College of Health Sciences  
DMI 477 Sectional Anatomy for Imaging Professionals  
Fall 2019

Instructor: Margaret (Madge-preferred) Hirschfeld  
Pronouns in use: she, her, hers  
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Inclusion Statement:  
By appreciating the importance of inclusion, we acknowledge that the collective and individual talents, skills, and perspectives of members, constituent groups, and fosters a culture of belonging, collaborative practice, innovation, and mutual respect. The learning environment of the classroom/labs will be safe, respectful, & promote the successful outcomes of all participants.

UWM Main Campus Resources for Students;  
• For a complete list of UWM student resources please see your clinical ed folder located in Canvas.

How to get questions answered:  
• Email will be answered within 24 hrs. Monday-Friday  
• If an emergency should happen after hours or during the weekend, please feel free to contact me via cell phone. Text is preferred.  
• Email convention; when sending emails regarding this class please use this subject line DMI 477  
• You must use your UWM email account, & you must check it often.  
• Communication is largely conducted via UWM email or Canvas course announcements.  
• Cell phone usage in class is restricted unless it pertains to the lesson. Never during testing.

Course Description: This is a 3.0 credit hour blended course. Student(s) should plan on devoting 9 hours per week to this class, including class sessions, online instruction & course assignments. The student(s) will be provided with information from various sources which will enhance their knowledge of cross-sectional anatomy, and introduce them to the modalities of Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) and the images created from those modalities.  

Students are expected to complete online assignments/readings before face to face class dates. Full class participation is expected.

Class Meeting Times: Thursday (11-1340) NWQ-B Room 6587. All course lectures & assignments are provided through D2L. Please review the course schedule posted on D2L & in the syllabus.

Class Policy: Classes will not be repeated therefore face to face class session attendance is mandatory. only 2 absences per semester are allowed per course unless a note from a physician is provided. Students who exceed this amount will fail the course.
**Required Text:** Lorrie L. Kelley, Connie M. Peterson: *Sectional Anatomy for Imaging Professionals 3rd or 4th ed.*
Lorrie L. Kelley, Connie M. Peterson: *Sectional Anatomy for Imaging Professionals 3rd or 4th ed. Workbook* optional

**Disclaimer:**
As many factors may affect the development and progress of a course, the instructor reserves the right to alter this syllabus as may be required to assure attainment of course learning objectives.
All course requirements, readings, and assignments may be subject to change at any time during the course. All course times are set by Central Time (CT).

**Course Objectives:** At the end of this course student(s) will be able to:

- Recognize and identify basic cross-sectional anatomy of the head, neck, chest, abdomen, & pelvis on computed tomography (CT) and magnetic resonance imaging (MRI) images/scans.
- Possess a basic understanding of body planes and landmarks (both internal & external) commonly used in setting up parameters of CT and/or MRI procedures/examinations.
- Possess a basic understanding of the principals related to image production in both CT and MRI imaging.
- Possess a thorough understanding of self, staff, and patient safety in the MRI suite(s) and will demonstrate this knowledge by passing the safety quiz with a score of 100% prior to entering the MRI area(s). The MRI safety quiz can be taken as many times as needed for student(s) to gain a successful 100% pass rate. This quiz can be found in the student(s) Clinical Ed. DMI 474 folder located in Canvas.
- Have a basic understanding disease processes and or pathologies and be able to identify said disease processes and/or pathologies on CT and MRI images/scans.
- Enhance prior venipuncture knowledge with hands-on, in starting IV’s, and patient lab blood draws.
- Gain a more thorough knowledge of the main vessels (vascular system) pertaining to the head, neck, thoracic cavity, abdomen & pelvis.
- Gain hands on experience by working one on one with a registered licensed CT technologist by means of numerous clinical rotations through this area.
- Have a thorough understanding of contrast media injection(s) and proper set-up of the automatic contrast media injector(s).
- Gain a more thorough knowledge of contrast agents and how patient administration of said agents applies in procedures/examinations in the modalities of CT and MRI.
- Recognize early stages of patient contrast related anaphylactic shock and respond appropriately.

**Readings:**
- All lessons contain a reading assignment for the assigned textbook, and may contain relevant articles from scholarly journals and/or handouts that supplement or summarize one or more concepts of the lesson.

**Links and Web sites:**
- Some lessons contain web links to video lectures, virtual anatomy presentations and/or other resources relevant to this course; students are responsible for the content from these assigned internet readings/activities.

**Monitoring Your Progress:**
- You will be able to monitor your progress for this course through D2L by clicking on the “Grades” tab at the top of the page.

