

SYLLABUS

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| Name of Course: | RADIOLOGY 1 LAB (ACS-813) | | | | | | |
| Length of Course: | 1 unit, 20 hours, | | | | | | |
| Course Description: | First in a series of radiology diagnosis courses, this class is designed to acquaint the student with basic radiographic anatomy. The course covers normal radiographic anatomy, roentgenometrics, skeletal development and common normal variants. Xray report writing will be introduced. | | | | | | |
| Prerequisites: | ANAT-111, ANAT-118 | | | | | | |
| Co-requisites: | ACS-313 | | | | | | |
| Course Offered By: | Clinical Sciences Department | | | | | | |
| Required Text: | Yochum TR. <i>Essentials of Skeletal Radiology</i> . 3 rd ed. 2005 Wicke L. <i>Atlas of Radiologic Anatomy</i> . 7 th ed. 2004 | | | | | | |
| Reference Materials: | Radiology 1 class notes | | | | | | |
| Method of Instruction: | Lab demonstration, lecture | | | | | | |
| Evaluation: | The course will have one practical lab examinations of 25 points. In addition in class assignments for each lab will be worth 10 points each. <table><tr><td>Final Exam</td><td>25 points</td></tr><tr><td><u>In class assignment</u></td><td><u>80 points (8 total)</u></td></tr><tr><td>Total points</td><td>105 points</td></tr></table> | Final Exam | 25 points | <u>In class assignment</u> | <u>80 points (8 total)</u> | Total points | 105 points |
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| <u>In class assignment</u> | <u>80 points (8 total)</u> | | | | | | |
| Total points | 105 points | | | | | | |

Quarter grades will be assigned according to the following percentage ranges:

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|---|--------------------------|---------|
| A | (4.0) Superior work | 90-100% |
| B | (3.0) Above average work | 80-89% |
| C | (2.0) Average work | 70-79% |
| F | (0.0) Failure | 0-69% |

Grades and the Grading System Final Grades are available online through the CAMS student portal. If there are any questions on grading procedures, computation of grade point average, or the accuracy of the grade report, please contact the Registrar's Office or the Office of Academic Affairs. Grades will be reported and evaluation will be based on the Academic Policies, Procedures, & Services. Please refer to Evaluation Policy (**Policy ID: OAA.0007**)

In order to maintain **Satisfactory Academic Progress**, a student must maintain a 2.0 or better in each and every course. **Any grade less than a C must be remedied by repeating the class.** Please refer to Satisfactory Academic Progress (**Policy ID: OAA.0006**)

Extra Credit: There will be no extra credit work permitted in this class.

Attendance: Please refer to Attendance Policy (**Policy ID: OAA.0002**)

Conduct and Responsibilities: Please refer to the Personal Conduct, Responsibility and Academic Responsibility Policy (**Policy ID: OAA.0003**)

Make-up Exams: Please refer to Make-up Assessment Policy (**Policy ID: OAA.0001**)

Request for Special Testing: Please refer to Request for Special Testing (**Policy ID: OAA.0004**)

Accommodation for Students with Disabilities:

If you have approved accommodations, please make an appointment to meet with your instructor as soon as possible. If you believe you require an accommodation, but do not have an approved accommodation letter, please see the Academic Counselor Lori Pino in the Office of Academic Affairs. Contact info: Lpino@lifewest.edu or 510-780-4500 ext. 2061. Please refer to Service for Students with Disabilities Policy (**Policy ID: OAA.0005**)

Electronic Course Management:

Canvas is LCCW's Learning Management System (LMS). Canvas will be used throughout the quarter during this course. Lectures, reminders, and messages will be posted. In addition, documents such as the course syllabus and helpful information about the class project will be posted. Students are expected to check Canvas at least once a week in order to keep updated. The website address for Canvas is <https://lifewest.instructure.com/login/canvas> Please refer to the Educational Technologies Policy (**Policy ID: OAA.0009**)

Course Goals: The goals of this course are to familiarize students with radiographic anatomy, to teach a systematic approach to reading x-rays (plain & digital), and to teach students to identify normal and normal variant findings and to distinguish them from early and late pathology.

Course Objectives:

Week 1.

To introduce the principles of normal radiographic anatomy.

-In class lab assignment

Principles of normal radiographic anatomy:

1. Anatomy normal for the patient age
2. Anatomy consistent with the patient's gender
3. Anatomy consistent with a patient's ethnicity

Week 2.

To introduce radiographic anatomy of the craniovertebral junction including roentgenometrics and normal variants in anatomy.

-In class lab assignment

Week 3.

To introduce radiographic anatomy of the cervical spine from C 3 through C 7.

