

**PRINCIPLES OF ANESTHESIA II****NUR 883 Section 001****3 Credits****Fall 2009**

**Catalog Course Description:** Advanced anesthesia care principles. Procedures and complications in the anesthetic management of the emergency and trauma patient. Considerations for specialty surgical areas.

**Course Objectives:** At the end of this course, students will:

1. Design management care plans for specialty surgical areas.
2. Discuss pathophysiology and mechanisms of pain.
3. Demonstrate understanding of anesthesia gas machine and anesthetic gas behavior.
4. Discuss implications of disease process on anesthetic management of surgical patients
5. Develop plans of care and anesthesia management for major system compromise.

**Prerequisites:** Acceptance into the Nurse Anesthesia Program

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

1. American Association of Colleges of Nursing. (1996). *The essentials of master's education for advanced practice*. Washington, DC: Author.
2. American Nursing Association. (2001). *Code of ethics for nurses with interpretive statements*. Silver Spring, MA: nursesbooks.org.
3. AANA (2007). *Scope and Standards for Nurse Anesthesia Practice*. Park Ridge, IL.
4. Professional Practice Documents (2006). *Code of ethics for Certified Registered Nurse Anesthetist*. Park Ridge, IL.
5. Professional Practice Documents (2006). *Post Anesthesia Care Standards for the Certified Registered Nurse Anesthesia*. Park Ridge, IL.

**Course Faculty:** Gayle Lourens, MS, BSN, CRNA

**Contact Information:**

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Office Hours: Variable-Appointments arranged by phone or e-mail

**Note: Times can be arranged to accommodate student schedules.****Instruction:**

- a. Methodology:

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

b. Required Texts:

Hughes and Levinson, *Anesthesia for Obstetrics, 4<sup>th</sup> ed.*, Philadelphia, Pennsylvania: Elsevier Saunders Publishing Company. ISBN: 0-683-30665-0

Cote, C., *A Practice of Anesthesia for Infants and Children, 4<sup>th</sup> ed.*, Philadelphia, Pennsylvania: Elsevier Saunders Publishing Company. ISBN: 0-721631983.

Stoelting, R.K., Dierdorf, S.F.; *Anesthesia and Co-existing Diseases, 4<sup>th</sup> ed.*, Philadelphia, Pennsylvania: Churchill Livingstone Publishing Company. ISBN: 0-443-06604-3.

Guyton, A.C., Hall, J.E.; (2006) *Textbook of Medical Physiology, 11<sup>th</sup> ed.*, Philadelphia, Pennsylvania: Elsevier Saunders Publishing Company. ISBN: 0-7216-0240-1.

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

Nagelhout, J.J., Plaus, K.L.; *Nurse Anesthesia, 4<sup>th</sup> 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, 4<sup>th</sup> ed.*, Baltimore, Maryland: Lippincott, Williams and Wilkins Publishing Company. ISBN: 0-7817-5469-0.

c. Optional Texts:

Miller, R.D.; (2005) *Miller's Anesthesia, 6<sup>th</sup> ed.* Philadelphia, Pennsylvania: Elsevier Saunders Publishing Company. ISBN: 0-443-06618-3 (set).

Yao, F.F., *Anesthesiology, Problem Oriented Patient Management, 6<sup>th</sup> ed.* Lippincott, Williams, Philadelphia, PA. ISBN: 0781765102.

**Evaluation:**

a. Course Grading Scale:

| <b>Percentage</b> | <b>Grade</b>     |
|-------------------|------------------|
| <b>94 - 100</b>   | <b>4.0</b>       |
| <b>87 - 93</b>    | <b>3.5</b>       |
| <b>80 - 86</b>    | <b>3.0</b>       |
|                   | <b>(passing)</b> |
| <b>75 - 79</b>    | <b>2.5</b>       |
| <b>70 - 74</b>    | <b>2.0</b>       |

c. Writing Requirements:

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. Testing

All materials brought into a test, except for number 2 pencils with an eraser and calculator must be left in the front of the classroom. Students may not wear coats or jackets during the examination.

Students may not leave the room until all students have completed their exams.

If the instructor suspects any sharing during an exam, all students involved will receive a 0 on that exam, and will face all consequences of academic dishonesty according to the MSU College of Nursing Student Handbook.

Students must use MSU College of Nursing approved calculator for examinations. Students may not borrow calculators from other students during the examination.

Any student who is absent from an examination must notify faculty prior to the examination. The student will be given the opportunity to make-up the missed exam with the faculty member during office hours. Only one test can be missed and the student given a chance to take a make-up examination during this course. Any other missed exams will be assigned a grade of zero.

C. Calculators

Calculators are permitted; however, cellular telephone calculators and PDA calculators will not be used. No sharing of calculators will be permitted during exams. If calculators are forgotten, students must calculate the answers manually.

D. Electronic Communication Devices

All cellular telephones are to be placed in the vibration mode or turned off during class. Beepers should be placed in the vibration mode during class. No cellular phones or beepers will be permitted on the student's person during examinations.

E. Children in the Classroom

Because of the intensity of these courses, 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. Appeal of Test Question/Grades

Appeals of test questions must be made within 5 days after the date of the examination. All appeals will be evaluated individually and must be made on the "Appeal of Test Question" form (attached).