**Tests:**
- All module tests will be administered in Canvas. Test dates and times are listed in the class schedule and posted in Canvas.
- Only one attempt is allowed for tests.
- Tests not completed in allotted time will receive a 5-point deduction in addition to number of questions missed due to test incompletion.
• In the event a test must be missed, such as special circumstances, a valid excuse must be given such as a doctor’s excuse, or any other format deemed appropriate to special circumstances by the instructor or program director.
• Different tests, of same content, can be expected in these instances.

Special circumstances may apply and will be reviewed on an individual basis.

Class Final:
• The final for this course consists of a 5-page (no more than 10 page) paper in AMA format on any topic which relates to computed tomography (CT) or magnetic resonance imaging (MRI)
• Student(s) may use a case study they have observed in their CT rotations, but final approval from course instructor must be given, to ensure all patient care HIPPA precautions are in place before hand.
• Papers may also include a new innovation(s) of either modality
• The page count cannot include intro/bibliography/reference pages.
• Guidelines/rubric for final paper and AMA format are posted in Canvas.
• Instructor is happy to meet one on one at any time during the semester for further instruction/feedback.

Wireless and Electronic devices:
These guidelines can be found at http://www.4.uwm.edu/chs/students/index.html. In addition, the following apply to any face-to-face sessions conducted during this course:

(1) The use of laptops for the purposes of taking notes during class is permitted. Please refrain from any extracurricular activities, such as surfing the internet, checking or composing email, or completing assignments for this or any other course. The first instance of inappropriate usage will result in a verbal warning and the powering down of the device. Any subsequent inappropriate usage will forfeit the right to use the device in class;
(2) All devices must be set to mute during class. Accepting or placing voice, email, or text messages during class is prohibited. If an emergency situation exists and you expect you will need to accept a message, please let the instructor know prior to the beginning of class. The first instance of inappropriate usage will result in a verbal warning and the powering down of the device. Any subsequent inappropriate usage will result in confiscation of the device until the end of class;
(3) No devices are permitted during exams. All devices must be set to mute or turned off and properly stowed prior to the start of the exam. If an emergency situation exists and you expect you will need to accept a message, please let the instructor know prior to the beginning of class. Except for pre-approved situations, any use of wireless or electronic devices during exams will not be tolerated. The device will be confiscated, the exam will be turned into the instructor immediately, and the student will be asked to leave the room. Appropriate policies governing academic misconduct will be pursued.

Grade Weights:

<table>
<thead>
<tr>
<th>Assignments/quizzes</th>
<th>% of final grade</th>
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<tbody>
<tr>
<td>Class Attendance/participation</td>
<td>15%</td>
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<tr>
<td>Unit examinations/chapter tests</td>
<td>40%</td>
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<td>Final Paper</td>
<td>30%</td>
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Grading scale:

<table>
<thead>
<tr>
<th>Score</th>
<th>Grade</th>
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<tbody>
<tr>
<td>96-100</td>
<td>A</td>
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<tr>
<td>92-95.9</td>
<td>A-</td>
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<tr>
<td>90-91.9</td>
<td>B+</td>
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<tr>
<td>87-89.9</td>
<td>B</td>
</tr>
<tr>
<td>85-86.9</td>
<td>B-</td>
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<tr>
<td>83-84.9</td>
<td>C+</td>
</tr>
<tr>
<td>80-82.9</td>
<td>C</td>
</tr>
<tr>
<td>78-79.9</td>
<td>C-</td>
</tr>
<tr>
<td>76-77.9</td>
<td>D+</td>
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<tr>
<td>Below 70</td>
<td>F</td>
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To pass the course the student must receive a minimum grade of C (80%) Students who drop below this passing grade at any time during this course will be notified by the instructor. Options will be discussed and the student(s) must present an action plan that will address this failing grade.

