

Instructor: Ralf Rapp

Office: CYCL-211 (Building 434)

Office Phone: 845-1411 (ext. 226 after 5pm)

Email Address: rapp@comp.tamu.edu

Office Hours: Tue 2-3pm, Wed 3-4pm, Thu 10-10:45am

Course Webpage: <http://cyclotron.tamu.edu/rapp/phy201.html> (check for more information!)

Text: Physics, 6th Ed. by Cutnell and Johnson, Volume 1

Physics 201 Lab Manual (published by Hayden-McNeil)

Optional: Student Solutions Manual; Student Study Guide

Grading: The total course grade is composed as follows

3 Intermediate Exams	60%
Final (Comprehensive)	25%
Laboratory	10%
Recitation (weekly quizzes)	5%
	<u>100%</u>

**Note:** You must achieve a 70% or better in the laboratory in order to pass the course.

In addition to the *weekly* homework assignments given below, it is mandatory to perform the weekly WebCT homework problems.

If your grade on the Final Exam is higher than your lowest grade on one of the three (Intermediate) Exams during the semester, the grade on the Final Exam will replace that one lowest exam grade in computing the course grade. The Final Exam grade **cannot** be used to replace an exam that has been missed.

Mon, Jan. 23, is the last day to drop with no record; Mon, Apr. 03 is the last day to Q-drop;

Final Exam: Fri, May 5, 03:00–05:00pm

Syllabus: (“c” denotes Conceptual Questions)

Week	Date	Topic	Sections in Text	Problems
1	Jan. 17 T Jan. 19 R	Units; Vectors Velocity; Acceleration	1:1–9 2:1–3,7	1: 6,7,11,13,38,41,45,46,47,56; c1,c14,c15,c16,c17 2: 3,16,61,67,74
2	Jan. 24 T Jan. 26 R	Constant Acceleration; Kinematics in 2-dim Projectiles; Relative Velocity Newton’s Laws	2:4–6,8; 3:1–2 3:3–5; 4:1–5	2: 19,24,31,39,43,44,45,47,48, 68,72,78; c1,c7,c12,c13 3: 6,16,17,21,22,30,35,51,53,64, 68,69,71; c2,c10,c12,c16
3	Jan. 31 T Feb. 02 R	Forces $F = ma$ Examples	4:6–10 4:11-13	4: 1,9,11,15,28,32,38,40,44, 54,56,59,67,76,79,82,84,89,94; c4,c6,c11,c17,c18,c21,c26
4	Feb. 07 T Feb. 09 R	Circular Motion; Satellites Review	5:1–8	5: 10,13,15,19,26,27,37,40, 49,54; c1,c6,c8,c14
5	Feb. 14 T Feb. 16 R	<b>Exam I</b> Work; Potential Energy	Chapters 1–5 6:1–3,9	6: 5,18,22,24; c1,c2,c7
6	Feb. 21 T Feb. 23 R	Conservation of Energy; Power Momentum; Collisions	6:4–8,10 7:1–6	6:25,31,34,37,39,42,44,45,46, 50,58,67,73; c14,c17 7: 11,19,21,28,30,32,34,35,45, 46,49,50,52; c4,c13,c20

<u>Week</u>	<u>Date</u>	<u>Topic</u>	<u>Sections in Text</u>	<u>Problems</u>
7	Feb. 28 T	Rotational Motion; Statics	8:1–6,8; 9:1–2	8: 19,21,23,32,35,44,47,57,63,66; c7,c9,c12
	Mar. 02 R	Rotational Dynamics; Angular Momentum	9:3–7	9: 2,6,9,12,15,24,31,37,38,47,53,55,56,63,66,68,69,70; c5,c6,c8,c13,c18,c20,c23
8	Mar. 07 T	Simple Harmonic Motion	10:1–9	10: 8,10,11,15,17,27,28,29,32,35,41,59,77; c2,c6,c13
	Mar. 09 R	Review		
–	Mar. 14 T	Spring Break (no class)		Prepare for Exam II !
	Mar. 16 R	Spring Break (no class)		
9	Mar. 21 T	<b>Exam II</b>	Chapters 6-10	
	Mar. 23 R	Fluid Statics	11:1–6,12	11: 13,39,40,41,42,46,85,89,90; c12,c13,c14,c15
10	Mar. 28 T	Expansion; Heat	12:1–8,11	12: 4,12,15,32,44,45,55,78,79,87; c3
	Mar. 30 R	Heat Transfer; Kinetic Theory	13:1–5; 14:1–3,5	13: 11,12,13,18,21,33; c5 14: 13,16,18,22,34,47,50,53; c11,c12,c13,c14
11	Apr. 04 T	1st Law of Thermodynamics	15:1–6	15: 1,4,10,11,21,24,25,33,41,43,49,64; c1,c2,c5,c6,c20
	Apr. 06 R	2nd Law; Heat Engines	15:7–10	
12	Apr. 11 T	Entropy	15:11-13	15: 64,69,73,75,78,80,82,88; c22,c23,c25
	Apr. 13 R	Review		
13	Apr. 18 T	<b>Exam III</b>	Chapters 11–15	
	Apr. 20 R	Waves; Sound	16:1-10,12	16: 6,9,17,25,27,53,72,75,85,87,91,93,99; c3,c4,c6,c15,c17,c19
14	Apr. 25 T	Superposition	17:1–4	17: 5,6,7,17; c1,c3,c14
	Apr. 27 R	Standing Waves, Review	17:5,6,8	17: 24,27,29,37,41,45;

### **Americans with Disabilities Act (ADA) Policy Statement:**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Room 126 of the Koldus Building or call 845-1637.

### **Academic Integrity Statement:**

An Aggie does not lie, cheat, or steal or tolerate those who do.

The Honor Council Rules and Procedures may be found on the web at <http://www.tamu.edu/aggiehonor>