthesia Program to accommodate student schedules.
Instruction:

a. Methodology: Presentation of course content is accomplished through weekly scheduled class meeting times. As adult learners, it is expected that students will complete assigned readings prior to class. Content will be delivered utilizing the following instructional methods:

- Classroom lectures
- Classroom discussion
- Readings from textbooks, journals or web pages (as assigned)
- Exams
- Selected low and high fidelity simulation events
- Student/faculty conferences
- Voice over power points (or an equivalency), narrative and audiofiles

b. Required Texts:


c. Optional Texts: None

Required Resources, References, Supplies:

- ANGEL Help Line
  1.800.500.1554 (24 hrs, 7 days/week)
  517.355.2345 (24 hrs, 7 days/week)
  www.angel.msu.edu (ANGEL Help link in upper right corner)
  Always check with the ANGEL Help Line first!
• Access to, and ability to use, Microsoft Office Word and Power Point

• Basic Scientific Calculator (scientific notation, log function, exponential functions, roots, square roots). Note: Calculators on mobile or phone devices are acceptable as calculators in class but not during exams.

• Frequently Called Telephone Numbers:
  - Colleen Wager
    Graduate Clinical Program’s Secretary
    Phone: 517-432-0474
    E-mail: colleen.wager@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

Evaluation:

a. Learning Assessments and Grading: In order to Pass the course, the student must achieve an overall grade of 80% or higher. Failure to meet 80% in the course will constitute a failing grade and the student will not be allowed to continue in the nurse anesthesia program. The MSN and Nurse Anesthesia Supplemental Handbooks discuss the procedures in the event of a failure of a course. There is no opportunity for “extra credit” or “make up work” in this course and late work will not be accepted.

b. The following grading scale will be used in this course:

<table>
<thead>
<tr>
<th>%</th>
<th>GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>94 – 100</td>
<td>4.0</td>
</tr>
<tr>
<td>87 – 93</td>
<td>3.5</td>
</tr>
<tr>
<td>80 – 86</td>
<td>3.0</td>
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<tr>
<td>75 – 79</td>
<td>2.5</td>
</tr>
<tr>
<td>70 – 74</td>
<td>2.0</td>
</tr>
<tr>
<td>65 – 69</td>
<td>1.5</td>
</tr>
<tr>
<td>60 – 64</td>
<td>1.0</td>
</tr>
<tr>
<td>Below 60</td>
<td>0.0</td>
</tr>
</tbody>
</table>

(Minimum passing grade)

(There is no opportunity for “extra credit” or “make up work” in this course and late work will not be accepted.)

b. The following grading scale will be used in this course:

<table>
<thead>
<tr>
<th>Exam / Assignment</th>
<th>Weighted %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>23.33%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>23.33%</td>
</tr>
<tr>
<td>Exam 3</td>
<td>23.33%</td>
</tr>
</tbody>
</table>
1. Exams: Three proctored, timed (60 minutes) exams will be administered through the Angel site during the semester. Each exam represents 23.33% of the final grade. Exams are based on information obtained from assigned readings, online sources, simulation events and lecture content.
2. Cumulative Final: A proctored, timed (120 minutes) cumulative final will be administered during finals week at the end of the semester. The exam represents 30% of the final grade.

d. Appeal of a test question: All inquiries/appeal of a test question must be made on this form. No appeal will be accepted unless received within 5 days of the posted grade/test review. All appeals will be evaluated individually.

Student Name: _______________________________________________________
Exam Number: _________ Date of Exam: __________ Date Submitted: _________
Submitted to: _________________________________________________________

1. Write the test number and question as it was written on the exam.

_____________________________________________________________________

2. What was the correct answer according to the test key? _________________

3. What answer did you select? _________________________________________

4. What concern do you have regarding the question and answer?

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

5. Cite Three References that support your rationale for the answer you selected over the answer on the answer key. References cannot be cited from the internet.

   a. ___________________________________________________________________

   b. ___________________________________________________________________

   c. ___________________________________________________________________

Additional comments may be attached to this form.

Faculty Response to Appeal: Accept _________ Reject _________

Rationale:
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
e. Testing and Classroom Conduct:
- Class begins promptly at the scheduled time. To avoid class disruption, a student who is late will be asked to join following a class break.
- Attending class is strongly encouraged. A student who misses class or arrives late will be responsible for the missed content and obtaining said content.
- Any student who will be absent from an exam must notify faculty prior to the examination. The student will be given the opportunity to make up the missed exam with the faculty member or faculty-designated proctor. The faculty member will select and schedule the date and time. Only one exam can be missed and made up during this course. Any other missed exam(s) will be assigned a grade of zero.
- All cell phones or handheld devices are to be silenced or turned off during class. Checking e-mail or texting during class is disruptive and the student will be asked to leave class.
- All materials brought into an exam (except for a writing utensil, eraser and calculator) must be left in front of the room. Students may not wear coats or jackets during an exam.
- A mobile device cannot serve as a calculator. Students who forget to bring an approved calculator to an exam will calculate the problem manually.
- If the instructor suspects any sharing during an exam, all students involved will receive a zero on that exam and will face all consequences of academic dishonesty according to the MSU College of Nursing Student Handbook and Michigan State University Policy.
- Due to the intensity of the course, faculty are unable to provide an environment conducive to learning and testing with children present. Students are expected to make child care arrangements in advance.

f. 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 Angel course as a communication item.

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.

