

Jackson Community College
DMS 254 Online- Transcranial Doppler Imaging and Capstone

Course Syllabus
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Credits: 3

Course Description:

This course will facilitate student learning of diagnostic testing methods, testing protocols, pathology and hemodynamics of the intracranial vessels, transcranial, color Doppler imaging (CDI), duplex sonography, registry exam testing strategies, and job placement preparation. This course contains a 200 question; computerized Mock Registry Exam.

Course Outcome:

By the completion of DMS 254 the student will be able to apply and demonstrate cognitive and affective domain knowledge in the areas of intracranial cerebrovascular system and testing; job placement preparation and registry testing endurance.

Outcomes/Competencies
Label normal anatomy of the intra-cranial arterial anatomy
Explain testing indications, limitations, contraindications, risk factors of intracranial imaging
Explain proper history assessment process
Discuss the disease concepts and processes of intracranial arterial disease
Apply concepts of patient positioning of transcranial Doppler testing
Explain concepts and recognize anatomical variants associated with the intracranial vessels
Explains and apply proper imaging techniques of transcranial Doppler imaging.
Explains and apply concepts of hemodynamics and pathophysiology associated with the intracranial vessels.
Discuss and recognize correlation of non-invasive and invasive test results
Discuss and recognize intracranial artery pathology
Explains and recognizes normal and abnormal Doppler waveform contours associated with the intracranial vessels
Explain and discuss transcranial Doppler protocols
Recognize arterial imaging artifacts
Write preliminary interpretation for transcranial Doppler testing
Discuss the importance of QA programs for peripheral arterial testing
Explain collateral pathways of the intracranial vessels

Discuss and apply the concepts of PW Doppler, color Doppler and gray scale imaging of the intracranial arterial system
Practice and discuss employment interview techniques
Practice and discuss resume writing techniques
Practice and discuss test taking techniques
Practice and discuss creating concept mapping/tables
Practice and discuss testing endurance techniques

Measurement of Objective:

1. Student must achieve a passing score of 75% on the module quizzes. Questions are conceptual based to measure knowledge, critical thinking and problem solving
2. Student must achieve a passing score of 75% on Mock Registry Exam. Questions are conceptual based to measure knowledge, critical thinking and problem solving

Associate Degree Outcomes (ADO)

The course goals and objectives incorporate specific Associate Degree Outcome (ADOs) established by the JCC Board of Trustees, administration, and faculty. These goals are in concert with four year colleges, universities, and reflect input from the professional communities we serve. ADOs guarantee students achieve goals necessary for graduation credit, transferability, and professional skills needed in many certification programs:

- ADO 7 Problem Solving at the developing level: Converts complex concepts into useful sonographic terminology, demonstrate critical thinking at the developing level and solves new problems(ADO7).

Facilitator and Student Responsibilities

Student Responsibilities:

Students are expected to participate and be prepared for each session. It is presumed by the facilitator that assignment, including reading, will be completed on time prior to material on subjects being presented; such preparations allows the student the best learning opportunities to understand material presented and pose questions in areas requiring clarity. The pace of this course makes it very difficult for a student to catch up once a student falls behind.

It is highly suggested by the instructor that students utilize as many references as possible to enhance their learning and understanding.

Facilitator's Responsibilities:

The facilitator's responsibilities include facilitate learning by providing and explaining the necessary materials for each student to understand the assignments and develop course goals, objectives, and performance objectives to a near mastery level. See JCC DMS Handbook for a listing of these goals, course objectives and performance objectives. Knowledge gained from this course should aid students in their clinical experiences.

Course Method, Attendance

This class/week will begin Monday and end Sunday at 11:00pm. All the tasks for the week are expected to be completed by 11:00pm **SUNDAY**.

This course is designed to allow you to work at your own pace throughout the week. You can access class any time of the day or night.

A student is expected to sign into class a minimum of twice weekly. Failure to sign into class twice weekly will result in the loss of 10% from the final grade.

Assignments

Resume and Cover letter:

I would like you to use the tips and guides from lesson 1 to create a resume and cover letter. You may want to search online for some examples if you get stuck. This resume should be for a vascular sonographer position.

You may use any of the three styles of resumes, but make sure what you use is ideal for your situation. The cover letter you write could be a letter of introduction or letter of application, you pick

Critically Thinking Cases

There will be 4 "Critically Thinking" cases in which you will analyze a real life patient scenario and create a "flow chart" of the steps you took to approach and complete the exam.

Final Mock Registry Exam

This exam consists of 200 questions and answers and is worth 200 points. Following the training program you will have 3 attempts to earn a 4.0.

Tables 1-5

Following the training program, you will create 5 tables. The instructions and examples will be provided within the the assignment link.

Grading

A quiz of 30 points follow each lesson. Quizzes must be completed by 11pm by the designated due date to avoid penalty. If previous arrangements are not made, five points will be deducted each day the quiz is late.

The Mock final exam will be given online. You are not required to have a proctor. You will be given multiple attempts to take the test. The final attempt will be your final grade. The exam consists of 200 multiple choice questions and is timed. This exam is worth 200 points.

The rationale for timed exams is to prepare you for the ARDMS certification exams which will be timed.

Assessment Element	points	Quantity	Total
Quiz	30	5	150
Resume	100	1	100
Cover Letter	70	1	70
Critically Thinking Cases	25	4	100
Tables 1-5	30	5	150
Final Exam	200	1	200
Total			720

Grading Scale:

95-100%	4.0
90 - 94%	3.5
85 - 89%	3.0
80 - 84%	2.5
75 - 79%	2.0
70 - 74%	1.5
65 - 69%	1.0
60 - 64%	0.5

Students must receive a 2.0 in clinical II AND demonstrate passing a 75% or higher on each module task. If a student does not obtain the required minimum scores the student will not advance to clinical III and will be dismissed from the VSON program.

Schedule and Due Dates

Week	Topic	Tasks	Due Date
1	-Course Introduction Job Hunting; Resume and Cover Letter	<ul style="list-style-type: none"> • Readings • Lesson Notes • Test Taking Tips and Preparation • Class Discussion 1 • quiz 	5/29
2	Transcranial anatomy & physiology	<ul style="list-style-type: none"> • Readings • Lesson Notes • Critical Thinking Case • Quiz 	6/5
3	Transcranial CW Doppler, Indication, Limitations	<ul style="list-style-type: none"> • Readings • Lesson Notes • Test taking tips PowerPoint- Multiple Choice • Critical Thinking Case • Quiz 	6/12
4	Non-Imaging Transcranial Doppler	<ul style="list-style-type: none"> • Readings • Lesson Notes • Critical Thinking Case • Quiz 	6/19
5	Transcranial Duplex	<ul style="list-style-type: none"> • Reading • Lesson Notes • Class Discussion 2 • Test Taking Tips- Multiple Choice • Critical Thinking Case • Quiz 	6/26
6	Interpretation and preliminary reports	<ul style="list-style-type: none"> • Readings • Lesson Notes 	7/3

	Vascular lab accreditation Review for Mock Registry Exam	<ul style="list-style-type: none"> • Quiz • Class discussion#3(exam review) testing tips; practice exams • Test Taking Tips and Strategies-Multiple Choice 	
7		<ul style="list-style-type: none"> • Tables 1-5 DO NOT WAIT TO BEGIN THESE TABLES!!! 	7/10
8	Mock Registry Exam	<ul style="list-style-type: none"> • Final Exam 	7/16/16