

Syllabus: Radiobiology for Residents 2007-2008
Time of Meeting: Thursdays, 1:00 – 2:00 pm

<u>Date</u>	<u>Topic</u>	<u>Instructor</u>	<u>Room</u>
September 27, 2007	Introduction to course / Molecular-Techniques	Joann Sweasy	WWW, Rm 201
October 4, 2007	Molecular – Techniques II	Joann Sweasy	WWW, Rm 201
October 11, 2007	DNA Strand Breaks and Chromosomal Aberrations	Brooks Low	WWW, Rm 201
October 18, 2007	Molecular Mechanisms of DNA Damage	Dean Rupp	WWW, Rm 201
October 25, 2007	Molecular Mechanisms of DNA Repair	Dean Rupp	WWW, Rm 201
November 1, 2007	Repair at the Cellular Level	Dean Rupp	WWW, Rm 201
November 8, 2007	Exam	Joann Sweasy, Dean Rupp, Brooks Low	WWW, Rm 201
November 15, 2007	Mechanisms of Cell Death	Doug Brash	WWW, Rm 201
November 29, 2007	Molecular Signaling	Doug Brash	WWW, Rm 201
December 6, 2007	Molecular Signaling	Doug Brash	WWW, Rm 201
December 13, 2007	Cancer	William Summers	WWW, Rm 201
December 20, 2007	Cancer	William Summers	WWW, Rm 201
January 3, 2008	Radiation Carcinogenesis	William Summers	WWW, Rm 201
January 10, 2008	Exam	Doug Brash, William Summers	WWW, Rm 201
January 17, 2008	Tumor Microenvironment	Zhong Yun	WWW, Rm 201
January 24, 2008	Cell and Tissue Survival Assays	Sara Rockwell	WWW, Rm 201
January 31, 2008	Solid Tumor Systems	Sara Rockwell	WWW, Rm 201
February 7, 2008	Models of Cell Survival	Sara Rockwell	WWW, Rm 201
February 14, 2008	Oxygen Effect	Zhong Yun	WWW, Rm 201
February 21, 2008	Cell and Tissue Kinetics	Sara Rockwell	WWW, Rm 201
February 28, 2008	Exam	Sara Rockwell, Zhong Yun	WWW, Rm 201
March 6, 2008	Radiobiological aspects of alternative dose delivery systems	Joanne Weidhaas	WWW, Rm 201
March 13, 2008	Clinically relevant normal tissue responses	Susan Higgins	WWW, Rm201
March 20, 2008	Time Body Irradiation	Kenneth Roberts	WWW, Rm 201

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March 27, 2008	Radiosensitizers, Bioreductive drugs, Radioprotectors	Sara Rockwell	WWW, Rm 201
April 3, 2008	Time, Dose, Fractionation	Joanne Weidhaas	WWW, Rm 201
April 10, 2008	Therapeutic Ratio	Joanne Weidhaas	WWW, Rm 201
April 17, 2008	Radiation effects in developing embryo	Ken Roberts	WWW, Rm 201
April 24, 2008	Exam	Joanne Weidhaas, Kenneth Roberts, Sara Rockwell	WWW, Rm 201
May 1, 2008	Brachytherapy	Susan Higgins	WWW, Rm 201
May 8, 2008	Mechanisms of normal tissue response	Susan Higgins	WWW, Rm 201
May 15, 2008	Hyperthermia	Meena Moran	WWW, Rm 201
May 22, 2008	Chemotherapeutic agents and radiation therapy and gene therapy	Junjie Chen	WWW, Rm 201
May 29, 2008	Heritable Effects of Radiation	Junjie Chen	WWW, Rm 201
June 5, 2008	Radiation and Cataracts	Anwar Khan	WWW, Rm 201
June 12, 2008	Reserved in case we need a make up day		WWW, Rm 201
June 19, 2008	Exam	Susan Higgins, Junjie Chen, Meena Moran, Anwar Khan	WWW, Rm 201

Lectures last for one hour

Handouts are to be given for each lecture. PowerPoint is suggested, and handouts can be the slides. Please cite references in the handouts. Please give practice questions for each lecture. Practice questions can be taken from the in-service exam and other exam books.

Please e-mail exam questions to Kathy Antos (Katherine.antos@yale.edu) one week prior to the exam date. You may want to include questions from the in-service exam and previous boards. Include the answers on a separate sheet, along with the points to be given for each answer. Joann will grade the exams and report on the results.