

PHYSICS 109 COURSE SYLLABUS

Course Information

Course Title: Introductory Physics – Life Sciences

Fall Semester, 2000

Meeting Time: TuTh 9:40-11:10

Meeting Place: FJA

Home page: www.physics.rhodes.edu/physics109

Instructor: Dr. Brent Hoffmeister

Office: 215 RT

Lab: 115A-E RT

Office Phone: X3913

Office Hours: 10:30-12:00 MW, 1:00-3:00 ThF, other times by appointment

Course Objectives

To provide students with a solid foundation in the fundamentals of classical physics, and a better understanding of the connection between physics and the life sciences.

Text

Eugene Hecht, *Physics: Calculus*, 2nd Edition, Brooks/Cole, ISBN 0-534-36270-2

Course Requirements

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| 1. Three tests as scheduled on course calendar | 45% |
| 2. Homework as scheduled on course calendar | 25% |
| 3. Final exam | 25% |
| 4. Class attendance and participation | 5% |

Grading Procedures

- All graded work will be assigned a numerical score. You may estimate the corresponding letter grade by computing a percentage score and comparing it with the table below:

$$\text{Percentage Score} = (\text{Your Score} / \text{Total Possible}) * 100$$

Percentage Score	Letter Grade	Percentage Score	Letter Grade	Percentage Score	Letter Grade
95-100	A	80-82	B-	67-69	D+
90-94	A-	77-79	C+	63-66	D
87-89	B+	73-76	C	60-63	D-
83-86	B	70-72	C-	Below 60	F

- Late homework assignments will be penalized by 10% of the total possible score per day (including weekends and holidays) that they are late.
- Make-up exams may be arranged on the condition that the student receives approval from the instructor *before* missing an exam.

- The conditions of the Honor Code described in the Rhodes College Student Hand Book apply to all assignments in this course unless otherwise specified by the instructor.

Course Calendar

Date	Subject	Reading	HW Due
Thu. Aug. 24	Ch. 1: Introduction, Ch. 2: Speed		
Tue. Aug. 29	Ch. 2: Velocity and Vector Addition	2.1-2.8	
Thu. Aug. 31	Ch. 3: Acceleration	3.1-3.8	Ch. 2
Tue. Sep. 5	Ch. 3: Projectile Motion	3.9	
Thu. Sep. 7	Ch. 4: Newton's 3 Laws	4.1-4.9	Ch. 3
Tue. Sep. 12	Ch. 4: Applications of Newton's 2 nd Law		
Thu. Sep. 14	Review		Ch. 4
Tue. Sep. 19	Test 1		
Thu. Sep. 21	Ch. 5: Centripetal Force	5.1-5.2	
Tue. Sep. 26	(No Meeting)		
Thu. Sep. 28	Ch. 5: Law of Gravitation	5.3-5.4	
Tue. Oct. 3	Ch. 6: Work	6.1	Ch. 5
Thu. Oct. 5	Ch. 6: Kinetic and Potential Energy	6.2-6.3	
Tue. Oct. 10	Ch. 6: Conservation of Energy	6.4-6.6	
Thu. Oct. 12	Ch. 7: Collisions	7.1-7.5	Ch. 6
Tue. Oct. 17	(Fall Recess)		
Thu. Oct. 19	Review		Ch. 7
Tue. Oct. 24	Test 2		
Thu. Oct. 26	Ch. 8: Rotational Kinematics	8.1-8.4	
Tue. Oct. 31	Ch. 8: Newton's 2 nd Law for Rotation	8.5-8.8	
Thu. Nov. 2	Ch. 8: Rotational Energy and Angular Momentum	8.9-8.11	
Tue. Nov. 7	Ch. 9: Fluid Statics	9.2, 9.4-9.6	Ch. 8
Thu. Nov. 9	Ch. 9: Fluid Dynamics	9.7-9.9	
Tue. Nov. 14	Review		Ch. 9
Thu. Nov. 16	Test 3		
Tue. Nov. 21	Ch. 10: Simple Harmonic Motion	10.1-10.7	
Thu. Nov. 23	(Thanksgiving Recess)		
Tue. Nov. 28	Ch. 11: Waves	11.1-11.8	Ch. 10
Thu. Nov. 30	Ch. 11: Wave Interference	11.9-11.10	
Tue. Dec. 5	Review		Ch. 11