



I. Course Information

Course: PHYS 2350 - General Physics I/Lab
Semester Credit Hours: 4.00
Course CRN and Section: 20272 - EV1
Semester and Year: Fall 2017
Course Start and End Dates: 08/21/2017 - 12/10/2017
Building and Room: Parker Building - 102

II. Instructor Information

TBA
Email: TBA

Office Hours: Professor: Douglas H. Laurence
Office Hours: 15 minutes before and after class, or by appointment.

III. Class Schedule and Location

Day	Date	Time	Location	Building/Room
T	08/22/2017 - 10/03/2017	6:00 PM - 8:45 PM	Ft Lauderdale/Davie Campus	Parker Building-102
R	08/24/2017 - 10/05/2017	6:00 PM - 8:30 PM	Ft Lauderdale/Davie Campus	Parker Building-203
R	10/12/2017 - 10/12/2017	6:00 PM - 8:00 PM	Ft Lauderdale/Davie Campus	Parker Building-203
T	10/17/2017 - 11/28/2017	6:00 PM - 8:45 PM	Ft Lauderdale/Davie Campus	Parker Building-102
R	10/19/2017 - 11/30/2017	6:00 PM - 8:30 PM	Ft Lauderdale/Davie Campus	Parker Building-203
R	12/07/2017 - 12/07/2017	6:00 PM - 8:00 PM	Ft Lauderdale/Davie Campus	Parker Building-203

IV. Course Description

First of a two-part series covering mechanics, thermodynamics, vibrations, and waves. Includes laboratory sessions. This course has been exempted from the requirements of the Writing Across the Curriculum policy. Prerequisite: MATH 1250 or MATH 2100 or MATH 2100H. Frequency: Every Fall and Winter.

V. Learning Outcomes

- 1) Use the basic concepts of mechanics, such as energy, momentum, force, torque, and wave motion to

solve simple mechanical problems.

2) Use the basic concepts of fluid mechanics, including pressure, density, and volume flow to solve fluid problems.

3) Apply thermodynamic concepts such as heat, internal energy, temperature, thermal conduction, and entropy to thermodynamic problems, especially to problems involving ideal gases.

VI. Materials and Resources

Book Url: [NSU Book Store](#)

Section Required Texts and Material:

Title: Physics: Principles with Applications

Author: Giancoli Publisher: Pearson

Edition: 7th

ISBN-13: 9780321625915

Calculator:

Scientific-only calculator; **no graphing/programmable calculators**

VII. Course Schedule and Topic Outline

Course Schedule:

Laboratory sessions will be held on **Tuesdays**, from 6:00PM – 8:45 PM, and lectures will be held on **Thursdays**, from 6:00PM – 8:30PM. You may find that lab days are ending before 8:45PM, but **do not plan** on that always being the case.

We will cover the following topics from the textbook:

1. Mechanics (chapters 2 – 8)
2. Applications (chapters 10, 11)
3. Thermodynamics (chapters 13 – 15)

WEEK	LAB	LECTURE
August 21	No Lab	Vectors + 1D Motion
August 28	1.01 Measurement	1D Motion + 3D Motion
September 4	No Lab	Newton's Laws
September 11	1.02 Gravity	Exam 1 (Ch 2 – 4)
September 18	1.03 Vectors	Circular Motion & Gravity
September 25	1.04 Newton's 2nd Law	Work and Energy
October 2	1.05 Energy	Linear Momentum
October 9	No Lab	Exam 2 (Ch 5 – 7)
October 16	1.06 Momentum	Rotational Motion
October 23	1.07 Torque	Fluids
October 30	1.08 Buoyancy	Oscillations & Waves
November 6	1.09 The Pendulum	Exam 3 (Ch 8, 10, 11)
November 13	1.10 Standing Waves	Temperature + Heat
November 20	Thanksgiving	Thanksgiving

November 27	No Lab	Thermodynamics
December 4	No Lab	Final Exam (Cumulative)

These dates are **subject to change with notification**.

