

Virginia Western Community College

ROC 121

Radiation Oncology / Pathology II

Prerequisites

Successful completion of ROC 110 and ROC 120.

Course Description

Continues Radiation Oncology I, which focuses on malignant pathology arising in each anatomical site, radiation rationale, treatment techniques, and radiobiological response.

Semester Credits: 3

Lecture Hours: 3

Lab/Clinical/Internship Hours: 0

Required Materials

Textbook:

Principles and Practice of Radiation Therapy. Washington, C. and Leaver, D. (2016). 4th Edition. ISBN: 9780323287524

Anatomy and Physiology the Easy Way. Alcamo, I. and Krumhardt, B. (2004). 3rd Edition. Barron's Educational Services. ISBN: 9780764119798

Other Required Materials:

Internet Access

Portal Design in Radiation Therapy. 2nd Edition. ISBN: 9780964271517

Course Outcomes

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

- Apply terminology to anatomy discussed
- Using diagrams label and identify anatomical structures
- For each cancer reviewed, identify etiology, presenting symptoms, pathology, staging, patterns of spread, and prognosis
- Identify lymphatic channels for each site
- Identify radiation dosage and describe the radiobiological responses associated with each anatomical site
- Discuss the rationale behind each treatment technique.
- Demonstrate without assistance the basic treatment technique for each anatomical site

Topical Description

Unit I: Gynecological Tumors

- Principles and Practice of Radiation Therapy
- Barron's Anatomy & Physiology the Easy Way

Unit II: Breast Cancer

- Principles and Practice of Radiation Therapy
- Anatomy and Physiology the Easy Way

Unit III: Central Nervous System Tumors

- Principles and Practice of Radiation Therapy
- Anatomy and Physiology the Easy Way

Unit IV: Digestive System Tumors

- Principles and Practice of Radiation Therapy
- Anatomy and Physiology the Easy Way

Unit V: Endocrine System Tumors

- Principles and Practice of Radiation Therapy
- Anatomy and Physiology the Easy Way

Unit VI: Pediatric Solid Tumors and Leukemia

- Principles and Practice of Radiation Therapy
- Anatomy and Physiology the Easy Way

Note to Instructors