

MASTER SYLLABUS

COURSE NUMBER AND TITLE:

RAD 352-3 Special Imaging Modalities

COURSE DESCRIPTION:

This course provides the student with the knowledge and understanding relevant to the function, operation and application of the various techniques used in image production. This course also includes a complete review of the radiography curriculum in preparation for the American Registry of Radiologic Technologists National certification examination.

All Radiography students must pass each of their Radiologic Science courses (RAD) with a grade of “C” or better (the minimum requirement) in order to satisfy Program requirements, and stay in the Program.

Any Radiography student that does not meet the minimum course requirement (a course grade of “C” or better) will not be allowed to continue in the Program. The student is allowed to re-apply to the Program the following year.

COURSE OBJECTIVES:

1. Students understanding of various techniques and modalities used in imaging through presentation given by their peers.
2. Review Radiation Protection topics for radiographers in preparation for the ARRT registry examination.
3. Review Equipment Operation and Quality Control topics for radiographers in preparation for the ARRT registry examination.
4. Review Image Acquisition and Evaluation topics for radiographers in preparation for the ARRT registry examination.
5. Review Imaging Procedures topics for radiographers in preparation for the ARRT registry examination.
6. Review Patient Care and Education topics for radiographers in preparation for the ARRT registry examination.

COURSE OUTLINE:

PERCENTAGE:

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| 1. Radiation Physics | 20% |
| 2. Radiographic Image Quality (CR, DR) | 10% |
| 3. Special Imaging Equipment I
(Fluoroscopy, Tomography, Mammography, PACs) | 10% |
| 4. Special Imaging Equipment II
(CT, MRI, Sonography, Nuclear Medicine) | 10% |
| 5. Generators (Single Phase, 3-Phase, 12-Pulse) | 10% |
| 6. Tubes and Phototimers/AEC | 10% |
| 7. Corectec Lessons | 30% |

MEANS OF STUDENT EVALUATION:

Grading Scale

93 - 100 =A
85 - 92 =B
75 - 84 =C
0 - 74 =F

PREQUISITE: RAD 332 with a minimum grade of C.

Co-Requisites: RAD 312, RAD 322 and RAD 342

TEXTBOOKS:

1. Carlton, R.R. & Adler, A.M. (2019). Principles of Radiographic Imaging: An Art and a Science, 6th edition. Cengage Learning. ISBN-13: 978-1439058725.
2. Callaway, W.J. (2017). Mosby's Comprehensive Review of Radiography: The Complete Study Guide and Career Planner, 8th edition. St. Louis, MO: Elsevier Science/Mosby. ISBN-13: 978-0323080781.
3. Optional: Carlton, R.R. & Adler, A.M. (2019). Workbook for Carlton/Adler's Principles of Radiographic Imaging: An Art and a Science, 6th edition. Cengage Learning. ISBN-13: 978-1439058701.
4. Optional: Saia, D.A. (2012). Radiography PREP: Program Review and Examination Preparation, 7th edition. Publisher: McGraw-Hill Medical. ISBN-13: 978- 0071787048.
5. Optional: Saia, D.A. (2012). Lange Q&A Radiography Examination, 9th edition. Publisher: McGraw-Hill Medical. ISBN-13: 978- 0071787215.
6. CorectecReview.com Corectec's Online Radiography Review Course