JEFFERSON COLLEGE

COURSE SYLLABUS

RAD105

Introduction to Radiography

1 Credit Hour

Revised by: Janet E. Akers BS RT (R)(M)
Revised Date: September 2013

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Dena McCaffrey, Dean, Career and Technical Education
RAD105 Introduction to Radiography

I. CATALOGUE DESCRIPTION

A. Prerequisites: Acceptance to Radiologic Technology Program, and reading proficiency

B. Credit hour award: 1

C. Description: This course shall provide the student with an overview of Radiologic Technology and its role in health care delivery. Students will be oriented to the academic and administrative structure of the program, radiographer role and responsibility, and to the profession as a whole. (F)

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>Distinguish various accrediting and credentialing agencies used and their function.</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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<tr>
<td>Differentiate between historical perspectives of x-ray discovery and modern day perspectives and customer service in radiography today.</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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<tr>
<td>Adjust prefixes, roots, suffixes of medical terminology used in radiology.</td>
<td>Class Discussion/Activity</td>
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<td>Written Examinations</td>
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<td>Develop an understanding of how to apply classroom knowledge in the clinical setting.</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>Define traits of becoming a better student while applying critical reading and thinking skills.</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>Define professional ethics and medical law.</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>Oral Communication Assignment</td>
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<td>Explain the primary professional associations associated with the radiology profession.</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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| Discuss the radiographer’s role in image production and evaluation. | Written Assignments  
Classroom Discussion/Activity |
|---|---|
| Explain organization and operation of the radiology department. | Written Assignments  
Written Examinations  
Classroom Discussion/Activity |
| Recognize Human and cultural diversity and what it means to the care provider. | Classroom Discussion/Activity  
Written Assignments  
Written Examinations |
| Recognize the importance of health information management. | Classroom Discussion/Activity  
Written Assignments  
Written Examinations |

### III. OUTLINE OF TOPICS

A. Accreditation and Credentialing
   1. Accreditation Body
      i. Definition
      ii. Purpose of agency
      iii. History
      iv. Type of program
      v. Organization process
   2. Credentialing Body
      i. Definition
      ii. Purpose of agency
      iii. Organization process
   3. Professional Organization and Development
      i. Purpose
      ii. Radiology Managers/supervisors
      iii. Educators
      iv. Radiologic technologists/radiologists

B. Role of the Radiologic Technologist/Radiographer
   1. Duties and Responsibilities
   2. Ethics and Law in the Radiologic Sciences
      i. Legal terms, principles, doctrines and law specific to the radiologic sciences
      ii. Institutional and professional liability protection typically available to the radiographer
      iii. Consent forms use relative to specific radiographic procedures
   3. Quality Customer Service
      i. Definition
      ii. Types of customer
      iii. Human and cultural diversity and what it means to the care provider.
      iv. Benefit of high quality service
v. Conflict resolution
   1. Effective listening
   2. Empathy
4. Importance of health information management.
5. Becoming a Better Student
   i. Hierarchy of human needs
   ii. Physiological needs
   iii. Psychological needs
   iv. Primal reaction to stress
   v. Stress and Conflict
      1. Definition
      2. Causes
      3. Managing and resolving
6. Dynamics of Learning
   i. Memorization
      1. Types
      2. Listening/reading skill improvement
      3. Retrieval process
      4. Remembering/forgetting
7. Critical Thinking Skills
   i. Definition
   ii. Qualities of a thinker
   iii. Developmental skills
8. Radiology: A Historical Perspective
   i. Wilhelm Conrad Roentgen
   ii. Discovery of x-rays
   iii. Advancements of the Roentgen Rays
C. Practicing the Profession
   1. Radiography Education – From Classroom to Clinic
      i. Patient as the customer
      ii. Basic Curriculum
      iii. Clinical Setting/evaluation
   2. Language of Medicine (abbreviations, prefixes, root, suffixes)
      i. The word building process
      ii. Medical abbreviations and symbols
      iii. Radiologic Technology procedures and terms
   3. Organization and Operation of the Radiology Department
      i. Policies and procedures
      ii. Personal monitoring
      iii. Safety standards
         1. Departmental
         2. Electrical
         3. Infection Control
         4. Quality Assurance
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)


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. 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)

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 80% or above must be achieved in this course to successfully complete this course.

EXAMS – All exams with scores less than 75% must be retaken until a score of 75% 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. Assignments will consist of worksheets, textbook reading, review questions and other activities to enhance the learning experience.

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

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.