

MASTER SYLLABUS

COURSE NO., HOURS, AND TITLE:

RAD 541, 3, Advance Practice of Radiologic/Imaging Sciences II

COURSE DESCRIPTION:

This course will continue to cover the same topics that were reviewed in RAD 521 but to a greater level of understanding. Topics include: Radiation physics, radiation biology, anatomy, pharmacology, human disease/pathology, advanced imaging methods, advanced imaging modalities, and patient care.

Prerequisite: A grade of "C" or better in RAD 521.

PREREQUISITE TO: N/A

COURSE OBJECTIVES

The objectives of RAD 541, Advance Practice of Radiologic/Imaging Sciences II are to gain a greater 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