

Virginia Western Community College

ROC 145

Quality Improvement

Prerequisites

Successful completion of ROC 110.

Course Description

Methods for performing various quality assurance tasks will be discussed, including the medical record component, as well as, standards and specification of therapeutic equipment. The student will acquire the knowledge and ability to recognize inaccuracy of treatment delivery.

Semester Credits: 2

Lecture Hours: 2

Lab/Clinical/Internship Hours: 0

Required Materials

Textbook:

Principles and Practice of Radiation Therapy. 4th Edition. ISBN: 9780323287524

The Physics of Radiation Therapy. 4th Edition. ISBN: 9780781788564

Other Required Materials:

AAPM Task Group #40

AAPM Task Group #66

Course Outcomes

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

- Describe the primary goal of a QA program
- Discuss the process for collecting data for ongoing data evaluation and the evaluation process
- Discuss the importance of chart accuracy
- Define recommended checking frequency for various components of the chart
- Discuss the importance of machine checks and warm-up procedure
- Discuss the necessity for proper documentation of equipment function
- Explain the importance of audio and visual communication
- Describe the types, function and check techniques for communication devices
- Develop a research project specific to quality improvement in radiation oncology

Topical Description

1	Quality Improvement in the Radiation Oncology Department
2	Treatment Delivery
3	Charts and Patient Identification
4	Quality Improvement Team
5	The Radiation Therapist and Education
6	Chart Checks, Informed Consent and Clinical Trials
7	Immobilization Devices
8	Filming/Imaging, Patient Communication Devices and Treatment Accessories
9	Equipment Safety, Faults and Interlocks
10	Linear Accelerator QA and Safety
11	CT/Simulator QA
12	Daily Warm-up, Preventative Maintenance
13	Brachytherapy
14	Treatment Planning, Dosimetry and IVDs
15	Culture of Safety in Radiation Oncology

Note to Instructors