

ME.510 (ONCOLOGY CENTER)

Courses

ME.510.601. Advanced Clerkship in Critical Care - Oncology Intensive Care.

ME.510.699. Oncology Elective.

ME.510.700. Biology of Cancer. 1 Credit.

Emphasis is placed on the fundamental biological processes underlying oncogenesis, and factors affecting the progression of various neoplastic diseases. A basic foundation will be developed that will permit the student to approach various aspects of oncology including epidemiology, carcinogenesis, environmental issues, biologic behavior of the neoplastic cell, and the rationale for the use of various treatment modalities with understanding.

ME.510.701. New Approaches to Cancer Prevention and Therapy. 1 Credit.

Selected timely topics relevant to novel diagnostic and treatment techniques being developed for the management of patients with cancer are considered with a view toward illustrating the underlying principles. Emphasis is placed on illuminating the chemical and biologic basis of therapeutics and their translation impact on clinical practice.

ME.510.706. Fundamentals of Cancer: Cause to Cure. 2.5 Credits.

This course is designed to be highly translational, covering fundamental cancer molecular biology to the processes of transformation and metastases, and how targeted therapies emerge from new scientific knowledge. There are four modules: 1) Origins of Cancer; 2) Progression of Cancer; 3) Treatment; and 4) Prevention.

ME.510.707. Statistics and Data Analysis Using R. 1 Credit.

Statistics and Data Analysis Using R is a hands-on introduction to the R statistical software suite for biomedical scientists. It is assumed that the student is familiar with the plots and statistical summaries that are most commonly used in biomedical papers, but no formal background in statistics or programming is necessary. The primary objective is learning to use R, but the course also emphasizes the standards of practice that programmers and data analysts have implemented to ensure transparency, accuracy and accountability. Students are required to have a laptop. Classes will be held at the following location: CRB2 5M-52.