

# LINCOLN UNIVERSITY

## SYLLABUS DI 165 / UT 165 – Vascular Scanning (Lab)

Fall 2011

**DATES:** 08/23-12/08/2011

**COURSE TITLE:** Vascular Scanning (Lab)

**COURSE CODE:** DI 165 / UT 165

**CREDIT:** 4 units = 120 lab hours

**CLASS MEETING TIMES:** Tuesdays & Thursdays, 12:30 pm – 4:15 pm

**PROFESSOR:** Dr. Jahan Orazova

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

### COURSE DESCRIPTION

Scanning protocols and practice for ultrasound examination of vascular structure. *Prerequisite: DI 155 / UT 155*

### READING ASSIGNMENT:

1. Hagen-Ansert: Textbook of Diagnostic Ultrasonography, 6th Edition, Vol#2 (ISBN 0323042023, 9780323042024)

2. Vascular Technology: An Illustrated Review. Claudia Rumwell, Michalene McPharlin. Published by Davies Pub., 2004. (ISBN 0941022692, 9780941022699).

3. Diagnostic Ultrasound. Rumack, Wilson, Charboneau. 2-Vol. Set. 3 edition (October 22, 2004). ISBN-10: 0323020232 / ISBN-13: 978-0323020237

### GOALS AND OBJECTIVES FOR ULTRASOUND VASCULAR IMAGING

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

- Identify normal and abnormal anatomy and conditions in sagittal, coronal, and transverse planes
- Utilize the principles of instrumentation to set up the ultrasound equipment for scanning
- Perform a basic transabdominal scan abdominal and small parts organs
- Apply appropriate measurements scanning techniques
- All students are encouraged to master hands-on ultrasound techniques and are given scanning time during course of study
- Provides an oral or written summary of preliminary findings to the interpreting physician

### 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.

### SCANNING LAB RULES

Lab hours:

- ▯ **Lab hours are posted front door & bulletin board** ( please respect class time, do not enter when class time is in session)
- ▯ **Each student has a maximum time of 20 min. (times may vary according to instructor or # of students waiting)**
- ▯ **Timer is used to track accurate time**
- ▯ **Use student subsection envelope for questions or concerns**
- ▯ **Sign in on preferred machine** (see clipboards) (with your name, start time & finish time) (after finish must resign in if you want to continue to scan)

## Respect Others and Lab:

- **No eating or drinking in lab** (only water)
- **No cell phones** ( exit room if must use phone)
- **Clean up after yourself** (table, transducer, putting chairs away, moving equipment, trash etc.)
- **Inform instructor or staff of needed supplies or equipment broken**
- **Keep a low tone of voice** ( lab room is small; speaking loudly can be very disruptive to student(s) who need their concentration for scanning)
- **Don't interrupt student scanning time** (ask the student is it okay to asked them questions while their scanning?)
- **Lecture scanning** (ask questions at appropriate time only ask instructor not other students)
- **Personal property** (never leave your personal property unattended, Lincoln University is not responsible for lost or stolen items. Although, Lincoln University does have a zero tolerance for theft, any student(s) caught stealing will be prosecuted)
- **Please don't remove any objects from lab room** (books, study materials)
- **Leave personal conversation outside lab room**
- **Outside patients** (please inform your outside patients to only bring 1 person with them, due to lab size, and number of students present)
- **No children allowed unless being scanned**

## Machines (Acuson & Mindray):

- Please kindly shut down the machine after scanning class
- Do not erase any information on machines (only instructors or lab assistants)
- Please inform lab assistants of needed supplies (babywipes, paper towels, gel)
- Wipe down transducer after every patient using the Transeptic spray)
- Change paper after every patient , and place pillow under paper not on top
- Please be very careful when moving around equipment (ultrasound machines, patient tables)

## IN-CLASS PRESENTATION

Student or teams (not more than 2 students) will be assigned to prepare written reports and oral presentations on one topic. These assignments count for 30 percent of your grade of the laboratory class (15 percent for the written portion and 15 percent for the oral portion). Both the written report and oral presentation should demonstrate your familiarity with current literature on the topic.

## GRADING SCALE

### HANDS-ON LAB EXAM:

- Each student will be assigned a partner and time;
- Each partner will have his/her turn to perform parts of the Physical Exam covering any of the material taught during the quarter;
- Student performs independently from lab instructor tree Duplex vascular protocols with limited time for every protocol.

### GRADING:

<b>Attendance</b>	10%
<b>Presentation</b>	20%
<b>Performance scanning protocols</b>	30%
<b>Final exam- Performance of scanning protocols</b>	40%
<b>Total</b>	100%

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

## CLASS SCHEDULE

DI 165 / UT 165 – Vascular Scanning (Lab)

WEEKS		DATES	ULTRASOUNDS PROTOCOLS
1 W	T	23-Aug	Extracranial Cerebrovascular Duplex
	TH	25-Aug	Extracranial Cerebrovascular Duplex
2 W	T	30-Aug	Extracranial Cerebrovascular Duplex
	TH	1-Sep	Upper Extremity Arterial Duplex
3 W	T	6-Sep	Upper Extremity Arterial Duplex Imaging
	TH	8-Sep	Upper Extremity Arterial Duplex Imaging
4 W	T	13-Sep	Upper Extremity Arterial Duplex Imaging
	TH	15-Sep	Upper Extremity Arterial Segmental Pressure Evaluation
5 W	T	20-Sep	Lower Extremity Arterial Segmental Pressure Evaluation
	TH	22-Sep	Upper Extremity Arterial Segmental Pressure Evaluation
6 W	T	27-Sep	Lower Extremity Arterial Segmental Pressure Evaluation
	TH	29-Sep	Lower Extremity Arterial Duplex Imaging
7 W	T	4-Oct	Lower Extremity Arterial Duplex Imaging
	TH	6-Oct	Lower Extremity Arterial Duplex Imaging
8 W	T	11-Oct	Lower Extremity Arterial Duplex Imaging
	TH	13-Oct	Lower Extremity Arterial Duplex Imaging
9 W	T	18-Oct	Lower Extremity Venous Duplex Imaging
	TH	20-Oct	Lower Extremity Venous Duplex Imaging
10 W	T	25-Oct	Mesenteric/Splanchnic Artery Duplex Imaging
	TH	27-Oct	Mesenteric/Splanchnic Artery Duplex Imaging
11 W	T	1-Nov	Mesenteric/Splanchnic Artery Duplex Imaging
	TH	3-Nov	Abdominal Aortic Iliac Duplex Imaging
12 W	T	8-Nov	Abdominal Aortic Iliac Duplex Imaging
	TH	10-Nov	Abdominal Aortic Iliac Duplex Imaging
13 W	T	15-Nov	Evaluation of Portal Hypertension
	TH	17-Nov	Evaluation of Portal Hypertension
14 W	T&TH	22-24, Nov	FALL RECESS
15 W	T	29-Nov	Renal Artery Duplex Imaging
	TH	1-Dec	Renal Artery Duplex Imaging
16 W	T	6-Dec	<b>Final hands-on examination</b>
	TH	8-Dec	<b>Final hands-on examination</b>

The syllabus updated 08/16/2011

**Note:** Instructor may change this syllabus and course schedule at any time according to my judgment as to what is best for the class. Any changes will be declared ahead of time in class.