ONCOLOGY (ONCOLOGY)

ONCOLOGY 401 — INTRODUCTION TO EXPERIMENTAL ONCOLOGY
2 credits.

Biological processes associated with and characteristic of neoplasia.
Enroll Info: None
Requisites: ZOOLOGY/BIOLOGY 101, BOTANY/BIOLOGY 130, ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 383, or graduate/professional standing
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
Level - Intermediate
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No
Last Taught: Fall 2021

ONCOLOGY/MICROBIO 545 — TOPICS IN BIOTECHNOLOGY
1 credit.

Seminars on current topics in agricultural, medical, and industrial biotechnology such as: microbiological production of food, drink, biopharmaceuticals; production methods, genetic engineering (vectors, recombination cloning), continuous fermentation; bioconversion processes and production of chemicals from biomass; plant biotechnology; transgenic animals. Enroll Info: None
Requisites: None
Course Designation: Level - Intermediate
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2022

ONCOLOGY/M&ENVTOX/PHM SCI/PHMCOL-M/POP HLTH 625 — TOXICOLOGY I
3 credits.

Basic principles of toxicology and biochemical mechanisms of toxicity in mammalian species and man. Correlation between morphological and functional changes caused by toxicants in different organs of the body. Enroll Info: None
Requisites: (BIOCHEM 501 or 508) and (ANAT&PHY 335, 435, or BIOCORE 485 486) and PATH 404; or graduate/professional standing
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
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: Yes, unlimited number of completions
Last Taught: Summer 2022

ONCOLOGY 673 — PURIFICATION AND CHARACTERIZATION OF PROTEIN AND PROTEIN COMPLEXES
2 credits.

The theory and practice of protein purification. Topics covered include conventional and recent protein fractionation techniques; enzyme assays, handling, and characterization; purification strategy; and overproduction of cloned gene products. The emphasis is on micro and laboratory scale purifications. Enroll Info: None
Requisites: BIOCHEM 508, CHEM 511 or graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2022

ONCOLOGY 675 — ADVANCED OR SPECIAL TOPICS IN CANCER RESEARCH
1-3 credits.

Examines special topics in cancer research. Topics and content will vary each semester and by section of the course. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
Level - Intermediate
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Summer 2022

ONCOLOGY 699 — SPECIAL RESEARCH PROBLEMS
1-3 credits.

Directed study projects as arranged with instructor. Enroll Info: None
Requisites: Consent of instructor
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
Last Taught: Spring 2022
ONCOLOGY 703 — CARCINOGENESIS AND TUMOR CELL BIOLOGY
3 credits.

Viral, chemical, and physical factors involved in tumor formation in humans and experimental animals; biology and biochemistry of neoplasia, both in vivo and in vitro. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2021

ONCOLOGY 778 — BIOINFORMATICS FOR BIOLOGISTS
3 credits.

Become familiar with bioinformatics theory and principles. Provides real-world experience that can be applied to your own work. Provides a foundation of knowledge that can be used to critically evaluate existing bioinformatics tools that can be used in your work, and in the absence of an appropriate tool, identify the analyses that demand the development of novel tools. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2022

ONCOLOGY 715 — ETHICS IN SCIENCE
1 credit.

A review and discussion of the fundamentals of ethical issues in science. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2022

ONCOLOGY 725 — READINGS IN CANCER BIOLOGY
2 credits.

A review and discussion of the current literature on topics related to cancer biology. The emphasis is on the development of skills in data analysis, critical interpretation, and clear writing. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2022

ONCOLOGY 735 — CURRENT PROBLEMS IN CANCER BIOLOGY
2 credits.

Emphasis is on the development of skills in data analysis and interpretation, grant proposal writing, and oral presentation to help prepare students for their Preliminary Exam. Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2021

ONCOLOGY 745 — MODELING HUMAN DISEASE IN ANIMALS
1 credit.

Provides a background in the use of animals in the study of human disease and hands-on exposure to common techniques such as tissue collection and processing, surgeries, imaging, and other manipulations. Lectures by basic scientists and clinicians will provide background about each of the organ systems or diseases and the ethics of animal research. Enroll Info: Prior to start of course, completion of online animal safety training. Instructions will be provided after enrollment.
Requisites: Consent of instructor
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No