

JEFFERSON COLLEGE
COURSE SYLLABUS

RAD250

Computed Tomography Registry Review Course

3 Credit Hours

I. CATALOGUE DESCRIPTION

- A. Prerequisites: Registered Radiologic Technologist through the American Registry of Radiologic Technologists (ARRT) or second year Radiologic Technology student in their final semester

Understand radiation physics	Class Discussion/Activity Written Examinations Written Assignments
Identify plane, position and pathology for the cranium, neck, chest, abdomen, pelvis and MSK	Class Discussion/Activity Written Examinations Written Assignments

II. OUTLINE OF TOPICS

A. History of CT

- v. Medications- metformin, Coumadin, steroids, anti-anxiety, gating
- vi. Post procedure instructions- diabetic patients, biopsy, myelography

C. Contrast Administration

1. Venipuncture
 - i. Aseptic technique
 - ii. Sterile technique
 - iii. Site selection
 - iv. Needle types gauge
 - v. Documentation
2. Injection Techniques
 - i. Manual verses power injectors
 - ii. Types of injectors
 - iii. Extravasation
3. Contrast agents and dosing
 - i. Positive
 - ii. Negative
 - iii. Neutral
 - iv. Intravenous (IV) contrast media
 - v. Enteral- barium and water soluble

iii. C

- b. Transverse
 - c. Axial
 - d. Coronal
- ii. Filter back projection
- iii. Iterative reconstructions
- iv. Interpolation
- v. Algorithms
- vi. Digital to analog

- ii. Reproductive organs
- iii. Distal colon and rectum
- iv. Vascular

6. MSK

- i. Upper extremity
- ii. Lower extremity
- iii. Spine
- iv. Pelvis/hips
- v. Shoulders
- vi. Ribs
- vii. Vascular

7. Special procedures

- i. Myelography
- ii. Arthrography
- iii. Diskograms
- iv.

B. Course homepage available through Blackboard

VI. SUPPLEMENTAL REFERENCES

A. Supplemental Textbooks

- a. Peterson, Connie (n.d.) *Sectional Anatomy for Imaging Professionals* (Current Edition).Elsevier.

B. Class Handouts

C. Library Resources

- i. Textbooks
- ii. Periodicals
- iii. Films On Demand Videos

D. Internet Resources

- iv. On-line references
- v. Textbook companion website

VII. METHOD OF EVALUATION (basis for determining course grade)

GRADES—Grades will be based on the percentage of total possible earned out of total points possible for this semester. ~~The assignments will vary~~ in the number of possible points based upon amount of work involved and complexity of material. The student should be aware that proofreading and

XI. OUTSIDE OF CLASS ACADEMICALLY RELATED ACTIVITIES

The U.S. Department of Education mandates that students be made aware of expectations regarding coursework to be completed outside the classroom. Students are expected to spend substantial time outside of class meetings engaging in academically related activities such as reading, studying, and completing assignments. Specifically, time spent on academically related activities outside of class combined with time spent in class meetings is expected to be a minimum of 37.5 hours over the duration of the term for each credit hour.