

# CANCER BIOLOGY (CANC)

## Explanation of Course Numbers

- Courses in the 1000s are primarily introductory undergraduate courses
- Those in the 2000s to 4000s are upper-level undergraduate courses that also may be taken for graduate credit with permission and additional work assigned
- Those in the 6000s and 8000s are for master's, doctoral, and professional-level students
- The 6000s are open to advanced undergraduate students with approval of the instructor and the dean or advising office

### **CANC 8214. Cancer Biology Seminar. 1 Credit.**

Current and emerging topics with presentations and discussions facilitated by leading experts from GW and outside institution; student-led journal club and oral presentation opportunities. Prerequisites: BMSC 8210 and BMSC 8212.

### **CANC 8221. The Basic Science of Oncology. 3 Credits.**

Epidemiology, genetics, viruses, oncogenes, chemical carcinogenesis, radiation carcinogenesis, tumor growth, metastasis, biochemistry of cancer cells, tumor markers, hormones and cancer, cancer immunobiology, radiotherapy, and chemotherapy and immunotherapy. Prerequisites: BMSC 8210, BMSC 8212 and BMSC 8230.

### **CANC 8222. Molecular Oncology and Cancer Epigenetics. 3 Credits.**

Topics in molecular oncology, including epidemiology, genetics and epigenetics, carcinogenesis, tumor growth and metastasis, biochemistry of cancer cells, tumor markers, hormones and cancer, cancer immunobiology, radiotherapy, chemotherapy, and immunotherapy. Prerequisites: BMSC 8210 and BMSC 8212.

### **CANC 8223. Immunology and Immunotherapy of Cancer. 3 Credits.**

Tumor immunology, approaches for cancer immunotherapy, current clinical progress and limitations of cancer immunotherapies. For graduate students, translational researchers, and scientists and practicing clinicians. Prerequisites: BMSC 8210 and BMSC 8212.

### **CANC 8998. Advanced Reading and Research. 1-12 Credits.**

Restricted to doctoral candidates preparing for the qualifying examination. May be repeated for credit.

### **CANC 8999. Dissertation Research. 3-12 Credits.**

May be repeated for credit. Restricted to IBS students.