MIDWESTERN STATE UNIVERSITY

Course Syllabus: Sectional Anatomy

Robert D. & Carol Gunn College of Health Sciences & Human Services
Department of Radiologic Sciences

Course Information

Name	RADS 4733x32- Sectional Anatomy (online)
Credit	3 hours
Term	Summer 2019
Dates	June 3, 2019-August 8, 2019
Time Commitment	Students should expect to spend at least 12 hours per week on course material (10 week term)
Prerequisites	None

Professor

Kimberly Onstott MSRS, RT(R)(CT)(MR) Assistant Professor, Radiologic Sciences

E-mail: kimberly.onstott@msutexas.edu
Use this format in the subject line: 4733_your last name_topic of the message
E-mail is the best way to reach me. If I haven't responded within 72 hours, please email me again.
Phone: (940) 397-4332
Office location: Midwestern State University
3410 Taft Blvd
Bridwell Hall 232
Wichita Falls, TX 76309
Office hours: Tuesday-Wednesday 10am-3pm (email for a meeting time)

Course Description

This course is a study of human anatomy viewed in sectional planes. Students will compare planar anatomy to sectional anatomy and recognize anatomical structures in computed tomography and magnetic resonance imaging. Studies will include the cranium, brain, spine, neck, chest, abdomen, pelvis, and extremities.

Course Objectives

Upon completion of this course, the student will:

- Recognize anatomic structures in various planes.
- Relate planar anatomy to line drawings of related cross-sectional anatomy.
- Describe the spatial relationship of one structure to another.
- Differentiate between the appearances of anatomic structures among different modalities such as Computed Tomography (CT) and Magnetic Resonance Imaging (MRI).
- Identify the strengths and weaknesses of each imaging modality for identifying specific pathological processes.

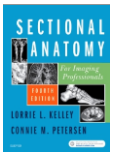
Teaching Methodology

Independent reading assignments, Desire2Learn (D2L) modules, open book module quizzes, Sectional Anatomy assignment, open book module quizzes, and a closed book proctored final exam are used in this course.

Course Materials

Textbooks

Kelley, L.L. & Petersen, C.M. (2018). *Sectional anatomy for imaging professionals*. (4th ed.). St. Louis, MO: Elsevier [ISBN: 978-0-323-41487-6]



Recommended

American Psychological Association. (2010). Publication manual of the American Psychological Association (6th ed.). Washington, DC: American Psychological Association. [ISBN 978-1-4338-0561-5]

Computer Requirements

You need access to an up-to-date computer with an internet connection in this course. D2L does not work well with Internet Explorer. Use a different browser when working in D2L.

Proctor Specifications

- Web Camera 640x480 resolution minimum, 1280x720 resolution recommended.
- PC Users: A well-working computer running Windows Vista or higher (Windows 10 S is not supported).
- Mac Users: A well-working computer running Mac OS X 10.5 or higher. Mac OS X 10.10 Yosemite recommended
- A reliable high speed internet connection
    - minimum download .768 Mbps
    - minimum upload .384 Mbps
- A functioning microphone (sometimes web cameras have built-in microphones).
- One of the following compatible web browsers:
    - Google Chrome (preferred)
    - Mozilla Firefox
    - Safari
- The following plugins for your web camera:
    - Adobe Flash Player v12
    - Adobe Shockwave player

Detailed instructions for ProctorU are in the RADS 4733 D2L course shell under the section labeled Final Examination.

Course Requirements

The student must:

- Participate in the course by completing the introductions and by continuously logging in to the D2L course to review professor updates and news items
- Complete reading assignments, visit online exercises, visit selected internet websites
- Successfully complete the required online examinations, including a proctored final exam.
- Complete a PowerPoint assignment
- Meet all submission deadlines

Modules

The course content is divided into 8 individual modules. Each module contains a reading assignment, online practice exercises, and an associated quiz.
See the Course Schedule at the end of this syllabus for all deadlines.

Evaluation

Grade Distribution

- 35% D2L Module Quizzes (8)
- 25% Sectional Anatomy PowerPoint Assignment
- 40% Proctored D2L Comprehensive Closed Book Final Exam

Grade Scale

A=100-90
B=89-80
C=79-70
D=69-60
F=59 and below

Grading Cycle

All assignments are graded together as a group to maintain a higher level of consistency. Grading begins on the first business day after a due date, outside of university holidays and professional meetings, and is typically completed before the next due date. You may track your progress through the Gradebook in D2L.

