<center>**MASTER SYLLABUS**</center>

COURSE NUMBER AND TITLE:
RAD 112L-1 Radiographic Anatomy and Positioning Laboratory

COURSE DESCRIPTION:
This course is the Laboratory to accompany RAD 112. Designed to provide the student radiographer with hands-on radiographic positioning experiences, in an energized X-ray room, leading to the development of clinical competencies. It serves as a foundation for the development of advanced clinical skills. The competencies developed are chest, abdomen, upper and lower extremities, pelvic girdle, spine and digestive system. The bony anatomy of these areas will be stressed. The principles of radiation protection for the patient and for the radiographer are practiced as well. Routine radiographic positioning common to most health facilities will be described, demonstrated and practiced on members of the class in the X-ray labs. Two laboratory sessions per week. Must be taken concurrently with RAD 112. If RAD 112 is dropped, then RAD 112L must be dropped. Lab fee: $75.00

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. Describe and demonstrate the body planes and associated medical terminology.

2. Apply the terminology associated with diagnostic radiography.

3. Given a diagram and/or radiograph locate the anatomy specific to the upper extremity, shoulder girdle, chest, bony thorax and abdomen.

4. Given a diagram and/or radiograph locate the anatomy specific to the lower extremity, pelvic girdle, and vertebral column.

5. Demonstrate competency in operating all functioning locks on the X-ray tube, X-ray table, the control panel, and the digital image processor.

6. Given the exposure factors for a specific body part, calculate the appropriate mAs and kVp values, to produce a desirable radiograph containing an image quality that is equal to, or better than the image quality displayed in the Merrill's positioning atlases.

7. Identify the anatomy visualized on radiographs produced in the lab settings.

8. Apply the principles of radiation protection in the lab setting.

9. Apply the concepts of radiographic positioning in the lab setting.

COURSE OUTLINE:	**PERCENTAGE:**
1. Positioning terminology	10%
2. Exposure factors	5%

3. Upper extremity & Shoulder girdle	20%
4. Thoracic Cavity	15%
5. Abdomen	10%
6. Lower extremity & Pelvic girdle	20%
7. Complete vertebral column	10%
8. Contrast exams: Urinary system & Digestive system	10%

MEANS OF STUDENT EVALUATION:

Grading Scale

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

PREREQUISITES: AH 241 with a grade of C or better. Restricted to RADS majors

Co-REQUISITES: RAD 102, RAD 112 and RAD 202

TEXTBOOK:

Required:

1. Frank, E.D., Long, B.W. & Smith, B.J. (Ed.). (2019). Merrill's Atlas of Radiographic Positions and Radiologic Procedures, 14th edition. 3 Volume Set. St. Louis, MO: Elsevier Science/Mosby, Inc.

2. Frank, E.D., Long, B.W. & Smith, B.J. (Ed.). (2019). Merrill's Pocket Guide to Radiography, 14th edition. Publisher: St. Louis, MO: Elsevier Science/Mosby, Inc.