

LINCOLN UNIVERSITY  
COLLEGE OF GRADUATE, UNDERGRADUATE AND PROFESSIONAL STUDIES

SYLLABUS  
DI 170 Abdomen and Small Parts Scanning (lab)

**SPRING 2010**

**DATA: 1/19/2010 – 05/17/2010**

**COURSE TITLE: Abdomen and Small Parts Scanning (lab)**

**COURSE CODE: DI 170**

**CREDIT HOURS: 4 unit laboratory**

**TIME: Mondays 3:30 pm – 5:15 pm; Thursdays 12:30 pm – 6:15 pm**

**PROFESSOR: Dr. Jahan Orazova**

**CONTACT INFORMATION: email: jorazova@lincolnuca.edu**

**COURSE DESCRIPTION**

Advanced ultrasound technologies including harmonic imaging, 3-dimensional Doppler color imaging and echography used for studying small parts of human body and its normal and abnormal patterns.

**COURSE PRE-REQUISITES**

- *DI 10 -Physical Principles of Ultrasound*
- *DI 20-Medical Terminology*
- *DI 30-Anatomy & Physiology*
- *DI 110-Ultrasound Principles & Protocols*
- *DI 150-Abdomen & Small Parts I*
- *DI 160-Abdomen & Small Parts II*

**STUDY MATERIAL/RECOURSES**

Textbook of Diagnostic Ultrasonography: 1<sup>st</sup> Volume, Sandra L. Hagen Ansert, 2006  
ISBN-10: 0323028039

Abdomen and Superficial Structures (Diagnostic Medical Sonography) by Diane M. Kawamura, Lippencott Williams, 2007; ISBN-13: 978-0323028035

**RECOMMENDED WEBSITES:**

1. <http://www.sonoworld.com>
2. <http://www.ultrasoundcases.info/>
3. <http://www.bartleby.com/> Gray's Anatomy of the Human Body.

## **COURSE OBJECTIVES AND STUDENT LEARNING OUTCOMES**

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

- Be able to describe the patient preparation, transducer selection, patient position, and images that should be obtained for all abdominal and soft tissue structures
- Identify abdominal organs anatomy and physiology
- Explain the significance of laboratory values used to evaluate abdominal organs functions
- List the primary uses of ultrasound in evaluating abdominal and small parts organs pathology
- Demonstrate the correct orientation of an ultrasound image
- Describe the ultrasound appearance of various liver pathologies
- Describe how to recognize abdominal structures in multiple planes
- Conduct hands-on scanning with demonstrating the sectional ultrasound anatomy in the transverse and longitudinal planes abdominal and small parts organs

### **INSTRUCTIONAL METHODS:**

The previously described topics will be presented through the aid of the following activities:

- ❖ Assigned text readings and lecture outlines (printed handouts);
- ❖ Demonstrations class lectures by using Power Point Computer presentations
- ❖ recommended study guide activities;
- ❖ Internet resources;
- ❖ Blackboard;
- ❖ Transparencies;
- ❖ Group discussions;
- ❖ Working with ultrasound machines;
- ❖ Hands-on laboratory learning activities;

### **STUDENT RESPONSIBILITIES**

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

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**DI 170 Abdomen and Small Parts Scanning (lab)**

<b>Mondays: 12:30 pm – 3:15 pm</b>			
<b>Tuesdays: 12:30 pm – 5:15 pm</b>			
1	TUE	1/19/2010	Liver Scanning protocol
2	MON	1/25/2010	Liver Scanning protocol
3	TUE	1/26/2010	Liver Scanning protocol
4	MON	2/1/2010	Liver Scanning protocol
5	TUE	2/2/2010	Gallbladder Scanning protocol ; <b>Presentation (#1)</b>
6	MON	2/8/2010	Gallbladder Scanning protocol
7	TUE	2/9/2010	Pancreas Scanning protocol; <b>Presentation (#2)</b>
8	TUE	2/16/2010	Pancreas Scanning protocol; <b>Presentation (#3)</b>
9	MON	2/22/2010	Pancreas Scanning protocol
10	TUE	2/23/2010	Spleen Scanning protocol ; <b>Presentation (#4)</b>
11	MON	3/1/2010	Spleen Scanning protocol
12	TUE	3/2/2010	Spleen Scanning protocol; <b>Presentation (#5)</b>
13	MON	3/8/2010	Renal Scanning protocol
14	TUE	3/9/2010	Renal Scanning protocol; <b>Presentation (#6)</b>
15	MON	3/15/2010	Renal Scanning protocol
16	MON	3/22/2010	Renal Scanning protocol; <b>Presentation (#7)</b>
17	TUE	3/23/2010	Abdominal arteries Scanning protocol
18	MON	3/29/2010	Abdominal arteries Scanning protocol
19	TUE	3/30/2010	Abdominal arteries Scanning protocol; <b>Presentation (#8)</b>
20	MON	4/5/2010	Inferior Vena Cava scanning protocol;
21	TUE	4/6/2010	Inferior Vena Cava scanning protocol; <b>Presentation (#9)</b>
22	MON	4/12/2010	Thyroid gland scanning protocol
23	TUE	4/13/2010	Thyroid gland scanning protocol; <b>Presentation (#10)</b>
24	MON	4/19/2010	Brest Ultrasound Imaging
25	TUE	4/20/2010	Brest Ultrasound Imaging
26	MON	4/26/2010	Prostate gland Ultrasound Imaging
27	TUE	4/27/2010	Scrotum scanning protocol
28	MON	5/3/2010	Lymph nodes ultrasound imaging
29	TUE	5/4/2010	GI tract ultrasound Imaging
30	MON	5/10/2010	GI tract ultrasound Imaging
<b>31</b>	<b>TUE</b>	<b>5/11/2010</b>	<b>Final hands-on examination</b>
<b>32</b>	<b>MON</b>	<b>5/17/2010</b>	<b>Final hands-on examination</b>