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| **Course Credit:** | 1 Credit |
| **Time and Location:** | Thursday  NURS Rm 120 |
| **Instructor:** | Chelsie Wheatley, BSRS, BSDMS, RT(R), RDMS, RVT |
| **Phone:** | 208-282-3311 or 208-282-4042 (Secretary, Alyssa) |

**Overview:** This course will cover sonographic anatomy and scanning procedures for superficial structures including the thyroid gland, parathyroid glands, prostate, scrotum, penis and musculoskeletal system. Emphasis is placed on pathology, the various disease processes, and their sonographic appearance. Activities structured follow the guidelines of the ARDMS. This course, combined with Abdomen I and Abdomen II courses will prepare the students to sit for the ARDMS Abdomen (AB) examination.

**Textbooks:** Hagen-Ansert, Sandra L. *Textbook of Diagnostic Sonography.* 8th Edition, Volume 1. St. Louis, Mo: Elsevier; 2018. ISBN 978-0-323-35375-5

**Method of Presentation:**  Lecture, PowerPoint, Handouts, SonoSim, Moodle Supplement

**Code of Ethics:** DMS 4417 adheres to the ISU 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 ISU Code of Student Conduct.

**Course Learning Objectives/Goals:** This course has been designed to prepare student sonographers for the responsibilities and understanding of superficial structure sonographic imaging. The student will learn the thyroid, parathyroid glands, scrotum, prostate, and an introduction to the musculoskeletal system. Benign vs. Malignant pathology will be discussed and at the conclusion of the course, students will demonstrate a knowledge of each item listed above. Ultimately, the student will gain a better understanding of the process involved in obtaining a quality sonographic exam of multiple structures superficially. This classroom understanding prepares the student for the corresponding laboratory experience and the ARDMS Abdomen board examination.

**Course Learning Outcomes-- Upon completion of this course, the student will be able to:**

* Discuss the embryology of the thyroid and parathyroid glands
* Describe the normal anatomy and physiology of the thyroid and parathyroid glands
* Define the relational anatomy of the thyroid and parathyroid glands
* Discuss the laboratory values and clinical findings of the thyroid and parathyroid glands
* Describe the sonographic examination of the thyroid and parathyroid glands
* Differentiate the sonographic features of the pathologic conditions found in the thyroid and parathyroid glands
* Identify normal anatomy of the scrotum
* Explain the vascular supply to the scrotal contents
* Describe patient positioning, scanning protocol, and technical considerations for an ultrasound examination of the scrotum
* Discuss the role of color and spectral Doppler in scrotal imaging
* Describe the ultrasound characteristics of scrotal pathology
* Identify normal anatomic location and function of the tendon, ligament, muscle, nerve and bursa
* Know the advantages and disadvantages of sonographic artifacts in musculoskeletal imaging
* Summarize the basic sonographic examinations of the shoulder, wrist, knee, ankle, and foot
* Distinguish normal anatomy from common pathologic conditions

**Academic Dishonesty Policy:**

Academic dishonesty (cheating, plagiarism, etc.) will not be tolerated in this class and may result in suspension or dismissal from this course and from the program. Cases will also be referred to the Dean of Students for possible dismissal from the university.

Cheating includes, but is not limited to, (1) use of any unauthorized assistance in taking quizzes, tests, or examinations; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or completing other assignments; or (3) 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 recognition, the published or unpublished works of another person. The use of materials generated by agencies engaged in "selling" term papers is also plagiarism.

Many components of DMS 4417 are designed to be highly interactive.  Students are encouraged to take full advantage of the many resources available including Internet sites, handouts and workbooks, other textbooks and journals, faculty, and peers. This interactive collegial learning environment is conducive for life-long learning.

***When students submit their efforts for grading, they are attesting that they have abided by these rules.***

**Classroom Procedure:**

1.  **Attendance:**  You are expected to attend class regularly.  It is your responsibility to maintain a level of attendance which will allow you to derive maximum benefit from the instruction.  Excessive absences (>10%) will result in a lower course grade if you are borderline between two grades.

2.  **Grading Procedure:**

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| **Assessment Method** | **Percentage Value** |
| Test #1 = Chapter 22 | 20% |
| Test #2 = Chapter 23 | 20% |
| Test #3 = Chapter 24 | 20% |
| Cumulative Final | 30% |
| Article Quiz | 10% |
| Total | 100% |

**This grading Scale will be used:**

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| +/- System |  |
| 93-100% A | 73-76% C |
| 90-92% A- | 70-72% C- |
| 87-89% B+ | 67-69% D+ |
| 83-86% B | 63-66% D |
| 80-82% B- | 60-62% D- |
| 77-79% C+ | 59% Below F |

*Note: A grade of C or better is required in this course in order to receive a degree from the Department of Radiographic Science.*

The minimum requirements to earn a passing grade are successful completion of all tests (70% minimum).  Tests and Quizzes will be a combination of either written or computer based. Students may use their own wireless laptops if they have one if tests are given in class; otherwise, students are required to use a lab computer when testing.

3. **Computer Account:** All students are required to have an ISU student computer account.  There is no fee required for this account. Obtain the account at the Computer Center, which is located in the basement of the College of Business Building or in the Rendezvous Lab.

4.  **Make-up:** If you are unable to sit for an examination, you may request a make-up exam.  You must inform me that you will not be present for the examination **prior** to the scheduled time.  An additional 10% drop in the test grade will result if prior notification is not given and is not accepted by me prior to taking the test.  The highest grade you can receive for a make-up exam is 89% unless you provide me with an acceptable excuse. An acceptable excuse is defined **as very** sick; a death in the immediate family; some unforeseen circumstance that would prohibit you from taking the exam. The key is to communicate with me directly via email, phone, or in person. Do not speak to another faculty member or the department secretary. I’m very easy to catch with email, but make sure your email is received by me prior to the test deadline.

*In addition, it is a requirement to take all tests offered during the semester.  An incomplete will be issued for the class if a test is not taken.*

**Cell phone policy:** Cell phones should not be used in class. They should be place in silent or vibrating mode or turned off. Additionally receiving and retrieving text messages should not occur during class or in labs. Failure to follow this policy will result in a deduction of grade up to 10% at the discretion of the instructor. If you need to communicate to someone outside of the class in an emergency situation please inform the instructor so accommodations to this policy may be made.

**Disability Services:** Students with disabilities who wish to have accommodations provided by the University must self-identify with Disability Services (236-3599) in order to have accommodations provided. Information and applications are available in the Center and may be picked up in person or requested by telephone. The URL is <http://www.isu.edu/ada4isu/>