

Radiological Health G48.2301 Identical to G23.2301. **Harley**. 4 points.

Introduction to the physical properties of ionizing radiation and radioactivity. The biological processes involved following exposure to radiation are described. The latest data concerning health effects, mainly cancer, from external and internal radiation exposure are covered. Current principles concerning radiation protection and medical applications of radionuclides are described. Proper procedures and risk assessment in emergency situations are discussed.

Radiological Health G48.2301

Spring 2005

<u>DATE</u>	<u>LECTURE TOPIC</u>
January 18	Basic Principles, Units and Calculations
January 25	Decay Schemes, Energy, and Dosimetric Concepts I
February 1	X-Rays, Auger Electrons, Bremmssthalung
February 8	Dosimetry II (Internal)
February 15	Risk Estimation
February 22	Dosimetry III (External), Regulations
March 1	Radioactivity Build up and Decay
March 8	Natural Radioactivity
March 15	SPRING RECESS
March 22	Radioactivity Measurements
March 29	Health Physics at Wyeth Pharmaceutical Lab (Dr. M. Miello)
April 5	Current Issues (Depleted Uranium, Bioassay)
April 12	Radiochemistry (Dr. I. Fisenne)
April 19	Current Issues (Radioactive Dispersal Devices, Radioactive Waste)
April 26	Review
May 10	FINAL EXAM