

SYLLABUS

Quarter: **SPRING 2008**

Name of Course: Radiology III – ACS – 324/824

Length of Course: 55 hours, (5 hrs. lect/week with open lab), 4.0 units

Course Description: Radiology III is a continuation of Radiology I and II and follows the approach initiated during Radiology II. Normal radiographic findings are compared to abnormal radiographic findings. Bone tumors, infections, metabolic diseases, and congenital dysplasias are covered. This class has designated open lab hours. This course provides content in pathology and diagnosis.

Prerequisites: ACS-312

Course Offered By: Department of Associated Clinical Science
Joe Ferguson, D.C., C.C.S.P., P.E.S.
Department Chair

Course Instructors: [Alexandra Weibel D.C., D.A.C.B.R.](#)

Office Hours: Monday and Wednesday 11:30-1:00 p.m. By appointment only.
Health Center Room TBA, Extension 2244

Required Text: Yochum TR. *Essentials of Skeletal Radiology*, 3rd ed. 2005
Freyschmidt J. *Borderlands of Normal and Early Pathological Findings in Skeletal Radiology*. 5th ed. 2003

Recommended Texts: Greenspan A. *Orthopedic Radiology*. 3rd e. 2000
Taylor J. *Skeletal Imaging*. 2000
Moeller TB. *Normal Findings in Radiography*. 2000
Moeller TB. *Pocket Atlas of Radiographic Anatomy*. 2nd ed. 2000

Reference Texts: NONE

MATERIALS: ACR FILES and Clinic Cases in Library

METHOD OF INSTRUCTION: Lecture-discussion; Aids will include films

Workbook: A workbook is available for purchase in the bookstore. Everyone must complete the workbook to pass the class. Failure to turn in a workbook will result in a final quarter grade of F and the class shall be repeated. The workbook is due by the end of the hour of the last class of the 9th week of the quarter. Workbooks handed in after the deadline will result in a 10 point deduction for the total quarters point

allotment for each school day after the workbook was due. Any workbook handed in after 5 school days from the deadline will result in a quarter grade of F and the course will be repeated. When a course is repeated, a new workbook must be completed. If the workbook doesn't meet professional standards or is incomplete (as judged by the instructor and department chair), the total course grade will be reduced by one letter grade. In the case of a very poor effort, the workbook can be determined incomplete and a course grade of F will result and the course will need to be repeated. If it appears that workbooks were copied, the involved parties will be turned into the proper school authorities to determine if disciplinary action is warranted.

***ALL EXAMS ARE CUMULATIVE INCLUDING MATERIAL FROM PREVIOUS RADIOLOGY COURSES. STUDENTS MUST HAVE A PASSING GRADE IN BOTH LECTURE AND LAB IN ORDER TO PASS THE COURSE.**

In order to maintain satisfactory Academic Progress, a student must maintain a 2.0 or better in each and every course. **A grade of less than C must be remedied by repeating the class.**

ATTENDANCE:

Instructors are required to record student attendance. Roll can be taken at any time during the class period. The instructor may call names, pass a roll sheet, use submitted classroom assignments, or observe the students. If the instructor calls roll, a student who is not present when his or her name is called is absent. If the instructor uses a roll sheet, students have 15 minutes to sign in.

If a student arrives after attendance has been taken but within the first 15 minutes of the start of the class session, the student must see the instructor at the end of the class hour to request that his or her absence be changed to a tardy. Three tardies attendance constitute one hour of absence. Failure to notify the instructor will result in the absence mark remaining on the attendance sheet. This cannot be changed later. **No additional assignments can be used to compensate for absences except as outlined in the college course overlap policy.**

If a student leaves after attendance has been taken, the instructor can change the attendance record to indicate an absence for the class period. Any request to leave class early must be approved by the instructor before the class session.

A student who misses more than 10% of the class hours will be over-cut from the class. If the student presents documentation to the dean verifying a documented emergency or other excusable reason that prevented attendance for 15% of the class hours, the dean may permit him or her to continue attending the class. In determining whether or not to permit a student to continue attending a class, the dean will consider the student's overall attendance record and academic standing. Under no circumstances, regardless of any personal situation, will a student who misses 20% of the class hours receive course credit. Excused absences still

count toward total absences, they only may entitle a student to make-up assignments and examinations.

A student is responsible for keeping track of his or her own attendance and absences. Instructors may but are not required to provide courtesy notices indicating that a student is approaching or has reached over-cut status.

Documented emergencies include hospitalization, accidents, or death in the family. Undocumented illness, not “feeling well,” weddings, events, extended vacations or school holidays, non-school scheduled seminars, etc., are not considered excusable reasons for missing class.

MAKE-UPS:

Students are expected to take all examinations and complete assignments as scheduled.

Students who have missed an exam due to a documented emergency or other excusable reason must pick up a “Request for Alternative Testing” form in the Dean’s Office. At that time, they will explain the circumstances of their emergency and provide documentation to the Dean of the College. If the Dean authorizes the exam, the student must then present the form to his/her instructor to complete the necessary information. The student must then take the completed and signed request to the Student Services Office to schedule a time for the exam to be proctored. As indicated near the top of the form, Student Services requires a minimum of 5 working days to set up and schedule the approved exam.

Documented emergencies include hospitalization, accidents, or death in the family. Undocumented illness, not “feeling well,” weddings, events, extended vacations or school holidays, non-school scheduled seminars, etc., are not excusable reasons for making-up an exam or assignment.

EXTRA CREDIT: There will be no extra credit work accepted in this class.

