Academic Term: Summer 2015
Credit: 3 units = 90 hours of lab
Class Hours: Monday, Tuesday, Wednesday, Thursday 12:30 – 3:15 p.m.
Lab Instructor: Dr. Dusica Ristic, MD, RDMS (ABD, BR, OB/GYN), RDCS, RVT
Contact: dristic@lincolnunca.edu
Office Hours: M, T, W, Th, 11:45 a.m. – 12:30 p.m., by appointment only.
Lab Phone: 510-238-9744

Course Materials:
   Marie DeLange, MD Glenn A. Rouse

Recommended Self-Study:
Review anatomy location, patient’s position, images techniques, biometrics, and pathologies.

Course Description:
The course includes interpretation of normal anatomy, sonographic and gross anatomy,
demonstration of scanning techniques and identifying protocols for OB/GYN.
(3 units) **Prerequisite: DI 231**

Learning Objectives:
- Practice ultrasound ergonomics
- Practice obtaining advanced anatomy images and protocols: Uterus, Ovaries, Fetus biometrics
- Use advanced knowledge of M-mode, Doppler, Color and Spectrum to differentiate between normal and abnormal sonographic findings
- Recognize sonographic pathology in fetal anatomy
- Describe physiology and pathology of the placenta and amnion
- Describe sonographic appearance of fetal acquired, congenital and genetic diseases
- Demonstrate knowledge of presenting biometrics
- Prepare for externship
**Instructional Methods:**
- Live lecture / demonstration ultrasound protocols including measurements in class
- Laboratory hands-on training with protocol handouts and worksheets
- Real-time imaging to locate, identify, measure biometrics, and recognize ultrasound images in female and fetal anatomy

**Homework and Presentation:**
Students will analyze images received during each lab session. Images containing anomalies should be selected and kept for the future presentation to others. Then each student will perform library research on a selected topic in the field of Advanced OB/GYN, and present the findings during a lab class orally with a PowerPoint presentation consisting of a 10-minute presentation and a 5-minute question period. Students should include enough background information, ultrasound images received during classes, pictures and references for their peers to be able to understand the topic. Each student will choose the topic of his/her presentation with the instructor’s approval. The approval must be obtained by February 19th, 2015. The presentation time for each student will be assigned on a first come, first served basis during class hours or instructor’s office hours, by phone, or by E-mail. The oral presentation must be completed at least two weeks before your final hands-on lab examination (see schedule below).

**Evaluation Criteria for Presentation:**
- Clinical statement: 4%
- Background information: 4%
- Slide content: 4%
- Slide design: 2%
- Resolution of the problem: 4%
- Oral presentation: 2%
Total: 20% of all the course grading elements

**Ultrasound Hands-on Laboratory Examination:**
- During the final ultrasound hands-on examination, students will have to demonstrate understanding of information presented primarily during the demo, lectures and hands-on laboratory training, i.e. Protocols, Images, Anatomy, Biometrics and complete the exam time.
- Students will need to be at the diagnostic imaging lab, ready to start scanning at the exact time per scheduled.
- Arrive about 15 minutes prior to your scheduled exam time.
- If you are late for the scheduled exam time, your time CANNOT be changed and you will not get a full hour! If you are late, you will only have the remaining time left in your hour.
- On the exam days, you may come to class, but it is not mandatory until your scheduled exam time.
- Only one time TEST will be given to students with a valid excuse: such as illness, family emergency, unforeseen heavy traffic or natural disaster.
Attendance and Participation:
- Students who are tardy, who arrive after roll is taken or leave before the end of class will receive only half-credit for attendance.
- **Students are not allowed to be more than 15 minutes late.**
- If you are late or absent, a valid excuse such as illness, family emergency, unforeseen heavy traffic or natural disaster is expected.
- **No requirements to make up any work missed as a result of an absence. However, it is your responsibility to obtain notes from other class members regarding the class session you missed.**

Grading Policy:

**Scanning performance:** Effective use of lab time, development of scanning skills, applying techniques, effective use of ultrasound machines controls, IE: TGC, Depth PRF, Freq. Transducers, and to improve images on each patient. No cell phones allowed.

**Attendance:** Being punctual, participation and working during class time. Absences, late arrivals, non-use of class times, and early leaves will result in students’ poor and/or failing grade.

**Final Examination:** The final lab exam will focus on protocols, annotations to anatomy images, quality of images, demonstrating proper use of the ultrasound machines in control adjustments to obtain best anatomy images, basic knowledge of anatomy location and recognition. Exams protocol to images must be completed within allowed time, no retest. Non-completion, poor behavior, disruption, requiring assistants or dishonesty will result in failing exam and course.

