

MEDICAL PHYSICS II
The University of Toledo
Department of Physics and Astronomy/Department of Radiation Oncology (CNSM/COMLS)
 PHYS 4440, CRN#21167
 Spring 2021

Class Location: RHC, suit K, room#0005/DCC, room#2050G, Main Hospital (basement) #0121

Class Day/Time: Tuesday, 1:00PM-3:45PM

Credit Hours: 3

COURSE SCHEDULE

Week	Dates	Topic	Instructor	Location	Homework
1	01/19	Probability and statistics (Ch. 11I)	DS	RHC	Ch.11I: 1-5
2	01/26	Nuclear medicine, PET and SPECT (Ch. 9I, 12I)	SA	MH	Ch.9I: 11, 16 Ch.12I: 1, 4
3	02/02	Ultrasound (Ch. 19I-22I)	SA	MH	Ch.19I: 2, 3, 4, 5, 6
4	02/09	Magnetic resonance imaging - part I (Ch. 23I, 24I)	SA	MH	Ch.23I: 2, 3, 4
5	02/16	INSTRUCTIONAL BREAK			
6	02/23	Magnetic resonance imaging – part II (Ch. 25I)	SA	MH	Ch.24I: 1, 2, 3, 5
7	03/02	Quality control in medical imaging	SA	MH	HW set document
8	03/09	MIDTERM EXAM	SA/DS	MH/DCC	
9	03/16	Radiobiology (Ch. 26I-27I)	DS	RHC	HW set document
10	03/23	Physics of proton radiation therapy (Ch. 15T)	DP	RHC	Flipped class Ch.15T: 1,2,4,6
11	03/30	Brachytherapy (Ch. 16T-17T)	DS	RHC	Ch.16T: 2,5,6,8 Ch.17T: 1,2,4,5
12	04/06	SRS, SBRT, and IORT	NS	RHC	HW set document
13	04/13	Radiopharmaceutical use in diagnostic and treatment (Handouts provided)	EP	DCC	HW set document
14	04/20	Radiation protection and regulations (Ch. 18T)	NS	RHC	Ch. 18T: 1,3,7
15	04/27	Quality assurance in radiation therapy (Ch. 19T)	DP	RHC	Ch. 19T: 2,3,4,5,9
16	05/04	FIANL EXAM	DS	DCC	

"I" for Medical Imaging Physics textbook

"T" for Hendee's Radiation Therapy Physics textbook