Location: Zoom Based Distance Teaching. Times: Tuesday & Friday 9:00 – 10:30am

Date	Location: Zoom Based Distance Teaching. 11mes: Tuesday & Friday 9:00 – 10:30am		
Sep 14 - MM		Lect	
Sep 17 - MM			
Assign #1 Sep 21 - MM 3 Thompson and Rayleigh scattering, Compton effect		1	
Sep 21 - MM		2	X-ray attenuation and absorption
Sep 24 – MM			
Assign#2 Sep 28 - MM 5 Photoelectric effect, Pair production	•	3	Thompson and Rayleigh scattering, Compton effect
Sep 28 - MM		4	
Oct 1 – HC Assign #3 Oct 5 – HC Assign #3 Oct 5 – HC Assign #3 Due Oct 12 – HC Oct 8 – HC Assign #3 Due Oct 12 – HC Oct 19 — Many Charged particles and neutrons Oct 15 Oct 19 — MM/HC Oct 22 – MC Oct 20 – MC Oct 20 – MC Assign #4 Oct 20 – MC Assign #4 Oct 20 – MC Nov 2 – MM Atomic and Nuclear Structure, Radioactivity and Decay Nov 5 – MC It INACS Nov 12 Reading/Midterm Break – No Class Nov 10 – MC Assign #5 Nov 12 — Radiation protection and safety – Introduction, effects and standards Assign #5 Nov 23 – DH Radiation Protection: Linae installation & Shielding calculations Nov 28 Nov 30 – DH 20 Source handling, safety/shielding design, environment, waste			
Assign #3	Sep 28 – MM	5	
Oct 5 – HC 7 Stopping power (cont'd), LET Oct 8 – HC 8 Exposure, Dose, Kerma Assign #3 Due 9 Heavy charged particles and neutrons Oct 12 – HC 9 Heavy charged particles and neutrons Oct 19 – MM/HC Mid-Term (NB this is 2.5 hours duration) Oct 29 – MC 11 Introduction to Clinical Medical Physics Oct 26 – MC 12 Isotope Machines Assign #4 Oct 29 – MC 13 Clinical X-ray Production Nov 2 – MM Atomic and Nuclear Structure, Radioactivity and Decay Nov 5 – MC 14 LINACS Nov 9 – MC 15 LINACS Nov 12 Reading/Midterm Break – No Class Nov 16 – MC 16 LINACS Nov 19 – DH 17 Radiation protection and safety – Introduction, effects and standards Assign #5 18 Occupational & Medical & Public Exposure, General shielding calculations Nov 26 – DH 19 Radiation Protection: Linac installation & Shielding calculations Nov 30 – DH 20 Source handling, safety/shielding design, environment, waste		6	Electron interactions, Charged particles, stopping power
Oct 8 - HC Assign #3 Due Oct 12 - HC 9 Heavy charged particles and neutrons Heavy charged particles and neutrons			
Assign #3 Due Oct 12 - HC 9 Heavy charged particles and neutrons		7	
Oct 12 - HC 9 Heavy charged particles and neutrons Oct 15 10 No class Oct 19 - MM/HC Mid-Term (NB this is 2.5 hours duration) Oct 22 - MC 11 Introduction to Clinical Medical Physics Oct 26 - MC 12 Isotope Machines Assign #4 13 Clinical X-ray Production Nov 2 - MM Atomic and Nuclear Structure, Radioactivity and Decay Nov 5 - MC 14 LINACS Nov 9 - MC 15 LINACS Nov 12 Reading/Midterm Break - No Class Nov 16 - MC 16 LINACS Nov 19 - DH Assign #5 17 Radiation protection and safety - Introduction, effects and standards Assign #5 17 Radiation Protection: Linac installation & Shielding calculations Nov 26 - DH 19 Radiation Protection: Linac installation & Shielding calculations Nov 28 Nov 30 - DH 20 Source handling, safety/shielding design, environment, waste	Oct 8 – HC	8	Exposure, Dose, Kerma
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Oct 22 – MC 11 Introduction to Clinical Medical Physics Oct 26 – MC 12 Isotope Machines Assign #4 13 Clinical X-ray Production Nov 2 – MM Atomic and Nuclear Structure, Radioactivity and Decay Nov 5 – MC 14 LINACS Nov 9 – MC 15 LINACS Nov 12 Reading/Midterm Break – No Class Nov 16 – MC 16 LINACS Nov 19 – DH Assign #5 Radiation protection and safety – Introduction, effects and standards Assign #5 Decupational & Medical & Public Exposure, General shielding calculations Nov 26 – DH 19 Radiation Protection: Linac installation & Shielding calculations Nov 28 Nov 30 – DH 20 Source handling, safety/shielding design, environment, waste	Oct 15	10	No class
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Assign #5 due Nov 28 Nov 30 – DH 20 Source handling, safety/shielding design, environment, waste		18	Occupational & Medical & Public Exposure, General shielding calculations
Nov 28 Nov 30 – DH 20 Source handling, safety/shielding design, environment, waste	Nov 26 – DH	19	Radiation Protection: Linac installation & Shielding calculations
TOUR DIE 20 C. D.:	_		
Dec 3 – MC/DH Course Review	Nov 30 – DH	20	Source handling, safety/shielding design, environment, waste
	Dec 3 – MC/DH		Course Review

Course final mark weightings: Assignments 25%, Mid-Term Exam 37%, Final Exam 38%

NB: A BC Cancer Facility tour to be arranged at mutually agreeable time at the Vancouver, Kelowna & Victoria Clinics (usually after hours)

Course Coordinator

Lecturers:

WB = Dr. Wayne Beckham, BC Cancer – Victoria

MC = Dr. Marco Carlone, BC Cancer – Kelowna

DH = Dr. Derek Hyde, BC Cancer – Kelowna

MM = Dr. Marie-Pierre Milette, BC Cancer – Kelowna

HC = Dr. Haley Clark, BC Cancer – Surrey

TA = Maryam Rostamzadeh

Contacts for Vancouver Students:

Dr. Samantha Lloyd, BC Cancer – Vancouver

Assignments: Unless otherwise stated, assignments are due in the same date as the next assignment is given.

The main textbook is:

E.B. Podgorsak, Review of Radiation Oncology Physics: A Handbook for Teachers and Students (Freely available on IAEA website at:

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pub.iaea.org%2Fmtcd%2Fpublications%2Fpdf%2Fpub1196 web.pdf&usg=AFQjCNHKVo-1doK6R5fgkun C428WHleJA)

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.

Revised 31 August, 2021