**Grading Elements and Percentage Values:**

| Attendance | 10% |
| Presentation | 20% |
| Scanning Performance in the Lab Sessions | 30% |
| Final Exam | 40% |
| **Total** | 100% |

**Grading Scale:**

| 100-93 | A |
| 92-89 | A- |
| 88-85 | B+ |
| 84-81 | B |
| 80-77 | B- |
| 76-73 | C+ |
| 72-69 | C |
| 68-65 | C- |
| 64-61 | D+ |
| 60-50 | D |
| 49≤ | F |
Classroom Protocol:
- All students are expected to display professionalism in preparation for hospital work. That means arriving on time, remaining quiet when others are speaking, and paying attention to whoever has the floor in the classroom.
- Students are expected to attend and be prepared for all regularly scheduled classes. If a student knows in advance that he or she will need to leave early, the student should notify the instructor before the class period begins.
- Students are expected to treat faculty and fellow students with respect. For example, students must not disrupt class by leaving and reentering during class, must not distract class by making noise, and must be attentive to comments being made by the instructor and by peers.
- Never speak while the instructor is speaking.
- Always raise your hand to speak or to leave your seat, and wait for a response before speaking.
- **Disruptive behavior will not be tolerated**, including touching of other classmates or their belongings.
- Students engaging in disruptive behavior in class will be asked to leave and may be subject to other penalties if the behavior continues.
- No drinks, eating, sleeping or personal grooming is permitted during ultrasound laboratory classes.
- Please turn off your cell phones, and refrain from activities that disrupt the class (such as eating and walking in and out of the room while lab class is in session).
- If you use a computer in class, please use it only to take notes, to access course materials from the course webpage, or to locate information relevant to the class discussion. **Do not** use your computer or cell phone to surf the web, check emails, or send/receive text messages, as these activities are distracting to those around you (and decrease your chances of getting the most out of your time in class).
- To encourage the free flow of conversation, no part of any class may be recorded on audio or video media without the permission of the instructor. You may record notes by hand or by typing into a mobile computer.
- The presence of guests to listen to any part of a class requires the consent of the instructor.

Academic Honesty:
The University maintains a strict policy concerning academic dishonesty, which includes cheating, plagiarism, giving assistance on an examination or paper when expressly forbidden by the instructor, and any other practices which demonstrate a lack of academic integrity. It is the responsibility of the students to know and to adhere to principles of academic honesty. A student found guilty of academic dishonesty will be subject to academic sanctions ranging from assignment failure to course failure.
### Summer Session 2015 Schedule: DI 241 (Lab)

<table>
<thead>
<tr>
<th>Week #</th>
<th>Mon, Tue, Wed, Thu, 12:30-03:15</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>06/08-06/11</td>
<td>Clinical Protocols, GYN: Uterus, Ovaries, Adnexa</td>
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<tr>
<td>Week 2</td>
<td>06/15-06/18</td>
<td>Clinical Protocols, OB 1st Trimester, Biometrics</td>
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<tr>
<td>Week 3</td>
<td>06/22-06/25</td>
<td>Clinical Protocols, OB 1st Trimester, Pathology</td>
</tr>
<tr>
<td>Week 4</td>
<td>06/29-07/02</td>
<td>Clinical Protocols 2nd and 3rd Trimesters, Biometrics</td>
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<tr>
<td>Week 5</td>
<td>07/06-07/09</td>
<td>Clinical Protocols 2nd and 3rd Trimesters, Pathology</td>
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<tr>
<td>Week 6</td>
<td>07/13-07/16</td>
<td>2nd and 3rd Trimesters, Recognizing Pathology</td>
</tr>
<tr>
<td>Week 7</td>
<td>07/20-07/23</td>
<td>Clinical Protocols Practice, <strong>Presentations, Final Exams</strong></td>
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**Note:**
- Instructor may change this syllabus and course schedule at any time according to the judgment as to what is best for the class. Any changes will be declared ahead of time in class.
- Lab weekly schedule will adjust to the volume and trimesters of volunteer patients.
- Lab session is very dependent on OB volunteers for walk-ins or scheduled appointments. Your assistance in recruitment of OB volunteers is necessary to ensure real-time practice and your skills development. Please schedule appointments if you have OB volunteers with the lab assistance.
- Lab phone for appointments: (510) 238-9744.

Syllabus updated: June 26, 2015