* Each HW assignment has a related Warm-up due 24 hours earlier

Physics 121 030X Course Schedule
Spring 2018 — Dr. Li

	*HW due**	*Lecture topic*	*Book sections*
Jan 24		All about the course	
Jan 26	Warm-up 0	Representing position and motion	1.1–1.3
Jan 29		Graphing motion; Acceleration	2.1–2.4
Jan 31	HW 1	The case of constant acceleration	2.5–2.7
Feb 2		Relative motion; Units; Uncertainty	3.5; 1.4
Feb 5		Forces and mass: Newton's laws	4.1–4.2, 4.5–4.6
Feb 7	HW 2	Springs, strings, and atoms	4.3–4.4, 8.3
Feb 9		Solving problems with Newton's laws	
Feb 12		Newton's third law	4.7, 5.7
Feb 14	HW 3	Apparent weight	5.3
Feb 16		Drag	5.6
Feb 19	HW 4	Review and discussion	
Feb 21		**Exam 1**	
Feb 23		Vectors in physics; Sideways accel.	3.1–3.3
Feb 26		Newton's laws in 2-D	3.6–3.8
Feb 28	HW 5	Using Newton's laws in 2-D	5.2, 5.4, 5.8
Mar 2		Friction	5.5
Mar 5		Circular motion and forces	6.3–6.4
Mar 7	HW 6	Gravity and orbits	6.5–6.6
Mar 9		Impulse and momentum	9.1–9.3
Mar 12		Conservation of momentum	9.4–9.6
Mar 14	HW 7	Work, energy, and power	10.1, 10.2, 10.8
Mar 16		Kinetic and potential energy	10.3, 10.4
Mar 26		Conservation of energy	10.6, 10.7
Mar 28	HW 8	Review and discussion	
Mar 30		**Exam 2**	
Apr 2		Rotational motion and torque	7.1–7.3
Apr 4		Rotational dynamics	7.4–7.6, 9.7
Apr 6	HW 9	Equilibrium and balance	8.1, 8.2
Apr 9		Elasticity and strength of materials	8.4
Apr 11		Linear response systems	
Apr 13	HW 10	Density and pressure in fluids	13.1–13.3
Apr 16		Buoyancy; Fluids in motion	13.4, 13.5
Apr 18		Viscosity and fluid flow in tubes	13.6, 13.7
Apr 20	HW 11	Thermal energy and temperature	11.4, 11.5 (part)
Apr 23		Gas pressure and the ideal gas law	12.1, 12.2
Apr 25		Gas processes; Thermal expansion	12.3, 12.4
Apr 27	HW 12	Review and discussion	
Apr 30		**Exam 3**	
May 2		Energy usage in living systems	11.1–11.3
May 4		Heat flow	11.5, 12.8
May 7		Using thermal energy; Entropy	11.6–11.8
May 9	HW 13	Course discussion and review	
May 15		**Final Exam: 1:30 – 3:30 p.m.**	