JEFFERSON COLLEGE
COURSE SYLLABUS

RAD135
Radiographic Positioning III
3 Credit Hours

Revised by: Janet E. Akers BS RT (R)(M)
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Dena McCaffrey, Dean, Career & Technical Education
RAD135 Radiographic Positioning III

I. CATALOGUE DESCRIPTION

A. Prerequisites: Acceptance to Radiologic Technology Program, Reading Proficiency

B. Credit hour award: 3

C. Description: This course consists of lecture and practicum in routine and trauma radiographic procedures for skull, facial bone and sinus studies using relevant structural relationships, anatomical landmarks in radiographic positioning, types and sizes of image receptors used for each study, routine and non-routine positioning and techniques of the region, body planes and lines, medical terms, definitions, abbreviations and symbols. Radiographic anatomy, radiation protection and patient care skills are reinforced. The student will evaluate radiographic image quality in simulated clinical conditions. This course is a portion of the five steps to clinical competency and must be completed with an 86% or better in both the lecture and practicum sections. (S)

II. EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES

<table>
<thead>
<tr>
<th>Expected Learning Outcomes</th>
<th>Assessment Measures</th>
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<tr>
<td>Identify the major anatomical structures and positioning terms related to the skull, facial bones and sinuses.</td>
<td>Written Assignments</td>
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<td>Class Discussion/Activity</td>
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<td>Written Examinations</td>
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<td>Competency Testing</td>
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<tr>
<td>Compare traditional and non-traditional projections used for skull, facial bones and sinuses.</td>
<td>Class Discussion/Activity</td>
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<td>Written Examinations</td>
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<td>Written Assignments</td>
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<td>Competency Testing</td>
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<tr>
<td>Determine film size, exposure factors, central ray direction and/or angulation for radiographic procedures.</td>
<td>Class Discussion/Activity</td>
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<td>Written Examinations</td>
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<td>Written Assignments</td>
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<td>Competency Testing</td>
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<tr>
<td>Demonstrate, in the lab, an understanding of pre-examination patient criteria practices for skull, facial bones and sinuses procedures.</td>
<td>Class Discussion/Activity</td>
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<td>Written Examinations</td>
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<td>Written Assignments</td>
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<td>Competency Testing</td>
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| Demonstrate, in the lab, radiation safety protection practices utilized in radiographic procedures | Class Discussion/Activity  
Written Examinations  
Written Assignments  
Competency Testing |
|---|---|
| Differentiate between basic positioning terms, body movements and joint classifications | Class Discussion/Activity  
Written Examinations  
Written Assignments  
Competency Testing |
| Identify the anatomical structures visible on radiographs of the skull, facial bones and sinuses | Class Discussion/Activity  
Written Examinations  
Written Assignments |

### III. OUTLINE OF TOPICS

A. Neuro Radiography

1. Skull Positioning
   i. Anatomy
      1. Skull  
      2. Cranial Bones  
      3. Ear  
      4. Facial Bones  
      5. Articulations of the skull
   ii. Terminology  
   iii. Pathology  
   iv. Exposure Technique  
   v. Skull Topography  
   vi. Skull Morphology  
   vii. Technical Considerations  
   viii. Radiation Protection  
   ix. Protocols  
   x. Positioning Considerations
      1. Type  
      2. Anatomy  
      3. Indications  
      4. Radiographic Film Size  
      5. Radiographic Technique  
      6. Patient Position  
      7. Radiographic Film Image  
      8. Film Critique  
      9. Trauma

2. Facial Bone Positioning
   i. Anatomy
      1. Facial Bones
ii. Terminology
iii. Pathology
iv. Exposure Technique
v. Technical Considerations
vi. Radiation Protection
vii. Protocols
viii. Positioning Considerations
   1. Type
   2. Anatomy
   3. Indications
   4. Radiographic Film Size
   5. Radiographic Technique
   6. Patient Position
   7. Radiographic Film Image
   8. Film Critique
   9. Trauma

3. Paranasal Sinuses Positioning
   i. Anatomy
      1. Sinuses
      2. Maxillary Sinuses
      3. Frontal Sinuses
      4. Ethmoid Sinuses
      5. Sphenoid Sinuses
   ii. Terminology
   iii. Pathology
   iv. Exposure Technique
   v. Technical Considerations
   vi. Radiation Protection
   vii. Protocols
   viii. Positioning Considerations
      1. Type
      2. Anatomy
      3. Indications
      4. Radiographic Film Size
      5. Radiographic Technique
      6. Patient Position
      7. Radiographic Film Image
      8. Film Critique
      9. Trauma

