

Virginia Western Community College

ROC 120

Radiation Oncology / Pathology I

Prerequisites

None

Course Description

Introduces 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 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

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: Anatomical Terminology, Cells, and Tissues

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

Unit II: Bones, Cartilage, and Soft Tissue Sarcomas

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

Unit III: Respiratory System Tumors

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

Unit IV: Male Reproductive and Genitourinary Tumors

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

Unit V: Lymphoreticular System Tumors

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

Unit VI: Head and Neck Cancers

- Principles and Practice of Radiation Therapy

Unit VII: Special Senses

- Anatomy and Physiology the Easy Way

Note to Instructors