

**Virginia Western Community College**  
**ROC 121**  
**Radiation Oncology/Pathology II**

**Prerequisites**

ROC 110, ROC 120

**Course Description**

A continuation of Radiation Oncology/Pathology I, which focuses on malignant pathology arising in each anatomical site, radiation treatment rationale, treatment techniques and radiobiological response.

**Semester Credits: 3 Lecture Hours: 3 Lab/Clinical/Internship Hours: 0**

**Required Material:**

Washington, C. and Leaver, D. (2016). *Principles and practice of radiation therapy* (4<sup>th</sup> ed.). St. Louis, MO: Mosby Co. ISBN 978-0-323-28752-4

Alcamo, I. and Krumhardt, B. (2004). *Anatomy and physiology the easy way* (3<sup>rd</sup> ed.). Barron's Educational Services. ISBN 13:978-0-7641-1979-8

**Course Outcomes**

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

- Apply medical terminology to anatomy discussed
- Use diagrams to label and identify anatomical structures
- For each cancer reviewed, identify etiology, presenting symptoms, pathology, staging, patterns of spread, and prognosis
- Identify radiation doses and describe the radiobiological responses associated with each anatomic site
- Discuss the rationale behind each treatment technique
- Demonstrate the basic treatment technique for each anatomical site

**Topical Description**

Unit I      Gynecological Tumors

Unit II      Breast Cancer

Unit III      Central Nervous System Tumors

Unit IV      Digestive System Tumors

Unit V     Endocrine Tumors

Unit VI    Pediatric Solid Tumors and Leukemia