

MASTER SYLLABUS

COURSE NO., HOURS, AND TITLE:

RAD 521, 3, Advance Practice of Radiologic/Imaging Sciences I

COURSE DESCRIPTION:

This course will include a review of the following topics: Radiation physics, radiation biology, anatomy, pharmacology, human disease/pathology, advanced imaging methods, advanced imaging modalities, and patient care.

PREREQUISITE TO: RAD 541

COURSE OBJECTIVES

The objectives of RAD 521, Advance Practice of Radiologic/Imaging Sciences I are to gain a better understanding of the following topics:

1. Radiation physics
2. Radiation biology
3. Anatomy
4. Pharmacology
5. Human disease/pathology
6. Advanced imaging methods
7. Advanced imaging modalities
8. Patient care

TOPICAL OUTLINE:

| Topics | Percentages of Time |
|---|---------------------|
| I. Radiation physics | 12% |
| II. Radiation biology | 12% |
| III. Anatomy | 12% |
| IV. Pharmacology | 12% |
| V. Human disease/pathology | 13% |
| VI. Advanced imaging methods | 13% |
| VII. Advanced imaging modalities | 13% |
| VIII. Patient care | 13% |

TEXTBOOKS:

Required:

Bushong, S. (2008). "Radiologic Science for Technologists Physics, Biology, and Protection, 9th Ed." Mosby (Elsevier).

Frank, E., Long, B., & Smith, B. (2009) "Merrill's Atlas of Radiographic Positioning & Procedures, 11th Ed." Mosby (Elsevier).

Hall, J. & Giaccia, A. (2006). "Radiobiology for the Radiologist, 6th Ed." Lippincott, Williams and Wilkins.

Jensen, S. & Peppers, M. (2005). "Pharmacology and Drug Administration for Imaging Technologists, 2nd Ed." Mosby (Elsevier).

Recommended:

N/A