

DMSO 1251 Sectional Anatomy for Sonographers

CREDIT

2 Semester Credit Hours (2 hours lecture, 1 hour lab)

MODE OF INSTRUCTION

Face to Face

COURSE DESCRIPTION

Sectional anatomy of the male and female body. Includes anatomical relationships of organs, vascular structures, body planes, and quadrants.

COURSE OBJECTIVES

- Upon completion of this course, the student will be able to
 - Describe anatomical relationships
 - Identify organs and structures of the body in sectional planes
 - Identify anatomical structures in multiple imaging planes.

INSTRUCTOR CONTACT INFORMATION

Instructor: Tracy Ryals, RDMS, RVT

Email: taryals@lit.edu

Office Phone: 409-247-5130

Office Location: Gateway #115

Office Hours: Please see Starfish to schedule an appointment

REQUIRED TEXTBOOK AND MATERIALS

1. Sectional Anatomy for Imaging Professionals; 4th Ed., Kelley and Peterson
ISBN: 978-0323414876
2. Color pencils
3. Computer with webcam

ATTENDANCE POLICY

Students are expected to be in class unless prior arrangements have been made. Absences must be limited to **serious** illness and/or immediate family **emergencies**; unexcused absences are not allowed. **Three (3) absences will result in a letter grade reduction.** **Excessive tardiness (more than 10 minutes/class or more than 2 consecutive classes) will result in an absence being awarded.** The terminology excused or not excused absence does not apply to this class. All absences are equal. Therefore, no matter the circumstances involved in the student's absence it will be counted towards the total for the semester.

It is extremely important that students always communicate with the faculty regarding absences by phone or email.



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COURSE CALENDAR

DATE	TOPIC	READINGS (Due on this Date)	ASSIGNMENTS (Due on this Date)
M 06 – 01	Syllabus/Intro to Sectional Anatomy	Chapter 1 & PP	
W 06 – 03	Abdomen Part 1	Chapter 7 & PP	
M 06 – 08	Aorta Anatomy/Protocol LAB		
W 06 – 10	Unit 1 Test Chapter 7 Abdomen – Part 2	Chapter 7 & PP	Test 1
M 06 – 15	LAB		
W 06 – 17	Review Test #1 Ch 7 Abdomen – Part 2	Chapter 8 & PP	
M 06 – 22	LAB		
W 06 – 24	Ch 8 Pelvis	Chapters 2, 3 & PPs	
M 06 – 29	LAB Unit 2 Test Opens @ 3:30 PM		
T 07 – 01	Unit 2 Test Due by 7PM		Test 2 Due @ 7PM
W 07 - 06	Review Test #2 Cranium & Brain	Chapters 2, 3 & PPs	
M 07 – 08	LAB		
W 07 – 13	Cranium & Brain	Chapters 2, 3 & PP's	
M 07 – 15	LAB		
W 07 – 20	Unit 3 Test		Test 3
M 07 – 22	LAB Thorax Lecture/Spine & Neck	Chapter 6 & PP	
W 07 – 27	Spine & Neck	Chapters 4, 5 & PP	
M 07 – 29	LAB		
W 08 – 03	Unit Test 4	Chapters 4, 5 & PP	Test 4
M 08 – 05	LAB		
W 08 – 10	Review Test 4 Review for Final		
M 08 – 11	LAB/SCAN FINAL		
W 08 – 12	FINAL EXAM		FINAL

** This schedule is subject to change at the discretion of the instructor at any time.*

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

1. Unit Exams 70%
2. Lab (Scanning Participation) 15%
3. Final exam 10%
4. Homework/Assignments 5%

GRADE SCALE

- 93-100 A
- 85-92 B
- 77-84 C
- 69-76 D
- 0-68 F

Course Outline

- A. Introduction to Sectional Anatomy
 1. Body Planes
 2. Regions
 3. Body Cavities and Spaces
- B. Cranium
 1. Anatomical Structures
 2. Sutures
 3. Fontanelles
- C. Facial Bones
 1. Nasal bones
 2. Maxilla
 3. Mandible
 4. Palatine bone
- D. Brain
 1. Meninges
 2. Ventricular System
 3. Cerebrum
 4. Diencephalon
 5. Limbic System
 6. Brain Stem
 7. Cerebrum
 8. Cerebral Vascular System
- E. Spine
 1. Vertebral Column
 2. Muscles
 3. Spinal Cord
- F. Neck
 1. Organs
 2. Muscles
 3. Vascular Structures

- G. Thorax
 - 1. Bony Thorax
 - 2. Lungs
 - 3. Pleural Cavities
 - 4. Bronchi
 - 5. Mediastinum
 - 6. Lymphatic System
 - 7. Heart and Vasculature
 - 8. Great Vessels
 - 9. Coronary Circulation
 - 10. Azygos Venous System
 - 11. Muscles

- H. Abdomen
 - 1. Abdominal Cavity
 - 2. Viscera (Organs)
 - 3. Arterial and Venous Vasculature
 - 4. Lymph Nodes
 - 5. Muscles of Abdominal Wall

- I. Pelvis
 - 1. Bony Structures
 - 2. Muscles
 - 3. Viscera (Organs)
 - 4. Vasculature

TECHNICAL REQUIREMENTS

For the latest technical requirements, including hardware, compatible browsers, operating systems, etc., review the Minimum Computer and Equipment Requirements on the [LIT Online Experience](#) page. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](#).

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

ARTIFICIAL INTELLIGENCE STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION

- No food, drinks, or tobacco products are allowed in class.
- Cell phones and all electronic devices must be turned off during class.
- Children are not permitted in class at any time.
- Assignments are due at the beginning of class or by the date listed in the syllabus.
- **Late work will not be accepted and will receive a grade of zero.**

Exam Policy – In-Person

- Exams will be given in person on scheduled dates unless otherwise announced by the instructor. They will be given through Blackboard and will require Lockdown Browser
- If an in-person exam is missed, a 10-point deduction will apply for each class day missed after the exam date. Students must make up the exam on the first day they return to class. If a student attends any sonography class on test day, the exam must be taken that day or a zero will be assigned.
- For online exams, late submissions will lose 10 points for every hour late beginning at the due time. Exams not submitted by midnight on the due date will receive a zero.

Academic Integrity

- Possession or use of unauthorized devices during exams (cell phones, smart watches, earbuds, tablets, laptops, meta glasses, notes, etc.) is considered cheating unless specifically approved by the instructor.
- Cheating on any lecture or lab exam results in immediate dismissal from the program and an F for the course.

Online Exam Requirements (LockDown Browser & Webcam)

- Exams will require LockDown Browser with webcam and screen monitoring.
- Students must:
 - Test in a well-lit, private location
 - Sit with a mirror behind them showing the full computer screen during the entire exam

- Always keep face and ears fully visible
- Remove all phones, watches, notes, books, and papers from the testing area
- Disable music, TV, and other background distractions
- Remain in the testing area for the entire exam
- Avoid reading questions aloud

Point Deductions

- 20-point deductions may be given for:
 - Poor lighting
 - Face or ears not fully visible
 - Screen/computer not visible in mirror during entire examination
 - Wearing hats, hoodies, earbuds, headphones, sunglasses, etc.
 - Reading questions aloud
- Repeated violations may increase to a 50-point deduction.
- 50-point deductions or a zero may result from:
 - Another person being seen or heard during the exam
 - Leaving the testing area during the exam
 - Having unauthorized materials visible during testing