The following is the class schedule for DMI 477 Sectional Anatomy for Imaging Professionals:
<table>
<thead>
<tr>
<th>Dates &amp; Time (11-1340)</th>
<th>Class Content</th>
<th>Assignment check-offs</th>
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</thead>
<tbody>
<tr>
<td><strong>Class 1</strong> &lt;br&gt; 9/5 Class online</td>
<td>• Class has been opened in Canvas</td>
<td>✓ Look over course  &lt;br&gt; ✓ Review materials prior to class.</td>
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<tr>
<td><strong>Class 2</strong> - &lt;br&gt; 9/12 Face to Face (F2F)</td>
<td>• Syllabus &lt;br&gt; • Overall class objectives/assignments. &lt;br&gt; • Final Paper Discussion/guidelines posted D2L &lt;br&gt; • Presentations &lt;br&gt; • Chapter 1&amp;2 posted Canvas</td>
<td>✓ Complete Take home tests Ch. 1 &amp; 2 due class 4  &lt;br&gt; ✓ Review chapter overviews  &lt;br&gt; ✓ Final Paper due in Canvas (12/5)</td>
</tr>
<tr>
<td><strong>Class 3</strong> - &lt;br&gt; 9/19 Class online</td>
<td>Chapter 3 Brain posted Canvas</td>
<td>✓ Complete worksheets Ch. 3 and have ready for class 4 F2F  &lt;br&gt; ✓ Review Chapter Overview  &lt;br&gt; ✓ Email instructor muddiest points by 9/24  &lt;br&gt; ✓ Circle of Willis Model due class 3</td>
</tr>
<tr>
<td><strong>Class 4</strong> - &lt;br&gt; 9/26 F2F</td>
<td>• Take-home tests Ch. 1 &amp; 2 due in class today.  &lt;br&gt; • Class discussion Ch. 3 Brain &lt;br&gt; • Exams with and without contrast &lt;br&gt; • Circle of Willis Models &lt;br&gt; • Anatomy worksheet review &lt;br&gt; • Muddiest points &lt;br&gt; • Brain/Cranium Anatomy Quiz</td>
<td>Test chapter 3 next class  &lt;br&gt; ✓ Final Paper topics due in Canvas 10/17</td>
</tr>
<tr>
<td><strong>Class 5</strong> – &lt;br&gt; 10/3 Class online</td>
<td>Test chapter 3 Brain Canvas (10/3 – 10/9) &lt;br&gt; Chapter 4 Spine posted in Canvas</td>
<td>✓ Complete online ASRT reading on spinal cord injuries.  &lt;br&gt; ✓ Complete worksheets and have ready for class F2F class 6  &lt;br&gt; ✓ Review chapter overview  &lt;br&gt; ✓ Email instructor muddiest points by 10/8  &lt;br&gt; ✓ Spinal vascular Model due class 5</td>
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<tr>
<td><strong>Class 6</strong> – &lt;br&gt; 10-10 F2F</td>
<td>• Role play contrast administration. &lt;br&gt; • Class lecture/discussion Ch. 4 &lt;br&gt; • Spinal vascular Models &lt;br&gt; • Ch. Outlines (muddiest points) &lt;br&gt; • Spine anatomy worksheet review &lt;br&gt; • Muddiest points &lt;br&gt; • Spine Anatomy Quiz</td>
<td>Test chapter 4 next class  &lt;br&gt; Final Paper topics due in Canvas by 10/17</td>
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<tr>
<td><strong>Class 7</strong> - &lt;br&gt; 10/17 Class online</td>
<td>Test chapter 4 Spine Canvas (10/17-10/23) &lt;br&gt; Chapter 5 Neck posted D2L.</td>
<td>✓ Final Paper topics due in Canvas today  &lt;br&gt; ✓ Complete worksheets and have ready for F2F class 8  &lt;br&gt; ✓ Review chapter overview  &lt;br&gt; ✓ Email instructor muddiest points by 10/22  &lt;br&gt; ✓ Neck vascular Model due class 7  &lt;br&gt; ✓ Email instructor muddiest points</td>
</tr>
<tr>
<td><strong>Class 8</strong> - &lt;br&gt; 10/24 F2F</td>
<td>• Ch. 5 lecture/discussion &lt;br&gt; • Neck vascular Model &lt;br&gt; • Ch. Outlines (muddiest points) &lt;br&gt; • Neck anatomy worksheet review &lt;br&gt; • Muddiest points &lt;br&gt; • Neck Anatomy Quiz &lt;br&gt; • Final paper assignment/presentations</td>
<td>Test chapter 5 next class</td>
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</table>
| Class 9 - 10/31 | Test chapter 5 Neck Canvas (10/31-11/6)  
Chapter 6 Thorax Posted Canvas | ✓ Complete worksheets and have ready for F2F class 10  
✓ Review Chapter Overview  
✓ Worksheet blood circulation of heart  
✓ Heart vascular Model due class 10  
✓ Email instructor muddiest points by 11/5 |
|----------------|----------------------------------------------------------------------------------|
| Class 10 - 11/7 F2F | • Ch. 6 lecture/discussion  
• Heart vascular Models  
• Worksheet blood circulation of heart  
• Ch. Outlines (muddiest points)  
• Thorax anatomy worksheet review  
• Muddiest points  
• Thorax Anatomy Quiz | Test chapter 6 next class  
**Final Paper due in D2L 12/5** |
| Class 11 - 11/14 Class online | Test chapter 6 Thorax D2L (11/14-11/20)  
Chapter 7 Abdomen posted Canvas | ✓ Complete worksheets have ready for F2F class 11  
✓ Abdomen vascular Models due class 12  
✓ Email instructor muddiest points by 11/19 |
| Class 12 - 11/21 F2F | • Ch. 7 lecture/discussion  
• Abdomen vascular Models  
• Ch. Outlines (muddiest points)  
• Abdomen anatomy review  
• Muddiest points  
• Abdomen Anatomy Quiz  
• Last minute questions/updates on final paper/presentations | Test chapter 7 next class  
**Final Paper due in D2L next class 12/5**  
Enjoy Thanksgiving break!  
**Practicums Today** |
| Class 13 - 12/5 Class online | Test chapter 7 Abdomen Canvas (11/28-12/4)  
Chapter 8 Pelvis posted in Canvas  
**Final Paper due in D2L today by 11:30pm** | ✓ Complete worksheets and have ready for F2F class 14  
✓ Pelvis vascular Models due next class  
✓ Email instructor muddiest points by 12/10  
✓ Pelvis Anatomy take home Quiz due next class  
✓ Test Ch. 8 take-home due next class.  
**Practicums Today** |
| Class 14 - 12/12 F2F | • Pelvis vascular Models  
• Ch. Outlines (muddiest points)  
• Pelvis worksheet review  
• Muddiest points  
• Pelvis Anatomy take home Quiz due in class.  
• Test Ch. 8 take-home due in class. | **Final Paper Presentations** |
| Class 15 - 12/19 F2F | Chapter 8 Take-Home Test due in class today | ✓ Chapters 9&10 are posted in Canvas.  
✓ Although these chapters will not be tested on it is in your best interest to review them.  
✓ Enjoy your well-earned break.  
✓ See you next year! |
University Policies
Syllabus Links