-In class lab assignment

Week 4.

To introduce normal radiographic anatomy of the thoracic spine and thorax

-In class lab assignment

Week 5. Midterm

Week 6.

To introduce radiographic anatomy of the lumbar spine including normal variants

-In class lab assignment

Week 7.

To introduce radiographic anatomy of the pelvis

-In class lab assignment

Week 8.

To introduce radiographic anatomy of the upper extremity

-In class lab assignment

Week 9.

To introduce radiographic anatomy of the lower extremity

-In class lab assignment

Week 10. Final

The criteria for identifying a normal film:

1. General considerations including age, sex, ethnicity.
2. Alignment patterns/roentgenometrics
3. Bone, including number of segments, contour and shape of bone, cortical margin, comparison to other similar bones and density.
4. Articulations, including subarticular bone and joint spacing
5. Soft tissues

Student Learning Outcomes (SLOs):

1. The student will be able to use correct terminology in describing radiographic anatomy of the craniovertebral junction. (PLO:1)
2. The student will be able to utilize correct terminology in describing the radiographic anatomy of the normal cervical spine. (PLO:1)
3. The student will be able to use correct terminology to describe the radiographic anatomy of the thoracic spine. (PLO:1)
4. The student will be able to use correct terminology to describe the radiographic anatomy of the lumbar spine. (PLO:1)
5. The student will be able to use correct terminology to describe the radiographic anatomy of the pelvis. (PLO:1)
6. The student will be able to use correct terminology to describe the radiographic anatomy of the upper extremity. (PLO:1)
7. The student will be able to utilize correct terminology to describe the radiographic anatomy of the lower extremity. (PLO:1)

Program Learning Outcomes (PLO): Students graduating with a Doctor of Chiropractic degree will be proficient in the following:

1. **ASSESSMENT AND DIAGNOSIS:** An assessment and diagnosis requires developed clinical reasoning skills. Clinical reasoning consists of data gathering and interpretation, hypothesis generation and testing, and critical evaluation of diagnostic strategies. It is a dynamic process that occurs before, during, and after the collection of data through history, physical examination, imaging, laboratory tests and case-related clinical services.
2. **MANAGEMENT PLAN:** Management involves the development, implementation and documentation of a patient care plan for positively impacting a patient's health and well-being, including specific therapeutic goals and prognoses. It may include case follow-up, referral, and/or collaborative care.
3. **HEALTH PROMOTION AND DISEASE PREVENTION:** Health promotion and disease prevention requires an understanding and application of epidemiological principles regarding the nature and identification of health issues in diverse populations and recognizes the impact of biological, chemical, behavioral, structural, psychosocial and environmental factors on general health.
4. **COMMUNICATION AND RECORD KEEPING:** Effective communication includes oral, written and nonverbal skills with appropriate sensitivity, clarity and control for a wide range of healthcare related activities, to include patient care, professional communication, health education, and record keeping and reporting.
5. **PROFESSIONAL ETHICS AND JURISPRUDENCE:** Professionals comply with the law and exhibit ethical behavior.
6. **INFORMATION AND TECHNOLOGY LITERACY:** Information literacy is a set of abilities, including the use of technology, to locate, evaluate and integrate research and other types of evidence to manage patient care.
7. **CHIROPRACTIC ADJUSTMENT/MANIPULATION:** Doctors of chiropractic employ the adjustment/manipulation to address joint and neurophysiologic dysfunction. The adjustment/manipulation is a precise procedure requiring the discrimination and identification of dysfunction, interpretation and application of clinical knowledge; and, the use of cognitive and psychomotor skills.
8. **INTERPROFESSIONAL EDUCATION:** Students have the knowledge, skills and values necessary to function as part of an inter-professional team to provide patient-centered collaborative care. Inter-professional teamwork may be demonstrated in didactic, clinical or simulated learning environments.
9. **BUSINESS:** Assessing personal skills and attributes, developing leadership skills, leveraging talents and strengths that provide an achievable expectation for graduate success. Adopting a systems-based approach to

business operations. Networking with practitioners in associated fields with chiropractic, alternative medicine and allopathic medicine. Experiencing and acquiring the hard business skills required to open and operate an on-going business concern. Participating in practical, real time events that promote business building and quantifiable marketing research outcomes

10. **PHILOSOPHY:** Demonstrates an ability to incorporate a philosophically based Chiropractic paradigm in approach to patient care. Demonstrates an understanding of both traditional and contemporary Chiropractic philosophic concepts and principles. Demonstrates an understanding of the concepts of philosophy, science, and art in chiropractic principles and their importance to chiropractic practice.