

LINCOLN UNIVERSITY

SYLLABUS DI 165 – Vascular Scanning (Lab)

SEMESTER: Spring 2011

COURSE TITLE: Vascular Scanning (Lab)

COURSE CODE: DI 165

CREDIT HOURS: 4 units' laboratory

CLASS HOURS: Tuesdays & Thursdays 12:30 pm – 4:15 pm

PROFESSOR: Dr. Jahan Orazova

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COURSE DESCRIPTION

Scanning protocols and practice for ultrasound examination of vascular structure. (4 units)

COURSE PRE-REQUISITES:

- DI 10-Physical Principles of Ultrasound
- DI 110-Ultrasound Principles & Protocols
- DI 120-Medical Terminology
- DI 130-Anatomy & Physiology
- DI 150-Abdomen & Small Parts I

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 PRACTICAL 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.

GRADING:

Attendance	10%
Presentation	20%
Performance scanning protocols	30%
Final exam- Performance of scanning protocols	40%
Total	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

Please be advised, that according to school policy, any person who fails a laboratory

**SYLLABUS
DI 165 Vascular Scanning (lab)**

#	w	Dates	Ultrasound protocols performance
1	T	1/18/2011	Extracranial Cerebrovascular Duplex
2	TH	1/20/2011	Extracranial Cerebrovascular Duplex
3	T	1/25/2011	Extracranial Cerebrovascular Duplex
4	TH	1/27/2011	Upper Extremity Arterial Duplex; Presentation (1)
5	T	2/1/2011	Upper Extremity Arterial Duplex Imaging
6	TH	2/3/2011	Upper Extremity Arterial Duplex Imaging; Presentation (2)
7	T	2/8/2011	Upper Extremity Arterial Duplex Imaging; Presentation (3)
8	TH	2/10/2011	Upper Extremity Arterial Segmental Pressure Evaluation
9	T	2/15/2011	Lower Extremity Arterial Segmental Pressure Evaluation
10	TH	2/17/2011	Upper Extremity Arterial Segmental Pressure Evaluation
11	T	2/22/2011	Lower Extremity Arterial Segmental Pressure Evaluation; Presentation (4)
12	TH	2/24/2011	Lower Extremity Arterial Duplex Imaging; Presentation (5)
13	T	3/1/2011	Lower Extremity Arterial Duplex Imaging
14	TH	3/3/2011	Lower Extremity Arterial Duplex Imaging; Presentation (6)
15	T	3/8/2011	Lower Extremity Arterial Duplex Imaging
16	TH	3/10/2011	Lower Extremity Arterial Duplex Imaging; Presentation (7)
17	T	3/15/2011	HOLIDAY
18	TH	3/17/2011	HOLIDAY
19	T	3/22/2011	Lower Extremity Venous Duplex Imaging;
20	TH	3/24/2011	Lower Extremity Venous Duplex Imaging;
21	T	3/29/2011	Lower Extremity Venous Duplex Imaging;
22	TH	3/31/2011	Mesenteric /Splanchnic Artery Duplex Imaging
23	T	4/5/2011	Mesenteric /Splanchnic Artery Duplex Imaging
24	TH	4/7/2011	Mesenteric/Splanchnic Artery Duplex Imaging
25	T	4/12/2011	Abdominal Aortic Iliac Duplex Imaging
26	TH	4/14/2011	Abdominal Aortic Iliac Duplex Imaging
27	T	4/19/2011	Evaluation of Portal Hypertension
28	TH	4/21/2011	Evaluation of Portal Hypertension

29	T	4/26/2011	Renal Artery Duplex Imaging
30	TH	4/28/2011	Renal Artery Duplex Imaging
31	T	5/3/2011	Final hands-on examination
32	TH	5/5/2011	Final hands-on examination

The syllabus updated 01/03/2011

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