Feedback

Feedback varies throughout the course. The News section of the course is where I will send messages to the entire class. It is best to set up your D2L account to receive an email notification (to the email of your choice) when News items are posted, so you do not miss important updates.

1. Click the down arrow in the News section on the 4733 course home page
2. Select Notifications
3. Check the box next to “News - new item available” and then check any other boxes you wish to receive an email notification from.
4. Check the email address you wish to send email notifications. If you need to change this, select “change your email settings” and enter the new email address. This email address should be an email address you check frequently.

You are welcome to email questions to clarify concepts or look for further explanations. If I come across repeated questions I will provide feedback or supplementary resources in the News section of the course so that everyone can benefit from it. You might look there first, because your question may be located there.

Late Work

Due Dates

Most assignments are due on Tuesdays (see due dates in the course schedule at the end of this syllabus). Assignments must be submitted by 23:59 (11:59 pm) Central time, on scheduled due dates in the course schedule. If a student fails to meet a deadline the student will receive no credit for the assignment not submitted on time.

Emergency Extension

If you have a major event such as a death in the family, illness, hospitalization, or other extenuating circumstances, email the professor at kimberly.onstott@msutexas.edu as soon as possible and on or before the scheduled due date. I will grant extensions on an individual basis. If an extension is granted, typically the following guidelines will be followed.

1. The assignment may be up to one week late and still qualify for full credit. After the one-week extension has passed, ten points per day can be deducted until the assignment is no longer worth any credit.
2. When the assignment is completed, you must send a follow-up email to let the professor know it is ready to grade. Failure to notify the professor could lead to a grade of zero.
3. **Avoid End of Course Late Work:** Please note there are University deadlines for submitting grades at the end of the semester. All work must be turned in at least a week before grades must be posted.
4. If a course includes interaction between students in the discussion board, and if extenuating circumstances will prevent you from participating, an alternate assignment may be considered at the discretion of the professor.

Final Course Grade

A final course score of 70% is required to pass this course. Letter grades of "D" or "F" cannot be used for graduation and will require the course be repeated according to the current radiology program policies.

Technical Difficulties

On occasion, you may experience problems with accessing D2L, accessing class files located within D2L, connecting with your internet service, or you may encounter other computer related problems. Make the professor aware of a technical problem as soon as possible. If a problem occurs on our end, such as D2L failure, then a due date extension will typically be granted**. However, keep in mind it is your responsibility to have (or have access to) a working computer in this class.** ***Assignments and tests are due by the due date, and personal computer technical difficulties will not be considered reason for the professor to allow students extra time to submit assignments, tests, or discussion postings.***

Dropbox assignments that can be attached in an email should be emailed to the professor as soon as a problem is encountered. Failure to do so may result in points being lost, regardless of connection issues.

For help options:

- For D2L issues go online go to the Distance Education Helpdesk
- By phone call the Distance Education office at 940-397-4868 between 8am and 5pm.
- Use the D2L help link in D2L.
- Contact your professor.
- For other computer access issues, go online to the MSU Information Technology Website.

Attendance

This is an online course and there are no mandatory sessions. However, the student should be vigilant in loggingin to D2L. The student should expect to log in at least 3 times per week. Regular checks will ensure that messages from the professor are received in a timely manner**.** This course is on a schedule that will be strictly adhered to. See the Important Dates section above for specific due dates.

Requesting a Withdrawal

The last opportunity to drop this course with a grade of "W" is 4:00pm on July 11, 2019. All withdrawals **must be initiated by the student**. After this date dropping the course results in a grade of "F".
In an emergency or extenuating circumstance, a student may request a grade of "Incomplete" before grades are submitted. If the professor grants the "Incomplete," the student has until thirty (30) days after the beginning of the next long semester to complete the course requirements. If the student does not complete the course requirements within the deadline, the grade of "Incomplete" will automatically convert into a grade of "F".

Special Needs

In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable adjustments in its policies, practices, services, and facilities to ensure equal opportModuley for qualified persons with disabilities to participate in all educational programs and activities.
The Office of Disability Services (ODS) provides information and assistance, arranges accommodations, and serves as a liaison for students, professors, and staff. The ODS has assistive devices such as books on tape, recorders, andadaptive software which can be loaned to qualified individuals. A student/employee who seeks accommodations based on disability must register with the Office of Disability Services in the Counseling Center; Clark Student Center Room 108. Documentation of disability from a competent professional is required.
Individuals with grievances related to discrimination or lack of accommodation based on a disability are encouraged to resolve the problem directly with the area involved. If the matter remains unresolved, the Office of Disability Services for resolution will provide advice and/or assistance. The grievance procedure may be found in the Student Handbook and Activities Calendar.
The Director of the Counseling Center serves as the ADA Coordinator and may be contacted at (940)397-4618, TDD (940)397-4515, or 3410 Taft Blvd., Clark Student Center Room 108.

