HUMAN ONCOLOGY (H ONCOL)

H ONCOL/MED PHYS 410 — RADIOBIOLOGY
2-3 credits.
Effects of ionizing radiations of living cells and organisms, including physical, chemical, and physiological bases of radiation cytotoxicity, mutagenicity, and carcinogenesis; lecture and lab.

Requisites: None
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

H ONCOL/B M E/MED PHYS/PHYSICS 501 — RADIOLOGICAL PHYSICS AND DOSIMETRY
3 credits.
Interactions and energy deposition by ionizing radiation in matter; concepts, quantities and units in radiological physics; principles and methods of radiation dosimetry.

Requisites: Calculus and modern physics
Course Designation: Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

H ONCOL 510 — TOPICS IN ONCOLOGY
1-3 credits.
As a topics course in human oncology, the topics will vary. D.
Requisites: Undergrad basic math or physics or basic biology or pharmacology or M.
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2013

H ONCOL 681 — SENIOR HONORS THESIS IN HUMAN ONCOLOGY 1
3-4 credits.
Independent research in the area of human oncology including biology, medical physics, or clinical oncology. A written thesis is required in the final semester.

Requisites: Senior standing and consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No

H ONCOL 682 — SENIOR HONORS THESIS IN HUMAN ONCOLOGY 2
3-4 credits.
Independent research in the area of human oncology including biology, medical physics, or clinical oncology. A written thesis is required in the final semester.

Requisites: Consent of instructor
Course Designation: Honors - Honors Only Courses (H)
Repeatable for Credit: No

H ONCOL 691 — SENIOR THESIS IN HUMAN ONCOLOGY 1
3-4 credits.
Independent research in the area of human oncology including biology, medical physics, or clinical oncology. A written thesis is required in the final semester.

Requisites: Senior standing and consent of instructor
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2015

H ONCOL 692 — SENIOR THESIS IN HUMAN ONCOLOGY 2
3-4 credits.
Independent research in the area of human oncology including biology, medical physics, or clinical oncology. A written thesis is required in the final semester.

Requisites: Senior standing and consent of instructor
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

H ONCOL 699 — INDEPENDENT STUDY IN HUMAN CANCER BIOLOGY
1-3 credits.

Requisites: Human Onc 402 and/or cons inst
Course Designation: Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: Yes, unlimited number of completions

H ONCOL/MED PHYS 812 — RADIATION MEDICINE PHYSICS CLERKSHIP
2 credits.
Allows students to observe and participate in the application of medical physics principles in the clinical setting. Under supervision, students will perform the functions of a clinical medical physicist in radiation medicine.

Requisites: B M E/H ONCOL/MED PHYS/PHYSICS/B M E/H ONCOL/ MED PHYS 501 and B M E/MED PHYS/B M E 566
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

H ONCOL 910 — INDEPENDENT READING AND RESEARCH FOR FOURTH YEAR MEDICAL STUDENTS
1-12 credits.

Requisites: 4th yr Med st
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions

H ONCOL 922 — RADIATION ONCOLOGY-CSC
2-12 credits.

Requisites: 4th yr Med st
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
H ONCOL 990 — RESEARCH IN HUMAN CANCER BIOLOGY
1-12 credits.

Graduate thesis research.

Requisites: Consent of instructor

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions