

Location: BCCA: Vancouver & Vancouver Island Centres. Times: Tuesday & Friday 9:30 – 11:00am

Date	Lecture number	
Sep 11		No Classes – TA Orientation
Sep 15 – MM	1	Course Introduction, Atomic and Nuclear Structure, Radioactivity and Decay
Sep 18 – SZ	2	X-ray attenuation and absorption
Assign #1		
Sep 22 – SZ	3	
Sep 25 – SZ	4	Thompson and Rayleigh scattering, Compton effect
Sep 29 – SZ	5	
Oct 2 – SZ	6	Photoelectric effect, Pair production
Assign #2		
Oct 6 –DH	7	Electron interactions, Charged particles, stopping power
Oct 9 – DH	8	Stopping power (cont'd), LET
Assign #2 Due		
Oct 13 – DH	9	Exposure, Dose, Kerma
Oct 16 – DH	10	Heavy charged particles and neutrons
Oct 20 – DH/SZ		Mid-Term
Oct 23 – DH	11	Radiation protection and safety – Introduction, effects and standards
Oct 27 – DH	12	Occupational & Medical & Public Exposure, General shielding calculations
Assign #3		
Oct 30 – DH	13	Source handling, safety/shielding design, environment, waste
Nov 3 – DH/SZ		Mid Term Review (Optional)
Nov 6 – DB	14	Introduction to Clinical Medical Physics
Nov 10		UVic Reading Break – No Class
Nov 13 – DB	15	Isotope Machines
Assign #4		
Nov 17 – DB	16	Clinical X-ray Production
Nov 20 DB	17	LINACS
Nov 24 – DB	18	LINACS
Nov 27 – DB	19	LINACS
Dec 1 – SZ	20	Radiation Protection: Linac installation & Shielding calculations
Dec 4 – SZ/DH/DB		Course Review

Course final mark weightings: Assignments 25%, Mid-Term Exam 30%, Final Exam 45%

NB: A BCCA Facility tour to be arranged at mutually agreeable time at the Vancouver & Victoria Clinics (probably after hours)

Lecturers: WB = Dr. Wayne Beckham (Coordinator), BCCA Vancouver Island Centre
 SZ = Dr. Sergei Zavgorodni, BCCA Vancouver Island Centre
 DB = Dr. Deidre Batchelar, BCCA Centre for the Southern Interior
 DH = Dr. Derek Hyde, BCCA Centre for the Southern Interior
 MM = Dr. Marie-Pierre Milette, BCCA Centre for the Southern Interior

Contacts for Vancouver Students:

Dr. Cheryl Duzenli, BCCA Vancouver Centre
 TA TBA

UVIC Requirement: Calculators – On all examinations the only acceptable calculator is the Sharp EL-510R. This calculator can be bought in the Bookstore for about \$10. DO NOT bring any other calculator to examinations.