

HAGERSTOWN COMMUNITY COLLEGE  
Official COURSE SYLLABUS

**COURSE: RAD 102 Radiography II**

**CREDITS: 3**

**INSTRUCTORS: Donna Carroll**

**SEMESTER/YEAR: Fall 2015**

**COURSE DESCRIPTION:**

This course focuses on the components, circuitry, and operation safety guidelines of radiographic equipment. The radiographic accessories utilized to enhance the production of quality radiographic images are also discussed. Laboratory fee required. Prerequisite: RAD 101. Two hours of lecture and three hours of laboratory each week. Semester offered: Fall of freshman year.

**PRIMARY TEXTBOOKS:**

Adler, Arlene M. Introduction to Radiologic Sciences and Patient Care, 2007, 5<sup>th</sup> edition.

Carlton, Richard R. Principles of Radiographic Imaging, Delmar Publishers, 2006, 5<sup>th</sup> edition.

Bushong Stewart C, Radiologic Science for Technologists, Elsevier, 9<sup>th</sup> or 10<sup>th</sup> ed, found on line only

**STUDENT LEARNING OUTCOMES:**

The student will

- a. identify the components of an x-ray unit and circuitry and their function.
- b. state the guidelines for and demonstrate safe operation of a radiographic unit.
- c. identify the accessories utilized to enhance the production of quality radiographic images and their function.
- d. explain the impact prime radiation exposure factors have on the production of quality radiographic images.

**TOTAL HOURS OF COURSEWORK**

To earn one academic credit at HCC, students are required to complete a minimum of 37.5 clock hours (45 fifty-minute "academic" hours) of coursework per semester. Those hours of coursework may be completed through a combination of hours within the classroom and hours outside the classroom. Certain courses may require more than the 37.5 minimum hours of coursework per credit. For most classes, students should expect to do at least 2 hours of coursework outside of class for each hours of in-class coursework.

**ACCOUNTING FOR CREDIT HOUR REQUIREMENT**

| <b>Assignment/Assessment</b>        | <b>Clock Hours</b> | <b>Explanation</b>                                     |
|-------------------------------------|--------------------|--|
| Assigned readings & sample problems | 57                 | Reading, note-taking, practicing sample problems, etc. |
| Exams 5 (15 hr/exam) x 5 hrs        | 80                 | Study time plus time to complete exams                 |
| Preparation for lab                 | 8                  | Research, writing,                                     |
| <b>Total hours</b>                  | <b>145</b>         |  |