Administrative Process

Unresolved issues related to this course should be first addressed between the student and the course professor. If there is no resolution, students must follow this sequence:

1. Interim Department Chair – Debra Wynne (940-397-4575)
2. College Dean - Dr. Jeff Killion (940-397-4594)
3. Dean of Students – Matthew Park (940-397-7500)

Honor System

RADS 4733 adheres to the MSU Code of Conduct.
In particular, academic dishonesty, however small, creates a breach in academic integrity. A student's participation in this course comes with the expectation that his or her work will be completed in full observance of the MSU Code of Student Conduct. A student should consult the current Student Handbook for answers to any questions about the code.
All components of RADS 4733 are designed to represent the efforts of each student individually and are NOT to be shared, copied, or plagiarized from other sources. When students submit their efforts for grading, they are attesting they abided by this rule.
An online plagiarism service may be used in this course. Student assignments may be uploaded to the service for identification of similarities to other student papers and published works.

Cheating includes, but is not limited to

- Use of any unauthorized assistance in taking quizzes, tests, or examinations;
- Dependence upon the aid of sources beyond those authorized by the professor in writing papers, preparing reports, solving problems, or completing other assignments; or
- The acquisition of tests or other academic materials belonging to the university faculty or staff without permission.

Plagiarism includes, but is not limited to

- The use of, by paraphrase or direct quotation without correct citation in the text and in the reference list,
- The published or unpublished works of another person.
- Students may NOT submit papers and assignments that they have previously submitted for this or other courses.
- The use of materials generated by agencies engaged in "selling" term papers is also plagiarism.

Academic dishonesty (cheating, plagiarism, etc.) will not be tolerated in this class. Whenever a student is unsure of whether a particular situation will be interpreted as academic dishonesty, he/she should ask the professor for clarification. If students are guilty of academic dishonesty, a grade of zero (0) will be given for the quiz, assignment, etc. Cases may also be referred to the Dean of Students for possible dismissal from the university.

Students are encouraged to review the tutorials and suggested websites for more information about plagiarism. If you have any questions about what constitutes plagiarism, please consult:

- The University Academic Dishonesty Policy
- The website Plagiarism.Org, or
- The professor

Please Note

By enrolling in this course, the student expressly grants MSU a "limited right" in all intellectual property created by the student for the purpose of this course. The "limited right" shall include, but shall not be limited to the right to reproduce the student's work/ project in order to verify originality and authenticity, and for educational purposes. Specifically, faculty may submit student papers and assignments to an external agency to verify originality and authenticity, and to detect for plagiarism.

Senate Bill 11

Senate Bill 11 Senate Bill 11 passed by the 84th Texas Legislature allows licensed handgun holders to carry concealed handguns on campus, effective August 1, 2016. Areas excluded from concealed carry are appropriately marked, in accordance with state law. For more information regarding campus carry, please refer to the University's campus carry webpage. If you have questions or concerns, please contact MSU Chief of Police Patrick Coggins by email at mpatrick.coggins@msutexas.edu.

Communicating with the Professor

Contact information for the professor is listed at the top of the first page of this syllabus. The professor prefers email so there is a record of the communication and often the professor is away from her desk. The professor will respond or at least acknowledge all student communications within five (5) business days. If this time period will be longer because the professor is out of town or other reason, a news item will be posted online in D2L for the class. Please always give the professor the time asked for to respond before repeating your request. Always include your course number and topic in the subject line of the email.

Assignment Details

- 35% D2l Module Quizzes (8)
- 25% Sectional Anatomy PowerPoint Assignment
- 40% Proctored D2L Comprehensive Closed Book Final Exam

Order of Content

This course is divided into individual modules which correspond to the chapters in the textbook. Each Module has module notes, a reading assignment, a quiz, and labeling exercises. The module quizzes are designed as an "open book" evaluation of the material. You must complete the first module quiz before the other quizzes will be visible. You can move through the course at your own pace but you should complete the modules quizzes in order because once you complete a quiz, another quiz will become visible. This course follows the boundaries set by the Course Schedule and the MSU Academic Calendar. See the Course Schedule at the end of this syllabus for specific information about due dates. Be sure to read the chapters in your textbook!

HIPAA requirement:

Do not place ANY patient name on your assignments. Any proper name that appears on an assignment, other than yours will be considered a HIPAA violation and the assignment grade may be dropped to as low as a zero, depending on the severity of the violation.

