

**LANCASTER COLLEGE OF NURSING AND HEALTH SCIENCES
DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM**

SYLLABUS

- I. Title: DMS 202 – OBSTETRICS I
- II. Course Description: This course will prepare the student to perform sonograms of the pregnant female pelvis. The course is divided into two segments: 1) normal and abnormal processes encountered in the first trimester, and 2) normal anatomy throughout the remainder of the pregnancy. Cross-sectional anatomy of these structures and their appearance on the sonogram will also be discussed. Classroom instruction will be coordinated with certain lab and clinical activities in the DMS 203 course.
- III. Prerequisite: DMS 110
- IV. Placement: Year II – Semester I, concurrent with DMS 203
- V. Time Allotment: Theory 30 hours
Clinical Laboratory 0 hours
- VI. Faculty: Robert M. Hess, BS, RDMS
- VII. Credits: 2
- VIII. Evaluation:
- | | | |
|---------------------|-----------|---------------|
| 2 Unit Exams | 200 | Points |
| Quiz | 20 | Points |
| Assignments | <u>30</u> | <u>Points</u> |
| Total Theory Points | 250 | Points |
- *A grade of "C" (2.0) is required to pass the theory portion of the course.**
- IX. Textbooks: DIAGNOSTIC ULTRASOUND, RUMACK, 2005
ATLAS OF HUMAN ANATOMY, Netter, 2006
POCKET PROTOCOLS FOR ULTRASOUND SCANNING, Tempkin, 1999
LGH PROTOCOL MANUAL
SDMS GUIDELINES

- X. Course Objectives: Given the theoretical content, at the completion of Obstetrics I, the student will demonstrate that he/she has the knowledge to:
1. Describe physical changes that occur throughout the normal pregnancy.
 2. Identify anatomical structures of a normal pregnancy on the sonogram.
 3. Select the appropriate sonographic imaging protocol for the obstetrical patient.
 4. Describe specific abnormalities that may be encountered in the 1st trimester of pregnancy.
 5. Describe characteristic sonographic features of each abnormality.
- XI. School Policies: Students are held accountable for all policies in the Student Handbook and any revisions made to those policies during the academic year.
- XII. Class:
- A. Importance of Attending Class
- Education comprises more than just private reading and passing of exams. Students should recognize that active and informed participation in class is essential to the development of their intellectual abilities and scholarly growth. Students must also recognize the importance, for both the present and the future, of achieving an academic record that reflects their intellectual ability. Such records are seldom achieved without regular attendance and participation in class activities. Attendance will be taken.
- B. Student Responsibility for Missed Material
- Students are responsible for all material presented and announcements made in class, regardless of attendance. It is the student's responsibility to obtain materials and assignments if absent.
- C. Unit Examinations
- Examinations should only be missed in extenuating circumstances. A student who misses an examination will be required to make up the examination on the next day of lecture. Contact the Course Faculty prior to the next lecture day to make arrangements to take the exam.
- A student who misses an examination, regardless of the reason, will have ten percent (10%) deducted from the grade achieved on the exam. Example: The exam is worth sixty (60) points, the student takes the exam and achieves a grade of 52/60. The score of 52 is then decreased by ten percent (10%) or five (5) points, thus the grade on the exam will be 47/60. An alternate examination may be given for the make-up examination.

D. Class Behavior

Once class has started, the instructor has the prerogative not to admit students into lecture. Students will be dismissed from class for any inappropriate behavior.

E. Written Assignments:

All submitted written work must follow the College of Nursing and Allied Health Writing Guidelines.

XIII. Other:

A. Academic Dishonesty and Plagiarism

Academic dishonesty violates the spirit and purpose of an academic community, and is therefore subject to disciplinary action. Academic dishonesty includes cheating on examinations, unauthorized duplicated submission of work, and/or unauthorized possession of exams.

Plagiarism is an act of academic dishonesty. Any work submitted that is not your own is an act of plagiarism. In preparing assignments, you must acknowledge in writing, any use of outside sources or any assistance you received in preparing an assignment.

