

# Reading\_HW\_Schedule

Day	Section	Title	Pages	Pages/ Section	Homework Problems	Due Date
08/19	1.1	Introduction	P 1-2	2	none	
	1.2	Idealized Models	P 3	1	none	
	1.3	Standards and Units	P 3-7	4	none	
08/21	1.4	Unit Consistency and Conversions	P 7-9	2	2, 5, 6	08/23
	1.5	Precision and Significant Figures	P 9-11	3	17, 21	08/23
	1.6	Estimates and Orders of Magnitude	P 11	1	24, 32	08/23
08/23	1.7	Vectors and Vectors Addition	P 12-16	5	34, 36	08/26
	1.8	Components and Vectors	P 16-21	6	42, 49	08/26
08/26	2.1	Displacement and Average Velocity	P 30-34	5	2, 12	08/28
	2.2	Instantaneous Velocity	P 34-37	4	19, 20	08/28
	2.3	Average and Instantaneous Velocity	P 37-42	6	24, 25	08/28
08/28	2.4	Motion and Constant Acceleration	P 42-48	7	28, 32	08/30
	2.5	Proportional Reasoning	P 48-51	4	41, 46	08/30
08/30	2.6	Freely Falling Objects	P 51-54	4	49, 52	09/04
	2.7	Relative Velocity along a Straight Line	P 54-56	3	62, 63	09/04
09/04	3.1	Velocity in a Plane	P 68-71	4	none	
	3.2	Acceleration in a Plane	P 71-74	4	1, 5	09/06
09/06	3.3	Projectile Motion	P 75-85	11	8, 27	09/09
	3.4	Uniform Circular Motion	P 85-88	4	31, 38	09/09
	3.5	Relative Velocity in a Plane	P 88-89	2	39, 43	09/09
09/09	4.1	Force	P 99-102	4	1, 4	09/11
	4.2	Newton's First Law	P 102-104	3	none	
09/11	4.3	Mass and Newton's Second Law	P 104-109	6	9, 10	09/13
	4.4	Mass and Weight	P 109-112	4	14, 18	09/13
09/13	4.5	Newton's Third Law	P 112-116	5	24, 27	09/16
	4.6	Free-Body Diagrams	P 116-118	3	28, 34	09/16
09/16	5.1	Equilibrium of a Particle	P 128-133	6	2, 9	09/18
	5.2	Applications of Newton's Second Law	P 133-137	5	18, 26	09/18
09/18	5.3	Contact Forces and Friction	P 137-145	9	33	09/20
	5.4	Elastic Forces	P 145-147	3	57	09/20
09/20	6.1	Force in Circular Motion	P 161-167	7	1, 2	09/23
	6.2	Motion in a Vertical Circle	P 168-170	3	10, 14	09/23
09/23	6.3	Newton's Law of Gravitation	P 170-172	3	16, 17	09/25
	6.4	Weight	P 172-175	4	26, 29	09/25
	6.5	Satellite Motion	P 175-180	6	34, 35	09/25
09/25	7.1	An Overview of Energy	P 188-192	5	none	
	7.2	Work	P 192-196	5	1,9	09/27
	7.3	Work and Kinetic Energy	P 196-200	5	14, 20	09/27
09/27	7.4	Work Done by a Varying Force	P 200-203	4	25, 26	09/30
	7.5	Potential Energy	P 203-208	6	30, 31	09/30
09/30	7.6	Conservation of Energy	P 208-212	5	44, 46	10/04
	7.7	Conservative and Non-conservative Forces	P 212-216	5	56, 57	10/04
	7.8	Power	P 216-218	3	64, 72	10/04
10/04	8.1	Momentum	P 231-234	4	1, 7	10/07
	8.2	Conservation of Momentum	P 234-239	6	8, 9	10/07
10/07	8.3	Inelastic Collisions	P 239-243	5	22, 23	10/09
	8.4	Elastic Collisions	P 244-248	5	32, 33	10/09
	8.5	Impulse	P 248-251	4	37, 40	10/09
10/09	8.6	Center of Mass	P 251-253	3	none	
	8.7	Motion of the Center of Mass	P 253-254	2	49, 52	10/11
	8.8	Rocket Propulsion	P 254-256	3	54	10/11