Introductions (required)

Original post and 2 replies

Introduce yourselves in the introduction discussion board and reply to at least two of your peers by the due date in the course schedule.

Modules

There are 8 modules. The cranium and brain modules are typically considered the most challenging.

Module 1-Introduction to Planar Anatomy
Module 2: Cranium
Module 3: Brain
Module 4: Spine and Neck
Module 5: Thorax
Module 6: Abdomen
Module 7: Pelvis
Module 8: Extremities

With each Module there are interactive labeling activities to reinforce your learning. Although the labeling activities are not graded, they are highly recommended. You may attempt these as many times as needed, and you may refer back to them at any time during this course.
Once you feel comfortable with the Module notes, the associated pages in your textbook, and the learning activities, you should complete the associated Module quizzes.

Independent Reading Assignments

Students should read the module notes, the textbook reading assignments, and the student should answer the chapter objectives before taking the open book Module quizzes.
The illustrations in the text are orientated in the same direction as CT and MR scans. The course includes images that are coronal (front to back), sagittal (side to side), as well as axial or transverse (top to bottom). These should be easy to differentiate.

- Axial or transverse planes run parallel to an imaginary plane that divides the body into top and bottom halves. Students should keep in mind that sectional images are viewed as if the patient is lying on a table and the observer is standing at the patient's feet and looking "up" at the exposed slice of the body. (The patient's left side will be on the viewer's right field of view) This is the most common image presentation.
- Coronal planes run parallel to an imaginary plane that divides the body into anterior and posterior halves
- Sagittal planes run parallel to an imaginary plane that divides the body into left and right halves,
- While the text is more or less self-explanatory, the individual Modules in the course begin with diagrams relating to planar anatomy. These diagrams are included to assist the student in becoming familiar with the relationship between the anatomical structures when viewed in cross-sectional orientation.

Module Quizzes-35%

When a student has reviewed a module and is ready for the quiz, he or she will log on to D2L and receive a customized timed module quiz consisting of randomized multiple choice questions and/or matching questions. It is important to know the module content before attempting the Module quizzes because they are timed.

Be sure to start the quizzes well in advance of the close time for the exams. If you are not finished by the time the exam period closes, the exam you are working on will shut down even if you have not finished. Also, save your answers continuously to avoid losing your answers.

Due dates

All quizzes are open the day that classes begin, so you may work ahead but you must complete the first quiz before other quizzes can be accessed. When one quiz is completed, you will have access to the next quiz. ***Quizzes not completed by the final due date, will receive a zero (0).*** Under no circumstances will an extension be made to incomplete quizzes not completed by the close date. Students should contact the professor in extenuating circumstances before the close date of the quizzes; such cases will be dealt with on an individual basis (see the section on late work). All quizzes must be completed before taking the Final Exam. See the course schedule for the due dates for the quizzes.

Technical problems

If technical issues occur (cannot see an image, cannot see your grade, etc.) sometimes the easiest solution is to see if the issue can be corrected by simply changing browsers. Fewer occurrences have been noted by using Firefox as a browser for D2L.

If students have technical difficulties during a quiz, they should use the Help link at the top toolbar in D2L, contact the MSU Information Systems Support Staff, and send an email to the course professor explaining what happened. Screen shots and/or taking a picture of your screen may help in diagnosing the problem.

Scores

Quiz scores will be available immediately after a student submits his or her quiz for grading.

If a student finds a faulty quiz test item or believes that a quiz question has been scored incorrectly, he or she should send an email to the course professor that includes the following:

1. Module Quiz Number (1-8)
2. Answer the student thinks should be correct
3. Rationale supporting why the student's answer is correct
4. Page numbers must be included when referencing the textbook in a rationale

After reviewing the case, if the course professor thinks a revision is justified, the student's quiz score will be revised to reflect the additional points and the test bank will be updated.

Sectional Anatomy PowerPoint Assignment -25%

The Sectional Anatomy Assignment is a short PowerPoint demonstration of knowledge. The purpose of this assignment is to enforce the appearance of anatomy as compared to pathological changes detected on different sectional imaging modalities (CT and MRI).

Students should demonstrate that they have an understanding of the anatomy they chose, but perhaps more importantly, this assignment provides an opportunity for students to "step back" and see which imaging modality is the most appropriate for the anatomy and condition being examined to improve the diagnosis and treatment of the patients.

Note: There are very specific instructions the student must follow for this presentation. Refer to the instructions in the course **before** beginning this project.