If an instructor believes that a student has committed an act of academic dishonesty or has plagiarized material, the instructor will award a failing grade for that assignment to the student. If the occurrence is during an examination, the student will receive a zero for that portion of their grade and must leave the room.

If the student disagrees with this decision, the student may follow the grievance procedure.

XIV.

CONTENT	HOURS	STUDENT ACTIVITIES	COURSE OBJECTIVE
<u>First Trimester</u>			
<p>I. Introduction</p> <p>A. Fetal Age Definition</p> <p>B. Indications for 1st trimester sonogram</p> <p>II. Early Gest. Development</p> <p>A. Up to 5 wks</p> <ol style="list-style-type: none"> 1. Ovulatory Cycle 2. Fertilization 3. Implantation 4. Embryonic Disk/ Yolk Sac 5. Chorion/Placenta 6. Endometrial Changes 7. US Appearance <ul style="list-style-type: none"> Gest. Sac Double Sac Sign Chorion Amnion Yolk Sac Yolk Stalk Embryo <p>B. 5-13 wks</p> <ol style="list-style-type: none"> 1. Amnion/ Amniotic Fluid 2. Yolk Sac 3. Embryonic Development 4. US Appearance <ul style="list-style-type: none"> Gest. Sac Yolk Sac Yolk Stalk Amnion/Amniotic Fluid Chorion/Placenta Fetal Anatomy Measurements <p>III. Exam Protocols</p> <ol style="list-style-type: none"> A. Transabdominal B. Transvaginal C. Worksheet/Computer Entries 	<p>Class:</p> <p>16 hrs</p>	<p>Rumack, Ch. 32, 33 Tempkin, p. 405-425 SDMS OB, p. 1-4</p> <p>Assignment</p> <p>Handout Demo in DMS 203 Lab and Lab Assign: OB - TV (1 hr)</p>	<p>5-9</p>

CONTENT	HOURS	STUDENT ACTIVITIES	COURSE OBJECTIVE
<u>Trimester II,III</u>			
<p>I. Indications/ II-III Trimester Sonogram</p> <p>II. Normal Anatomy</p> <p style="padding-left: 20px;">A. Placenta</p> <p style="padding-left: 40px;">1. Embryology</p> <p style="padding-left: 40px;">2. Structure</p> <p style="padding-left: 40px;">3. Cord</p> <p style="padding-left: 40px;">4. Function</p> <p style="padding-left: 40px;">5. US Appearance</p> <p style="padding-left: 60px;">Size</p> <p style="padding-left: 60px;">Grade</p> <p style="padding-left: 60px;">Normal Variations</p> <p style="padding-left: 20px;">B. Fetal Head</p> <p style="padding-left: 20px;">C. Fetal Spine</p> <p style="padding-left: 20px;">D. Fetal Chest/Heart</p> <p style="padding-left: 20px;">E. Fetal Digestive System</p> <p style="padding-left: 20px;">F. Fetal Genitourinary System</p> <p style="padding-left: 20px;">G. Fetal Skeleton</p> <p style="padding-left: 20px;">H. Amniotic Fluid</p> <p>III. Fetal Parameters</p> <p style="padding-left: 20px;">A. Biparietal Diameter</p> <p style="padding-left: 20px;">B. Cephalic Index</p> <p style="padding-left: 20px;">C. Head Circumference</p> <p style="padding-left: 20px;">D. Abd. Circumference</p> <p style="padding-left: 20px;">E. Femur Length</p> <p style="padding-left: 20px;">F. Gestational Age</p> <p style="padding-left: 20px;">G. Fetal Weight</p> <p style="padding-left: 20px;">H. Others measurements</p>	<p>Class:</p> <p>14 hrs</p>	<p>Rumack, Ch. 48 (Spirit), p. 1337-48 Tempkin, p. 426-490 SDMS OB, p. 6-13</p> <p>Demo in DMS 203 Lab: Lab Assign: OB #1-5 (29 hrs)</p> <p>Rumack, Ch. 45, p.1493-1503 SDMS OB, p.18-20</p> <p>Demo in DMS 203 Lab:: Lab Assign: OB #6</p>	<p>5-7</p>