MASTER SYLLABUS

COURSE NUMBER AND TITLE:

RAD 420- Special Studies in Radiation Therapy

COURSE DESCRIPTION:

A review of the many types of cancer to include discussion of clinical symptoms, treatment patterns, technical pitfalls, survival statistics and patient/family interactions. Quality assurance procedures for a Radiation Therapy Department will also be reviewed to include different QA tests, tolerances, and frequencies. Both written and oral seminar responses will be included in this course. Prerequisite: RAD 360, 370, 380, 390, 400.

COURSE OBJECTIVES:

- 1. Demonstrate knowledge of the nursing aspect of patient care.
- 2. Demonstrate an understanding of the disease: stage, diagnosis, prognosis, and cross-sectional anatomy.
- 3. Demonstrate an understanding of quality assurance procedures.
- 4. Demonstrate an understanding of billing procedures.

TOPICAL OUTLINE:

- 1. Nomenclature.
- 2. Dose calculation parameters.
- 3. Practical calculation methods.
- 4. Gap calculations.
- 5. Irregular field calculations.
- 6. Beam modifiers.
- 7. Isodose distributions and factors that affect isodose distributions.
- 8. Electron beam parameters and dosimetry.
- 9. Special procedures

MEANS OF STUDENT EVALUATION:

Grading Scale

A = 100 - 93

B = 92 - 85

C = 84 - 77

D = 76 - 70

F = 70 and below

A Course grade of a "B" or better is required in RAD 420 to continue in the radiation therapy program.

PREREQUISITES: Instructor approval.

TEXTBOOK:

No new textbook required.