Topic Approval (Must be submitted by due date)

Students will pick one (1) organ, joint, or section of the spine (cervical, thoracic, or lumbar) and an associated specific pathology to research. Use the bulleted guidelines below when choosing your topic. ***Students must submit their topic requests to the appropriate discussion by the due date indicated on the course schedule or a grade of zero (0) for the entire assignment may be assigned.***

- You will be comparing CT and MRI modalities. You should do some research prior to submitting your topic for approval to determine that your chosen pathology can be imaged using both modalities.
- Two students cannot have the same topic. To avoid duplication, students should review the discussion board to see anatomy already selected by classmates. First come first served.
- Students may **NOT** use anatomy reports submitted previously for other classes. The instructor may not be aware that a student has previously used a particular topic. Even if the instructor approves the topic for this class and it is revealed later that the student is using the same topic, the student will receive a **zero (0)** on this assignment. Students would be wise to select topics they have not written about in the past. Refer to the Honor System section of this syllabus, the course instructor, and the links within D2L for more information on academic dishonesty.

The course instructor will let the student know his/her selected anatomy topic is approved by posting on the discussion board.

Comprehensive Final Exam- 40%

All quizzes must be completed before the Final Exam is taken. If a quiz has been missed it is the student's responsibility to contact the professor for permission to take the final.

You must schedule your exam well in advance in order to guarantee a spot with ProctorU. There have been instances in the past in which the student waited to the last minute to schedule their exam and ProctorU was already booked.

Exam Format

- The proctored comprehensive final examination is closed book matching and multiple choice format.
- The exam is a timed, 2 hour (120 min) test.
- The comprehensive exam will be administered using Desire2Learn (D2L) and ProctorU online proctoring service.
- To prepare for this exam:
  - Review prior quizzes in the course
  - Review the Module notes
  - Review learning activities
  - Review textbook

What to Bring

- You may bring scratch paper with only ProctorU's phone number on it.
- No smart watches or any other electronic devices will be allowed.
- Students are not allowed to print the final exam.
- No textbooks or notes may be used.

ProctorU Scheduling

- The comprehensive proctored final exam will be administered using Desire2Learn (D2L) and ProctorU online proctoring
- You may schedule your exam for any time within the testing dates in the course schedule. You must have ALL of your course work complete when you take your final or the final will not be accessible in D2L.
- For ProctorU instructions, please read the ProctorU student instruction guide
- Be aware certain equipment is required. Review the ProctorU instructions as soon as possible.
- Contact a ProctorU representative to check your equipment and bandwidth real time before your test date. If anything changes after this check (new computer, updates, ISP changes, etc.), REPEAT the check.
- ProctorU allows you to take an exam on demand or by appointment. All appointments should be made at least three days in advance. To make an appointment, simply create an account on the MSU ProctorU webpage

Technical problems

- If you are disconnected during your exam, you must immediately send an email to your professor, and immediately contact ProctorU by phone. All exams are monitored and a log is created by the proctor and by D2L.
- *All times will be documented*
- The exam must be taken within the scheduled test dates, regardless of any technical issues that may arise. This is the student's responsibility.

- Late submissions will not be accepted.
- My suggestion is to take the exam during the first days it is available (listed below) to avoid receiving a zero due to technical issues. If you have to reschedule, it must be within the scheduled dates and times.

Additional Notes

- All course requirements must be completed before a grade is awarded. Students must complete the final and all course work by the dates published in the course schedule.
- All assignments received are considered complete and will be graded as such. Any decision of the professor is final and there will be no further changes made.
- Information contained in the course syllabus, other than the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the professor.
- See the Course Schedule below.

Course Schedule

Date	Activity ** Note: These are Central Times**
Monday, June 3	Class Opens Module Quizzes are open Review course syllabus and participate in the Introduction discussion.
June 11	Introductions due by 23:59
June 18	PowerPoint Topic due by 23:59
July 2	Final exam must be scheduled with Proctor U by this date. All assignments must be completed by the date your exam is scheduled with ProctorU.
July 2	Half way point!-Quizzes 1-4 should be complete
July 11	Drop day *Last day to withdraw with a grade of "W"*
July 23	Sectional PowerPoint Assignment due to dropbox by 23:59
July 30	All quizzes due by 23:59
Final exam July 30—August 6	Closed Book Proctored Final Exam The exam must be complete and submitted for grading by 23:59 on August 6. *(Last scheduled 'start' time with ProctorU is 21:00 (9pm))* *(timed 2 hours, multiple choice/matching format, all quizzes must be complete, before taking the final)*