#### LINCOLN UNIVERSIY

# COLLEGE OF GRADUATE, UNDERGRADUATE AND PROFESSIONAL STUDIES SYBALLUS AND SCHEDULE FALL 2012

**DATES:** 08/20/2012 – 12/03/2012

**COURSE TITLE:** Abdomen and Small Parts II (LECTURE)

COURSE CODE: DI 160 / UT 160

CREDIT HOURS: 3 units (45 hours of lectures)
CLASS TIME: MONDAY, 12:30 PM TO 3:15 PM

**PROFESSOR:** Dr. DEEPAK TOLIA

M.D. (RADIOLOGY); RDMS, RVT

**OFFICE HOURS:** by appointment

**CONTACT:** <u>dtolia@lincolnuca.edu</u> Phone: 408 705 2204

#### **COURSE DESCRIPTION**

✓ Advanced ultrasound technologies including harmonic imaging, 2-dimensional Doppler color imaging and echocardiography used for studying small parts of human body and its normal and abnormal patterns.

#### **COURSE PRE-REQUISITE**

✓ DI 150 / UT 150 – Abdomen and Small Parts I

#### STUDY MATERIAL/RESOURSES

Textbook of Diagnostic Ultrasonography: Volume #1, Sandra L. Hagen-Ansert, 7th edition (2011), ISBN-10: **0323073018**, ISBN-13: **978-0323073011** 6th edition (2006), ISBN-10: **0323028039**, ISBN-13: **978-0323028035** 

Abdomen and Superficial Structures (Diagnostic Medical Sonography) by Diane M. Kawamura, Lippincott Williams (2012), ISBN-10: **1605479950**, ISBN-13: **978-1605479958** 

#### **RECOMMENDED WEBSITES**

http://www.mypacs.net/

http://www.sonoworld.com/

http://www.ultrasoundcases.info/

http://www.bartleby.com/ - Gray's Anatomy of the Human Body.

http://www.ecomovies.com/

#### **COURSE OBJECTIVES**

✓ The course studies advanced ultrasound technologies, including harmonic imaging and 2-dimensional Doppler color imaging, which are used for studying small parts of human body and its normal and abnormal patterns.

#### Upon satisfactory completion of this course, the students will be able to:

- ✓ Describe the anatomy, physiology and normal variations of the Small parts.
- ✓ Describe and competently perform a sonographic examination of the abdomen.
- ✓ Explain the significance of clinical tests relevant to structures within the abdomen and small parts.
- ✓ Locate and critically assess information on sonography of the abdomen and small parts.
- ✓ Optimize the use of sonographic equipment in the production of images.
- ✓ Demonstrate an understanding of the sonographic patterns of abdominal disease.
- ✓ Describe the anatomy, physiology and normal variations of the pediatric abdomen and identify normal and abnormal sonographic appearances of the pediatric abdomen.
- ✓ Demonstrate an understanding of the principles in ultrasound-assisted intervention.

#### **INSTRUCTIONAL METHODS**

- The previously described topics will be presented through the following activities:
- Assigned text readings and lecture outlines (handouts);
- Demonstrations class lectures by using Power Point Computer presentations (handouts);
- Recommended study guide activities;
- Internet resources;
- Group discussions and ultrasound case analyses;
- Quizzes & examinations;
- Working with ultrasound machines;
- Hands-on ultrasound laboratory trainings (protocols-handouts);
- Ultrasound laboratory live & video demonstrations;
- Students' Vascular Imaging Power Point presentations;
- > Students' Ultrasound Hands-on self study trainings.

#### **ATTENDANCE AND PARTICIPATION**

- ✓ Students who are tardy, who arrive after roll is taken, or leave before the end of the class will receive only half-credit for attendance.
- ✓ Students are not allowed being late more than 15 minutes!
- ✓ 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 lab missed as a result of an absence. However, it is your responsibility to compensate for scanning you missed; you may have it from other class members.

#### **REQUIREMENTS**

This is a lecture-lab course in which topics are presented by teacher, with ultrasound hands-on lab practice which is explained and demonstrated by lab instructor;

The student is expected to be prepared in advance before the class sessions; Being prepared includes the following:

- ✓ Having read text materials (e.g., textbook readings, and lecture outlines) assigned for that day's activities and bringing required work materials (e.g., textbook, handouts, writing supplies, etc.) to the session;
- ✓ Home works will include reading the topic(s) one week ahead of time;

The student is expected to attend and participate in all course lectures and activities, and complete all quizzes, examinations and course assignments on time. Therefore an attendance and being on time are crucial to your final grade;

The student should understand that "introductory" does not mean "easy".

The student must budget time efficiently and be realistic about all personal and professional commitments that consume time.

#### **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 student 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 failure on the assignment to failure in the course too.

## **Ultrasound hands-on laboratory trainings**

Ultrasound hands-on laboratory is included demonstration of the understanding of information presented primarily during lectures. Practical experience will gain under the guidance of a supervisor- teacher; the syllabus set out includes a competency assessment sheet for training. This should be completed the course of training, as it will help to determine in which area(s) the student can practice independently. Students are expected to arrive to class on time, and stay through the end of Ultrasound laboratory class.

#### **IN-CLASS PRESENTATION (PROJECT)**

- ✓ Each student prepares a power-point presentation on ultrasound diagnostic topic of his/her choice.
- ✓ The presentation should be approximately 10 minutes long followed by 5 minutes discussion. The topics and format for the presentation will be discussed in class.
- ✓ A final draft of the presentation must be submitted for review one week prior to the presentation. An article related to the presentation for students to review must also be submitted one week prior to the presentation.
- ✓ For the grading of student, instructor will prepare 3 questions from the topic submitted for the student presentation. The questions will be due on the day of each of the presentation and will be used to help guide class discussion of the presentation topics.