According to the policies of The Michigan State University College of Nursing, grades may be appealed only for reasons of discrimination. All appeals must be made in writing. See the current Student Handbook for the appropriate form. The appeal must be made to the faculty

member and course coordinator within one week. The appeal must be accompanied by a legible copy of all student work in the course at the occurrence/failure.

After appealing to the faculty and course chair, the student may appeal to the MSU College of Nursing Student Services Office. Grade appeals must be made in writing to the Director of Student Services and to the Associate Dean of Academic Affairs with 5 working days after appealing to the faculty and course chair.

The third level of appeal may be made in writing to the Dean of the MSU College of Nursing. The last level of appeal is at the university level. Students are referred to The MSU Student Handbook for this process of grade appeal.

G. Progression in the Major

NUR 883 is a required course in the nurse anesthesia curriculum. In order to progress, a student must pass this course with a grade of “B” or better

H. 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.

J. 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

## Appeal of Test Question

*All inquiries/appeals concerning a disputed answer on an examination must be made on this form. No appeal will be accepted unless received within five (5) days of the examination. 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:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Faculty Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## 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 to review and act 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>

## PRINCIPLES OF ANESTHESIA II

NUR 883 Section 001

3 Credits

Variable Times A107 Life Sciences

Fall 2009

### Additional Course Objectives:

1. Describe indications and contraindications of anesthetic techniques for different surgical procedures.
2. Discuss implications of anesthetic choice and technique on procedures requiring special anesthetic considerations.
3. Analyze the anesthesia implication on patients with co-existing diseases
4. Describe the anesthetic complications and their treatment for various types of surgical procedures.
5. Analyze the impact of surgery on patients undergoing major system procedures
6. Discuss anesthetic techniques and other modalities of benefit in the management and control of peri-operative pain control and other post operative complications.

Differentiate anatomic and physiologic features, equipment issues, and pharmacological concerns unique to special and advanced anesthetic procedures.

**Course 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](http://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](http://www.allmsu.com) Web site to complete any course work in NUR 883. 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](http://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:**

|  | <b>Content/Topic</b>   | <b>Faculty</b>         |
|--|--|------------------------|
| <b>Sept 2</b>                                      | Regional Anesthesia (SAB, Epidural)  | <b>Lourens</b>         |
| <b>Sept 8</b><br><b>Sept 11</b>                    | Anesthesia for Orthopedics<br><b>Group 1 – SAB Lab</b>   | <b>Lourens</b>         |
| <b>Sept 14</b><br><b>Sept 18</b>                   | Anesthesia for ENT; Anesthesia and laser surgery<br><b>Group 2 – SAB Lab</b>   | <b>Lourens</b>         |
| <b>Sept 22</b><br><b>Sept 24</b><br><b>Sept 25</b> | <b>Exam I (9/22/09) First 90 minutes</b><br>Anesthesia for Maxillofacial Surgery<br><b>Open Simulation (not required)</b><br><b>Open Simulation (not required)</b>               | <b>Lourens</b>         |
| <b>Sept 28</b><br><b>Sept 28</b><br><b>Sept 29</b> | Anesthesia for Ophthalmic Surgery,<br>Anesthesia for Gastrointestinal Procedures/<br>Laparoscopic Implications<br><b>Group 1 – Epidural Lab</b><br><b>Group 2 – Epidural Lab</b> | <b>Lourens</b>         |
| <b>Oct 5</b>                                       | Endocrine System and Anesthetic Implications, Anesthesia for Genitourinary Procedures  | <b>TBA</b>             |
| <b>Oct 13</b><br><b>Oct 16</b>                     | Obesity and Anesthesia Practice<br><b>Open simulation (not required)</b>   | <b>TBA</b>             |
| <b>Oct 20</b>                                      | <b>Exam II (10/20/09) First 90 minutes</b><br>Obstetrics   | <b>Lourens</b>         |
| <b>Oct 27</b><br><b>Oct 29</b>                     | Obstetrics / Intro to extremity region (Bier Blocks)<br><b>Open simulation (not required)</b>  | <b>Lourens</b>         |
| <b>Nov 2 or 3</b>                                  | Regional OR Geriatrics   | <b>Croft or Talley</b> |
| <b>Nov 9 or 10</b>                                 | Regional OR Geriatrics   | <b>Croft or Talley</b> |
| <b>Nov 17</b>                                      | Introduction to Advanced Airway<br><b>Didactic and Hands on lab (all students participate)</b>   | <b>Lourens</b>         |
| <b>No lecture</b><br><b>Nov 25</b>                 | <b>Advanced Airway Clinic (Flint)</b><br><b>10 am – 4 pm</b>   | <b>Lourens</b>         |
| <b>Dec 1</b><br><b>Dec 4</b>                       | <b>Exam III (12/1/09)</b><br>Pediatrics  | <b>Lourens</b>         |
| <b>Dec 7</b>                                       | Pediatrics / Neonatal  | <b>Lourens</b>         |
| <b>TBA</b>   | <b>Cumulative Final Exam</b>   | <b>Lourens</b>         |