CONDUCT AND RESPONSIBILITIES

It is the student’s responsibility to maintain professional standards of behavior and attire while on campus. Students are expected to be prepared for instructional activities. They must bring required supplies/equipment and dress appropriately in accordance with the instructor’s directions. Failure to do so can result in the student being marked absent for the class session. Any disruptive activity (e.g. use of cell phones, side conversations) in the classroom is prohibited. If the instructor requires a disruptive student to leave the classroom, the student remains responsible for all information and will be marked absent for the class session. The dean will impose sanctions for unprofessional behavior. Any form of deceit, fraud, plagiarism, unauthorized collaboration, or theft will result in failure of the course and referral to the dean for disciplinary sanctions.

INDEPENDENT STUDENT WORK

All exams must be the product of the individual student's original efforts for this class. Collaboration on other class assignments is permitted as defined by the instructor.

PROCEDURES FOR REVIEWING EXAMS

The instructor has not authorized distribution of old exams. Any possession of old exams is prohibited. The instructor may either conduct review sessions in class or may meet with a student to review his or her exam during office hours for two weeks following the exam (unless there is a shorter time period until the last scheduled office hour during the last week of classes.) Students may not review mid-term exams during final exam week. The possession of any exam other than during a review session constitutes unprofessional conduct.

REQUEST FOR TESTING ACCOMMODATIONS

The student must notify the instructor of any authorized testing accommodations at least one week prior to the exam. Once arrangements have been made, they cannot be changed without approval from the instructor and the office of student services.

The student must notify the instructor of any schedule conflicts during final exam week at least one week prior to the beginning of final exams. Appropriate paperwork must be completed and submitted to the office of student services. Once arrangements have been made, they cannot be changed without approval from the instructor and the office of student services.

COURSE OBJECTIVES:

The student should be able to distinguish between the various types of arthropathies (degenerative, inflammatory and metabolic) on skeletal studies and be able to give a reasonable differential diagnosis when presented with various radiographic findings.

The student should be able to discuss and recognize the typical radiographic findings of the various traumatic injuries presented in class. The student should be able to discuss when diagnostic imaging is appropriate in the clinical setting of trauma.

The student should have an understanding of the proper use of diagnostic imaging in the practice of chiropractic.

Testing: written tests will primarily be short answer filling in the blank. Written tests will cover any information discussed in class, in lab, or in the workbook. **IN ADDITION, ANY INFORMATION CONTAINED IN THE ARTHRITIS OR TRAUMA CHAPTERS OF THE REFERENCE TEXT IS FAIR GAME.** As the quarter progresses, each test will be comprehensive up to the cut off. Lab tests will be scantron. No test or quiz shall be retaken due to an overlap (exception-finals).

Written midterm	40 points
Final written	80 points
Lab 1	15 points
Lab 2	15 points
Pop quizzes:	teacher's discretion (all unannounced)

Grades: Grades will be based on the total number of points available (with the workbook considerations previously outlined). The number of quizzes is at the instructor's discretion.

Grading scale:

93 – 100	A
84 – 92	B
75 – 83	C
67 – 74	D
66 and below	F

ADDENDUM TO SYLLABUS

QUIZZES: Quizzes will be given on many of the days that the class meets. This may result in around 6-8 (10 question) quizzes (teacher's discretion). Each question on a quiz will add one additional point to the total points accumulated in the quarter. One (1) quiz will be dropped (the lowest score). Quizzes will be given the last 10 minutes of class. Overlap students will have to get to class or find me WITHIN 10 MINUTES of class being over to have an opportunity to take the quiz. There are NO make-ups for missed quizzes. MOST of the quizzes will be in short answer format.

TUMORS

Week 1-5

- I. Introduction
- II. Metastatic tumors
- III. Primary malignant tumors of bone
 - A. Multiple Myeloma and Plasmacytoma
 - B. Osteosarcoma
 - C. Chondrosarcoma
 - D. Ewing's sarcoma
 - E. Chordoma
- IV. Primary quasimalignant bone tumors
 - A. Giant Cell Tumor
- V. Primary benign tumors of bone
 - A. Osteochondroma
 - B. Hemangioma

- C. Osteoma
- D. Osteoid Osteoma
- E. Osteoblastoma
- F. Enchondroma
- G. Chondroblastoma
- H. Nonossifying Fibroma and Fibrous Cortical Defect (Fibrous Xanthoma)
- I. Simple Bone Cyst
- J. Aneurysmal Bone Cyst

Week 6-10

VI. Tumor like processes

- A. Paget's disease
- B. Fibrous Dysplasia
- C. Neurofibromatosis

VII. Infection

- A. General overview
- B. Suppurative osteomyelitis
- C. Septic arthritis
- D. Nonsuppurative osteomyelitis (TB)

VIII. Hematologic and vascular disorders

- A. Avascular necrosis

IX. Epiphyseal disorders

- A. Legg-Calve-Perthes disease
- B. Freiberg's disease
- C. Keinboch's disease
- D. Osgood-Schlatter's disease
- E. Scheuremann's disease
- F. Osteochondritis Dessimans
- G. Others

X. Metabolic Disorders

- A. Senile and Postmenopausal Osteoporosis
- B. Regional Osteoporosis
 1. Reflex Sympathetic Dystrophy Syndrome
 2. Disuse and Immobilization Osteoporosis
 3. Transient Regional Osteoporosis
- C. Osteomalacia
- D. Rickets
- E. Scurvy
- F. Hyperparathyroidism
- G. Acromegaly