In order to facilitate a climate of academic excellence and integrity, the faculty of the College of Nursing adopted the following Honor Code. Students are expected to contribute to the legitimacy of their degree by confidentially reporting breeches to this honor code:
- I vow to hold myself and my peers to the highest measure of honesty and integrity
• I commit myself to respectful and professional conduct in all classroom and clinical interactions
• I will neither give nor receive any unauthorized assistance in completing my assigned academic work
• I will always prepare completely to care for my patients before attending clinical
• I will hold in confidence all personal matters coming to my knowledge in the practice of my calling
• I will do all in my power to maintain and elevate the standard of my chosen profession

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 884. 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.
<table>
<thead>
<tr>
<th>Date</th>
<th>Course Objective</th>
<th>Topic Content</th>
<th>Textbook/Readings</th>
<th>Activities</th>
<th>Faculty</th>
</tr>
</thead>
</table>
| Week 1 (January 8) | 1                | Obstetrics  
Eyes  
Endocrine                                             | Chestnut, Chapter 2,3,4,18,26, 37  
Barash, Chapter 49, 51                                                                                                                                          | Readings  
Self Assessment                                                                                                       | Lourens                   |
| Week 2 (January 15) | 2                | Trauma  
Brain Death Organ Donation  
Transplantation                                           | Miller, Chapter 73;  
Barash Chapter 36, 54  
Boldt, J. (Resuscitation Fluid)  
Chappell, D., Jacob, M., & Conzen, P. (Rational Approach to Perioperative Fluid Management)  
Morris, et al (Permissive Hypotension)  
Spahn, D.R. (Coagulopathy and transfusion in trauma)  
Enriquez, L.J. & Shore, L. (Point of care coagulation testing and transfusion algorithms) | Readings  
Simulation                                                                                                               | Lourens                   |
| Week 3 (January 22) | 3                | Pediatrics  
Neonatal                                              | Cote, Chapter 27, 33  
Barash, Chapter 44, 45                                                                                                                                            | Readings                                                                                                                   | Mason                     |
| Week 4 (January 29) | 2                | Burns  
Hapatobiliary                                         | Barash 48, 36  
Nagelhout & Plause, Chapter 31                                                                                                                                      | Exam I (23.3% of final grade)  
Readings                                                                                                          | Lourens  
(* Mason Gone) |
| Week 5 (February 5) | 4,5              | Neuroanesthesia                                        | Barash Chapter 39                                                                                                                                             | Readings  
Self Assessment                                                                                                        | Lourens                   |
| Week 6 (February 12) | 2,3,5             | Thoracic                                              | Barash, Chapter 40  
Nagelhout and Plause, Chapter 28                                                                                                                                      | Readings  
Simulation                                                                                                           | Mason                     |
| Week 7 (February 19) | 3,5              | Noncardiac Surgery for the Cardiac Patient             | Auerbach, A. & Goldman, L.  (Assessing and Reducing the Cardiac Risk of Noncardiac Surgery)  
(* Lourens Gone) |
| Week 8 (February 26) | 2,3,5             | Lines Lab                                              | Henley, Chapter 3                                                                                                                                             | Exam II (23.3% of final grade)  
Review Lines  
Power Point on Angel  
Central Lines Lab / Simulation                                                                                           | Lourens / Mason             |
<p>| Week 9          |                  | <strong>SPRING BREAK</strong>                                      |                                                                                                                                                            | No Class                                                 |             |</p>
<table>
<thead>
<tr>
<th>Week 10  (March 12)</th>
<th>2,3,4,5</th>
<th>Vascular / Chronic Pain</th>
<th>Barash, Chapter 42 / Barash, Chapter 58 Nagelhout &amp; Plaus, Chapter 26</th>
<th>Readings Self Assessment</th>
<th>Mason / Lourens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 11  (March 19)</td>
<td>3,5</td>
<td>Off Unit</td>
<td>Barash, Chapter 34</td>
<td>Readings</td>
<td>Mason</td>
</tr>
<tr>
<td>Week 12  (March 26)</td>
<td>3</td>
<td>Office Based Practice / Plastics</td>
<td>Barash, Chapter 33</td>
<td>Readings Self Assessment</td>
<td>Lourens</td>
</tr>
<tr>
<td>Week 13  (April 2) TBA</td>
<td>Extremity Regional Workshop</td>
<td>Brown, appropriate chapters associated with extremity regional (Femoral, Sciatic, Intercostal, Interscalene, Supraclavicular, Infraciavicular, Axillary, Distal upper Extremity and IV regional) Anatomy text as review Nagelhout &amp; Plaus, Chapter 46</td>
<td>Exam III (23.3% of final grade) Participate in Workshop</td>
<td>Crofut / Bienger / Lourens</td>
<td></td>
</tr>
<tr>
<td>Week 14  (April 9)</td>
<td>3,5</td>
<td>Congenital Heart</td>
<td>Cote, Chapter 15, 21</td>
<td>Readings Self Assessment</td>
<td>Mason</td>
</tr>
<tr>
<td>Week 15  (April 16)</td>
<td>3,5</td>
<td>Adult Hearts (Introduction)</td>
<td>Barash Chapter 41 Henley Chapter 1,2,5,6,7, 19</td>
<td>Readings Self Assessment Lourens (*Mason gone)</td>
<td></td>
</tr>
<tr>
<td>Week 16  (April 23)</td>
<td>3,5</td>
<td>Hearts (Part II)</td>
<td>Henley Chapter 10-18, 21,22</td>
<td>Readings Lourens</td>
<td></td>
</tr>
<tr>
<td>Week 17  (April 30)</td>
<td></td>
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<td><strong>FINAL EXAM- DATE TBA</strong></td>
<td>Lourens</td>
<td></td>
</tr>
</tbody>
</table>