

SP211 – General Physics I: Sections 3323 & 5523

Professor Chris Morgan

Syllabus: Class Schedule, Lab Schedule and Reading Assignments

Week	Day	Ch	Sects	Topic	Laboratory
Week 1 (17 – 21 Aug)	M	1	All	Course Introduction; Concepts of Motion	Lecture in Lab Classroom
	T	2	1-2	1-D Kinematics: Acceleration and Motion Diagrams	
	W	2	2-4	1-D Kinematics: Kinematics Equations and Free Fall	
	F	3	1	Review of Vectors & 2-Dimensional Kinematics	
Week 2 (24 – 28 Aug)	M	3	1	Relative Motion	1-D Kinematics
	W	3	2	Projectile Motion	
	F	3	3	Circular Motion	
Week 3 (31 Aug – 4 Sept)	M	4	1-3	Newton’s 1st and 2nd Laws	2-D Kinematics
	W	4	4-6	Weight, Springs & Strings; Free Body Diagrams	
	F	4	7-8	Newton’s 3rd Law	
Week 4 (7 – 11 Sept)	M	-	-	Labor Day Holiday: No Classes	Newton’s Laws
	W	4	All	Problem Solving with Newton’s Laws	
	F	5	1	Friction	
Week 5 (14 – 18 Sept)	M	5	2	Drag	Uniform Circular Motion
	W	5	3	Dynamics of Circular Motion	
	F	5	5	Center of Mass	
Week 6 (21 – 25 Sept)	M	-	-	Review for Test #1	Test #1 During Lab Period
	W	6	1-3	Mechanical Work	
	F	-	-	Demonstration Lecture in CH100	
Week 7 (28 Sept – 2 Oct)	M	6	4	Power & Work-Kinetic Energy Theorem	Work and Energy
	W	7	1-2	Potential Energy & Mechanical Equilibrium	
	F	7	3	The Conservation of Energy	
Week 8 (5 – 9 Oct)	M	8	1-2	Linear Momentum & Conservation of Momentum	One Dimensional Collisions
	W	8	3	Impulse & 1D Collisions	
	F	8	3-4	2D Collisions & Center of Mass Frame	
Week 9 (12 – 16 Oct)	M	-	-	Columbus Day: No Classes	Lecture in Lab Classroom
	T	9	1	Rotational Kinematics	
	W	9	2-3	Rotational Kinetic Energy and Moment of Inertia	
	F	9	4-5	Torque and Rotational Dynamics	
Week 10 (19 – 23 Oct)	M	9	5	Rotational Dynamics & Power	Two Dimensional Collisions
	W	9	6	Rolling Motion	
	F	10	1-2	Intro to Angular Momentum	
Week 11 (26 – 30 Oct)	M	-	-	Review for Test #2	Test #2 During Lab Period
	W	10	3	Conservation of Angular Momentum	
	F	-	-	Demonstration Lecture in CH100	
Week 12 (2 – 6 Nov)	M	11	1-2	Kepler’s Laws and Newtonian Gravity	Rotational Dynamics
	W	11	3	Gravitational Potential Energy, Escape Speed & Orbits	
	F	13	1-2	Fluids, Density & Pressure	
Week 13 (9 – 13 Nov)	M	13	3	Buoyancy and Archimedes’ Principle	Lecture in Lab Classroom
	T	14	1-2	Simple Harmonic Motion & Energy	
	W	-	-	Veterans Day: No Classes	
	F	14	2-3	Oscillators and Pendulums	
Week 14 (16 – 20 Nov)	M	15	1-2	Simple Wave Motion, Harmonic Waves	Simple Harmonic Motion
	W	15	2-3	Harmonic Sound Waves & Wave Intensity	
	F	15	5	Doppler Effect	
Week 15 (23 – 27 Nov)	M	16	1	Superposition, Interference & Beats	
	T*	16	2	Standing Waves	
	W	-	-	Thanksgiving Break: No Classes	
	F	-	-		
Week 16 (30 Nov - 4 Dec)	M	-	-	Review for Test #3	Standing Waves
	W	-	-	Test #3 During Class Period	
	F	-	-	Demonstration Lecture in CH100	
Week 17 (7 Dec)	M	-	-	Final Exam Review	

T*: Tuesday, November 24 is a Wednesday Schedule