

**VIRGINIA WESTERN COMMUNITY COLLEGE  
COURSE OUTLINE**

I. COURSE TITLE: **Introduction to Radiation Oncology**

II. COURSE PREFIX/NUMBER ROC 110

III. COURSE DESCRIPTION

Presents an overview of the field of Radiation Oncology, focusing on medical and technical terminology, practices and procedures, treatment charts, roles of staff, clinical objectives, treatment modalities, and equipment. Other topics include patient care, psychosocial issues, ethics and legal considerations of patient management.

Prerequisites: None

Lecture 2 hour per week. (2 credits)

IV. COURSE OUTCOMES

At the completion of this course, the student should be able to:

1. Apply terminology pertaining to the medical and therapy professions.
2. Discuss ethical and legal considerations of patient management.
3. Relate the current methods of radiation cancer management procedures.
4. Identify and describe the various treatment modalities.
5. Describe specific equipment to include operation and functions.
6. Depict the role and responsibilities of each staff member

V. REQUIRED MATERIALS/TEXTBOOK

Internet access required

Textbook:

Washington, C. and Leaver, D. (2020). *Principles and practice of radiation therapy* (5<sup>th</sup> ed.). St. Louis, MO: Mosby Co. ISBN 978-0-323-59695-4

VI. TOPICAL DESCRIPTION

The student will read the assigned chapter, view the power point presentation in Canvas

and complete the homework assignment and chapter quiz.  
Please refer to the Assignments and Exam information listed under the Syllabus tab in Canvas.

Topics Covered:

Chapter 1: Cancer: An Overview

Chapter 2: The Ethics and Legal Considerations of Cancer Management

PowerPoint 3: Principles of Pathology

Chapter 5: Detection and Diagnosis

Chapter 6: Medical Imaging

Exam I – Chapters 1, 2, PP 3, 5, and 6

Chapter 7: Treatment Delivery Equipment

Chapter 8: Treatment Procedures

PowerPoint 8: Simulator Design

Chapter 21: Computed Tomography Simulation

Exam II – Chapters 7, 8, PP 8, and 21,