COURSE SCHEDULE FOR 2024FA

Week	Class date	Sections of Shiell & McNab for pre-class reading	Contents of the class readings from Shiell & McNab
1	Tues Sep 10	Course syllabus 4.0 – 4.2	**Introduction to the course and to light. 4 Waves.** Introduction, The One-Dimensional Wave Equation, Harmonic Waves
	Weds Sep 11	4.3 – 4.5	A Review of Complex Numbers, Complex Representation of Harmonic Waves, Harmonic Plane Waves
2	Tues Sep 17	4.6 – 4.9	Other Harmonic Waves, Electromagnetic Waves, Polarization of Light, Doppler Effect
	Weds Sep 18	6.0 – 6.2	**6 Superposition of Waves.** Introduction, Superposition and the Superposition Principle, Superposition of Harmonic Waves of the Same Frequency
3	Mon Sep 23	Drop-in for asgmt 1	Drop-in class to discuss asgmt 1
	Tues Sep 24	6.3 – 6.5	Two Extremes: Mutually Incoherent and Mutually Coherent Beams, Standing Waves, The Beat Phenomenon
	Weds Sep 25	6.6	Phase and Group Velocities
4	Tues Oct 1	14.0 – 14.1 (linearly pol'd)	**14 Mathematical Treatment of Polarization.** Introduction, Jones Vectors: Representation of Pure Polarization States (linear pol'd)
	Weds Oct 2	14.1 (circularly pol'd)	Jones Vectors: Representation of Pure Polarization States (circularly pol'd)
5	Mon Oct 7	Drop-in for asgmt 2	Drop-in class to discuss asgmt 2
	Tues Oct 8	14.2 – 14.3 15.0 – 15.1	Jones Matrices: Representation of Polarizing Components, Stokes Vectors and Mueller Matrices. **15 Polarization in Practice.** Introduction, Polarization due to Selective Absorption: Dichroism
	Weds Oct 9	15.2	Polarization due to Selective Reflection
6	Tues Oct 15	15.3 – 15.5	Polarization due to Selective Scattering, Introduction to Birefringence and Waveplates, Polarization due to Birefringence
	Weds Oct 16	15.6 – 15.7	Chirality: Optical Activity and Circular Dichroism, Photoelasticity
-	Oct 21–25	***Reading Week***	***Reading Week***
7	Mon Oct 28	Review for midterm	Review for midterm and review of asgmt 3
	Tues Oct 29	**Midterm**	**Midterm**
	Weds Oct 30	Review of midterm	Review of midterm
8	Tues Nov 5	13 **or** 16 & 17	Work in groups on topic of choice: **Optical fibers and Communications Technology or Light-Matter Interactions and Lasers**
	Weds Nov 6		
9	Mon Nov 11		
	Tues Nov 12		
	Weds Nov 13	Drop-in for asgmt 4	Drop-in class to discuss asgmt 4: based on topic of choice
10	Tues Nov 19	Continue with 13 **or** 16 & 17	Continue with: **Optical fibers and Communications Technology or Light-Matter Interactions and Lasers**
	Weds Nov 20		
11	Tues Nov 26 & Weds Nov 27	Asgmt 5: presentations	Asgmt 5: presentations on topic of choice: **Optical fibers and Communications Technology or Light-Matter Interactions and Lasers**
12	Tues Dec 3	–	Review for final exam
	Weds Dec 4	–	Review for final exam