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10/11	9.1	Angular Velocity and Angular Acceleration	P 267-270	4	1, 3	10/14
	9.2	Rotation with Constant Angular Acceleration	P 270-272	3	12, 15	10/14
	9.3	Relationship between Linear and Angular Quantities	P 272-276	5	25, 27	10/14
10/14	9.4	Kinetic Energy of Rotation and Moment of Inertia	P 277-281	5	30, 38	10/16
	9.5	Rotation about a Moving Axis	P 281-284	4	47, 52	10/16
10/16	10.1	Torque	P 294-297	4	1,2	10/21
	10.2	Torque and Angular Acceleration	P 297-303	7	6,7	10/21
	10.3	Work and Power in Rotational Motion	P 303-305	3	18, 19	10/21
10/21	10.4	Angular Momentum	P 305-307	3	22, 25	10/23
	10.5	Conservation of Angular Momentum	P 307-311	5	28, 29	10/23
	10.6	Equilibrium of a Rigid Body	P 311-316	6	35, 39	10/23
	10.7	Vector Nature of Angular Quantities	P 317-319	3	none	
10/23	11.1	Stress, Strain, and Elastic Deformations	P 333-340	8	1, 2	10/25
	11.2	Periodic Motion	P 340-343	4	24, 25	10/25
	11.3	Energy in Simple Harmonic Motion	P 343-345	3	31, 32	10/25
10/25	11.4	Equations of Simple Harmonic Motion	P 346-351	6	38, 40	10/28
	11.5	The Simple Pendulum	P 351-354	4	47	10/28
	11.6	Damped and Forced Oscillations	P 354-358	5	52	10/28
10/28	12.1	Mechanical Waves	P 365-367	3	none	
	12.2	Periodic Mechanical Waves	P 367-369	3	3, 4	10/30
	12.3	Wave Speeds	P 369-371	3	6, 9	10/30
10/30	12.4	Mathematical Description of a Wave	P 371-372	2	10, 12	11/01
	12.5	Reflections and Superpositions	P 373-374	2	none	
	12.6	Standing Waves and Normal Modes	P 374-380	7	14, 17	11/01
	12.7	Longitudinal Standing Waves	P 380-384	5	25, 27	11/01
11/01	12.8	Interference	P 384-385	2	34	11/04
	12.9	Sound and Hearing	P 385-386	2	36	11/04
	12.10	Sound Intensity	P 386-389	4	39, 40	11/04
11/04	12.11	Beats	P 389-391	3	48, 49	11/06
	12.12	The Doppler Effect	P 391-395	5	52, 55	11/06
11/06	13.1	Density	P 407-409	3	2, 4	11/08
	13.2	Pressure in a Fluid	P 409-416	8	12, 28	11/08
	13.3	Archimedes's Principle: Buoyancy	P 416-419	4	29, 33	11/08
11/08	13.4	Surface Tension and Capillarity	P 419-422	4	39, 40	11/11
	13.5	Fluid Flow	P 422-424	3	42, 43	11/11
	13.6	Bernoulli's Equation	P 424-427	4	none	11/11
11/11	13.7	Applications of Bernoulli's Equation	P 427-430	4	47, 48	11/13
	13.8	Real Fluids: Viscosity and Turbulence	P 430-432	3	none	
11/13	14.1	Temperature and Thermal Equilibrium	P 441-443	4	none	
	14.2	Temperature Scales	P 443-446	4	1, 4	11/15
	14.3	Thermal Expansion	P 446-451	6	8, 11	11/15
11/15	14.4	Quantity of Heat	P 451-454	5	22, 23	11/18
	14.5	Phase Changes	P 454-457	4	31, 35	11/18
11/18	14.6	Calorimetry	P 458-459	2	43, 44	11/20
	14.7	Heat Transfer	P 459-466	8	52, 53	11/20
	14.8	Solar Energy and Resource Conservation	P 466-467	2	none	
11/20	15.1	The Mole and Avogadro's Number	P 477-478	2	1,2, 6	11/22
	15.2	Equations of State	P 479-485	7	15	11/22
	15.3	Kinetic Theory of an Ideal Gas	P 486-492	7	18, 23	11/22
11/22	15.4	Heat Capacities	P 492-493	2	32, 34	11/25
	15.5	The First Law of Thermodynamics	P 493-501	9	38, 39	11/25
	15.6	Thermodynamic Processes	P 501-503	3	none	
11/25	15.7	Properties of an Ideal Gas	P 503-506	4	50, 52	12/02
	16.1	Directions of Thermodynamic Processes	P 516-518	3	none	

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	16.2	Heat Engines	P 518-521	4	3, 8	12/02
12/02	16.3	Internal Combustion Engines	P 521-523	3	10	12/04
	16.4	Refrigerators	P 523-525	3	14, 15	12/04
	16.5	The Second Law of Thermodynamics	P 526-527	2	none	
	16.6	The Carnot Engine: The Most Efficient Heat Engine	P 527-531	5	19, 22	12/04
12/04	16.7	Entropy	P 531-535	5	26	12/06
	16.8	The Kelvin Temperature Scale	P 535-536	2	none	
	16.9	Energy Resources: A Case Study in Thermodynamics	P 536-537	2	none	
12/06		Review for Final				
12/11		Final Exam from 8:00-10:00				