4. Orbits & Nasal Bones Positioning
   i. Anatomy
      1. Orbits
      2. Nasal Bones
   ii. Terminology
   iii. Pathology
   iv. Exposure Technique
v. Technical Considerations
vi. Radiation Protection
vii. Protocols
viii. Positioning Considerations
   1. Type
   2. Anatomy
   3. Indications
   4. Radiographic Film Size
   5. Radiographic Technique
   6. Patient Position
   7. Radiographic Film Image
   8. Film Critique
   9. Trauma
5. Zygomatic Arches & Mandible Positioning
   i. Anatomy
      1. Zygomatic Arches
      2. Mandible
   ii. Terminology
   iii. Pathology
   iv. Exposure Technique
   v. Technical Considerations
   vi. Radiation Protection
   vii. Protocols
viii. Positioning Considerations
   1. Type
   2. Anatomy
   3. Indications
   4. Radiographic Film Size
   5. Radiographic Technique
   6. Patient Position
   7. Radiographic Film Image
   8. Film Critique
   9. Trauma

IV. METHOD(S) OF INSTRUCTION

This course is taught using a variety of instructional methods, which include but are not limited to interactive lectures, computer presentations, group activities and exercises, videos, supplemental handouts and student presentations. Students are expected to be ACTIVE participants in the learning process. Students are expected to read the assigned readings prior to scheduled class meetings and come to class prepared to actively participate in all activities.

V. REQUIRED TEXTBOOK(S)

A. Frank, E., Long, B., Smith, B. *Merrill’s Atlas of Radiographic


VI. REQUIRED MATERIALS

A. A computer with internet access and basic software to include Word and Power Point (available through Jefferson College labs)
B. Course homepage available through Blackboard
C. Index card holder/binder, ½” Binder, paper, pens, pencils with erasers, highlighters

VII. SUPPLEMENTAL REFERENCES

A. Class Handouts
B. Library Resources
   1. Textbooks
   2. Periodicals
   3. Films On Demand Videos
C. Internet Resources
   1. On-line references
   2. Textbook companion website

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

Assignments will consist of worksheets, textbook reading, review questions and other activities to enhance the learning experience.

Evaluation tools may include research projects, written and oral communication projects, class attendance/participation, homework assignments, and exams.

GRADES – Grades will be based on the percentage of total points 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.

A final semester grade of 86% or above must be achieved in both the classroom and lab sections of this course to successfully complete this course.

EXAMS – All exams with scores less than 86% must be retaken until a score of 86% or above is achieved to complete course requirements. The original score will be used to figure the semester grade. The student will be allowed to retake an exam a maximum of two times. If the student has not passed an exam within the three designated attempts, the student will present to the review board and may be dismissed from the program. The student must
contact the instructor prior to any absence to make arrangements for retesting. Until course requirements are met, the final grade will be an incomplete.

If an exam is not taken at the scheduled time and arrangements for a make-up exam have not been made prior to the designated exam time, the grade for that exam will be zero. No make-up exam will be considered unless the instructor is personally notified prior to the absence. If a student arranges to take the exam at other than the scheduled time, 5% will be deducted from the grade on that exam. Make-up exams are scheduled at the convenience of the instructor. Student’s grade will also be based on participation in class and attendance.

ASSIGNMENTS - In order to be prepared for each class meeting, the student should complete each homework assignment prior to the following class meeting. All assignments must be typewritten and are due at the beginning of class on the assigned due dates. Late assignments will not be accepted. In-class quizzes and assignments cannot be made up.

Grading Scale: (Jefferson College Radiologic Technology Program's)
A= 100-92%
B= 91.9-86%
C= 85.9-80%
D= 79.9-70%
F= 69.9 and below
I= Incomplete
W= Excused withdrawal from course

IX.  ADA AA STATEMENT

Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services (Library; phone 636-481-3169).

X.  ACADEMIC HONESTY STATEMENT

All students are responsible for complying with campus policies as stated in the Student Handbook (see College website, http://www.jeffco.edu/jeffco/index.php?option=com_weblinks&catid=26&Itemid=84

XI.  ATTENDANCE STATEMENT

Students earn their financial aid by regularly attending and actively participating in their coursework. If a student does not actively participate, he/she may have to return financial aid funds. Consult the College Catalog or a Student Financial Services representative for more details. Student’s grade will also be based on participation in class and attendance.