

**Common Course Outline**  
**RADT 236**  
**Computed Tomography (CT) Registry Review**  
**1 Credit**

**Community College of Baltimore County**

**Description**

**RADT 236 – Computed Tomography (CT) Registry Review** presents a detailed explanation of key concepts outlined in the American Registry of Radiologic Technologists (ARRT) published Content Specifications for their post-primary exam in CT. This course is intended to qualify technologists who need an effective way to prepare for the ARRT CT exam.

**1 Credit**

**Co-requisites:** None

**Overall Course Objectives**

Upon completion of this course students will be able to:

1. identify the basic principles and physics of Computed Tomography;
2. summarize patient safety factors and risks associated with Computed Tomography;
3. review Aseptic techniques with the application of venipuncture use technology to investigate environmental issues;
4. examine the process of how a CT image is acquired and distinguish between generator phases and multiple detector computed tomography (MDCT) scanners;
5. compare the different types of contrast agents administered based upon scanning protocols;
6. explain the biological effects of radiation during CT and the importance of isocenter;
7. identify anatomy based upon axial, sagittal, and coronal planes;
8. describe methods of acquiring images based on speed, slices, resolution and technical factors;
9. review different interventional and fluoroscopic procedures; and
10. identify pathological processes with relation to appearance and Hounsfield units.

**Major Topics**

- I. Patient care and safety
- II. Radiation protection and radiobiology
- III. Sectional anatomy
- IV. Pathology
- V. Principles of physics
- VI. Instrumentation
- VII. Imaging procedures

## VIII. Scanning protocols

### **Course Requirements**

Grading procedures will be determined by the individual faculty member but will include the following:

#### **Grading/exams**

- Attendance and active participation
- One (1) interactive assignment/activity per module
- A minimum of four (4) quizzes
- A minimum of two (2) mock registry examinations
- One (1) Reflective Journal

A minimum score of 75% is required to pass this course. The ARRT has established a minimum scaled passing score of 75. The CT program has developed standards of grading that are consistent with grading system of other programs. Letter grades will be distributed according to the following standards:

A = 92-100

B = 83-91

C = 75-82

D = 65-74

F = below 65

**Written Assignments:** Students are required to utilize appropriate academic resources.

#### **Other Course Information**

The CT Registry Review course consists of 4 comprehensive modules that are delivered over a period of 4 weeks. Each week will have an outline, a detailed list of objectives, course objectives, lecture, practice exercises, and a post test. The course will cover 16 hours of didactic material and adhere to the standards and requirements desired by the ARRT. This course can also be applied to continuing education credits.