1. Students with disabilities. Information regarding special accommodations so that they are provided in a timely manner. http://www4.uwm.edu/sac/SACltr.pdf


3. Students called to active military duty. Accommodations for absences due to call-up of reserves to active military duty.
   Students: http://www4.uwm.edu/current_students/military_call_up.cfm

4. Incompletes. A notation of "incomplete" may be given in lieu of a final grade to a student who has carried a subject successfully until the end of a semester but who, because of illness or other unusual and substantiated cause beyond the student's control, has been unable to take or complete the final examination or to complete some limited amount of term work. http://www4.uwm.edu/secu/docs/other/S31.pdf

5. Discriminatory conduct (such as sexual harassment). Discriminatory conduct will not be tolerated by the University. It poisons the work and learning environment of the University and threatens the careers, educational experience, and well-being of students, faculty, and staff. http://www4.uwm.edu/secu/docs/other/S47.pdf

6. Academic misconduct. Cheating on exams or plagiarism are violations of the academic honor code and carry severe sanctions, including failing a course or even suspension or dismissal from the University. http://www4.uwm.edu/acad_aff/policy/academicmisconduct.cfm

A further note on plagiarism: Plagiarism is defined as attempting to pass someone else’s work as your own by failing to properly cite sources (Merriam-Webster online dictionary, www.m-w.com) this includes other student’s work, that published in traditional print forms, and that obtained via internet sources. Plagiarism in any form will not be tolerated. If I am able to “Google” text from any student work, and the results demonstrate that it is taken directly from a source without proper citation, regardless of the number or instances observed in the assignment the assignment will receive a grade of “F”, with all ramifications that may have for the final grade in the course. No accommodations will be made to allow the student to make up the assignment. Remember to cite any and all sources used in this course, including websites.

All students are expected to observe the CHS Honor Code in this class. The Honor code can be found at http://www4.uwm.edu/chs/students/honorcode/honorcode.html

7. Complaint procedures. Students may direct complaints to the head of the academic unit or department in which the complaint occurs. If the complaint allegedly violates a specific university policy, it may be directed to the head of the department or academic unit in which the complaint occurred or to the appropriate university office responsible for enforcing the policy. http://www4.uwm.edu/secu/docs/other/S49.7.htm

8. Grade appeal procedures. A student may appeal a grade on the grounds that it is based on a capricious or arbitrary decision of the course instructor. Such an appeal shall follow the established procedures adopted by the department, college, or school in which the course resides or in the case of graduate students, the Graduate School. These procedures are available in writing from the respective department chairperson or the Academic Dean of the College/School. http://www4.uwm.edu/secu/docs/other/S28.htm

9. Other Final exam requirement, the final exam date requirement, etc. http://www4.uwm.edu/secu/docs/other/S22.htm

10. Selected Academic and Administrative Policy 24.5, Firearms and Dangerous weapons policy