

SYLLABUS

- Name of Course:** X-ray Positioning (ACS-312)
- Length of Course:** 31 hrs (2-hrs lab/wk & 1 hr/wk instruction via online modules), 1.5 units
- Course Description:** This is a practical course in Radiologic Technique with emphasis on special chiropractic procedures. Machine operation and patient positioning are demonstrated and discussed. Radiography of the appendicular skeleton is included. Emphasis is placed on patient and operator protection and radiographic quality assurance.
- Prerequisites:** Radiology 1 (ACS-313)
- Course Offered By:** Clinical Sciences Department
- Required Text:** Health Center Policies and Procedures Manual (Clinic Manual)
Yochem TR. Essentials of Skeletal Radiology, Vol. 1. 3rd ed. 2005
X-Ray Positioning Class Notes
LCCW e-learning modules
- Recommended Text:** None
- Reference Text:** None
- Method of Instruction:** Lab demonstration, practice x-rays with Phantom, online modules and quizzes
- Evaluation:** There will be **two practical exams**. All exams will be comprehensive.

Online modules and weekly quiz:

You are also required to complete online modules to pass this course. Each module has video content and an associated quiz. LRC Librarian will provide you with the information you need to access these modules.

Practical Midterm:	40%
Practical Final:	40%
Online Weekly Quizzes:	20%

Evaluation/Grading Criteria:

A (4.0)	Superior work	90-100%
B (3.0)	Above Average	80-89%
C (2.0)	Average Work	70-79%
F (0.0)	Poor - The student must repeat the entire course	below 70%.

Incomplete: The student has failed to take all required exams and/or has failed to turn in other required work.

Overcut: The student has missed more than 10% of the course hours.

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**)

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 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 goal of this course is to teach x-ray safety rules, and to develop students' knowledge and skills in positioning a patient for spinal and extremity x-rays in order to obtain quality radiographs.

Course Objectives:

- Week 1** Cervical Spine to views such as the views included in a Davis series, pillar views and Swimmer's view will be demonstrated. The students will be expected to be able to do practice set-ups in a timely manner.
- Week 2** Thoracic Spine and the limited Chest series will be demonstrated. The students will be expected to be able to do practice set-ups in a timely manner.
- Week 3** Lumbar Spine, Sacral Base and Coccyx views will be demonstrated. The students will be expected to be able to do practice set-ups in a timely manner.
- Week 4** Hip, Shoulder, AC joint views will be demonstrated. The students will be expected to be able to do practice set-ups in a timely manner.
- Week 5** *Practical Midterm*
- Week 6** Knee views will be demonstrated. The students will be expected to be able to do practice set-ups in a timely manner.
- Week 7** Ankle and Foot views will be demonstrated. The students will be expected to be able to do practice set-ups in a timely manner.
- Week 8** Elbow, Wrist and Hand views will be demonstrated. The students will be expected to be able to do practice set-ups in a timely manner.
- Week 9** Full Spine views will be demonstrated. The students will be expected to be able to do practice set-ups in a timely manner.
- Week 10** *Practical Final*

Student Learning Outcomes (SLO):

1. The student will be able to identify the appropriate radiographic studies to perform for the different areas of the body. [PLO:1]
2. The student will be able to demonstrate the procedures for taking x-ray views of the various areas of the body, including patient placement, collimation, and filtration, etc. [PLO:1]
3. The student will be able to safely operate an x-ray unit. [PLO:1]
4. The student will be able to operate darkroom equipment. [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.