#### **EVALUATION CRITERIA FOR PRESENTATION**

Basis of evaluation of presentation, is to test the ability of student to understand the given pathology, and the importance of scanning protocol for that and collect relevant content from different material, i.e. from text books, reference books; hand outs and internet. Extra stress will be given on number of slides which student had scanned in our lab. Instructor will observe the following criteria during presentation for grading:

- ✓ Clinical statement
- ✓ Slide content
- ✓ Slide design
- ✓ Overall understanding and knowledge of topic
- ✓ Number of slides involved which are scanned by the student him/herself
- ✓ Oral presentation and references

#### **TESTING**

#### Quizzes

The student will take 10 tests 10-15 questions each. These quizzes will address the detailed content and major concepts presented in the lectures, lecture outlines, text readings, and study guide activities. If the student takes more than ten quizzes, only the best ten quiz scores will be used in calculating the student's total points. An each quiz will be timed, 1 minute for every question to complete. No make-up quizzes for missed quizzes will be administered (the student will receive no score for missed quizzes.

#### **Midterm & Final examination**

The student will take written midterm test of 50 questions and final examination of 100 questions.

The written examinations are proctored and will be closed-book exams.

Students will not be allowed to refer to texts, notes, nor other materials while taking the exams.

The scantron machines will be used in grading multiple-choice tests.

Only one time RETESTS will be given.

The student must take the exam during the scheduled time period.

A student missing an exam because of an illness or legitimate emergency may take a make-up exam as soon as possible after the student returns from the illness and as determined by the instructor. In such a circumstance, the student should make every reasonable attempt to contact the instructor before the exam period is over (or as soon as possible).

While make-up exams will cover the same content area as a missed exam, the exam format and specific questions may be different.

#### **Ultrasound Hands-on Laboratory Examination**

Final ultrasound hands-on examination student have to demonstrate understanding of information presented primarily during lectures and hands-on laboratory trainings.

Student will schedule time and date 2-3 week ahead to Ultrasound hands-on laboratory examination.

Student(s) need to be at the Ultrasound Lab – ready to start scanning at the exact time you scheduled your exam for. (It is recommended that you arrive about 15 minutes prior to your scheduled exam time.)

If a student is late for his/ her 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 exam days, you may come to class, but it is not mandatory until your scheduled exam time.

Only one time RETESTS will be given students with a valid excuse such as illness, family emergency, unforeseen heavy traffic or natural disaster.

#### **GRADING**

LECTURE	Attendance	10%
	Midterm exam	20%
	Final Exam	20%
	Tests/Quizzes	10%
LAB (Hands-on Scanning)	Attendance	10%
	Presentation	10%
	Hands-on exam	20%
TOTAL		100%

100-93	Α
92-89	A-
88-85	B+
84-81	В
80-77	B-
76-73	C+
72-69	С
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, he or she 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 teacher 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 eating, sleeping or personal grooming is permitted during lecture and ultrasound laboratory classes.
- ✓ Drinks only in closed container.
- ✓ 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 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 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 teacher.

#### **STUDENT RESPONSIBILITIES**

- ✓ Students are expected to be prepared in advance before the LAB/LECTURE sessions.
- ✓ Being prepared includes the following:
- ✓ Don't use cell phones in LAB/LECTURE.
- ✓ Attend all the lab/lecture classes on time, participate in scanning, ask questions to the instructor, memorize protocols, bring appropriate materials to lab (e.g. notebook, writing utensils, handouts) having read texted materials (e.g. textbooks lectures & outlines), collect images for review.
- ✓ Retrieve instructor's signature to sign off organs & small-parts protocols, use lab time effectively and efficiently, and PRACTICE HARD, PRACTICE scanning during lab hours.

# **LINCOLN UNIVERSITY**

COLLEGE OF GRADUATE, UNDERGRADUATE AND PROFESSIONAL STUDIES DI/UT 160 – Abdomen & Small Parts II (LECTURE) Fall 2012

DR. DEEPAK TOLIA CLASS TIME: MONDAY 12:30 TO 3:15 PM

### **SCHEDULE**

Week	Date	Topics for lecture		Test
Week 1	08/20/2012	Thyroid and Parathyroid gland & neck	(quiz)	
Week 2	08/27/2012	Peripheral and abdominal lymph nodes	(quiz)	Test 1
Week 3	09/03/2012	Holiday		
Week 4	09/10/2012	Sonography of the breast	(quiz)	Test 2
Week 5	09/17/2012	Sonography of scrotum	(quiz)	Test 3
Week 6	09/26/2012	Superficial and muscular structures	(quiz)	Test 4
Week 7	10/01/2012	Sonography of prostate	(quiz)	Test 6
Week 8	10/08/2012	Sonography of GI Tract – small and large bowel		Test 5
Week 9	10/15/2012	Sonography of the Appendix	(quiz)	Test 6
Week 10	10/22/2012	Holiday		
Week 11	10/29/2012	Sonography in pediatrics I	(quiz)	Test 7
Week 12	11/05/2012	Sonography in pediatrics II	(quiz)	Test 8
Week 13	11/12/2012	Sonography in emergency room	(quiz)	Test 9
Week 14	11/19/2012	Interventional procedures		
Week 15	11/26/2012	Review of lectures		
Week 16	12/03/2012	Final exam		

BREAK TIME - 1:45 PM TO 2:00 PM

Last reviewed: Aug. 17<sup>th</sup>, 2012