VIII. Grading Criteria

Final Grade:

Your final grade is determined by your performance on a number of different tasks:

Homework	10 points
Laboratory	20 points
Exams (x3)	15 points (x3)
Final Exam	25 points
Total	100 points

You can compute your total points with the following formula:

$$\text{Points} = (\%HW) \cdot (10) + (\%Lab) \cdot (20) + (\%E1 + \%E2 + \%E3) \cdot (15) + (\%Final) \cdot (25)$$

Example grade: 90% on homework, 95% in lab, 72% on Exam 1, 85% on Exam 2, 65% on Exam 3 and 82% on the Final. The total grade is then:

$$(.90) \cdot (20) + (0.95) \cdot (20) + (0.72 + 0.86 + 0.65) \cdot (15) + (0.82) \cdot (20) = 86.9 \text{ pts}$$

Grading Scale:

Total points will be rounded to the **first decimal place**, i.e. 79.96 = 80.0, but 79.94 = 79.9. I will always round 0.05 to 0.1, i.e. 79.95 = 80.0.

Points	Final Grade
93.0 – 100.0	A
90.0 – 92.9	A-
87.0 – 89.9	B+
83.0 – 86.9	B
80.0 – 82.9	B-
77.0 – 79.9	C+
73.0 – 76.9	C
70.0 – 72.9	C-
67.0 – 69.9	D+
65.0 – 66.9	D
0 – 64.9	F

If your program requires you to pass with a C, you **must** earn 72.95 or more points to be rounded to 73.0 and earn a C. **No exceptions will be made.**

IX. Course Policies

General Policy:

Mastering Physics:

Students are **required to have MasteringPhysics access**. This is how you will do your homework. An access code for MasteringPhysics is included in the textbook bundle from the NSU bookstore or may be purchased online directly at www.masteringphysics.com. No extensions will be given for failure to acquire a MasteringPhysics access code.

Student Responsibilities:

You are expected to **read each assigned section** from the textbook. It is your responsibility to learn how to use the calculator you choose. It is the student's responsibility to ensure that they have reliable internet access and compatible technology for the course. Note that MyMathLab may be accessed from a phone or tablet if necessary.

Missed Assignments and Grades:

You are expected to complete each homework assignment on time; there will be no make ups for homework not completed before the due date. These missed assignments will be each be given a zero grade. Students who are unable to take an exam with a valid, serious reason must contact me **immediately by email** to discuss a make-up exam. Failure to complete any exam will result in a zero grade. Any **questions or disputes about the grade received** on homework or an exam should be brought to the attention of the instructor as soon as possible.

Attendance Policy:

While attendance is not required for the lecture, **be extremely careful about how many days you skip**. It is not recommended that any days be skipped due to the fact that lecture is only conducted once a week. There are only 12 full days of class – **any missed class means that you've missed about 8% of the material for the entire course**.

X. College Policies

Students should visit <http://www.nova.edu/academic-affairs/nsu-syllabus-policy.html> to access additional required college-wide policies. It is your responsibility to access and carefully read these policies to ensure you are fully informed. As a student in this class, you are obligated to follow these college-wide policies in addition to the policies established by your instructor.

The following policies are described on this website:

- Academic misconduct
- Last day to withdraw
- Email policy
- Student course evaluations
- Student responsibility to register
- Student responsibility for course prerequisites

Additional Academic Resources: Nova Southeastern University offers a variety of resources that may aid in student success. Among these resources are:

Accommodations for students with documented disabilities: For more information about ADA policy, services, and procedures, students may contact the Office of Student Disability Services at 954-262-7189.

Free tutoring services: Students are encouraged to use the free tutoring services offered by the Tutoring and Testing Center (TTC). TTC provides a supportive atmosphere in which tutors and students work collaboratively on improving students' writing, math and/or science skills. For more information, you may call TTC at 954-262-8350.

Student Success: All undergraduate students and faculty are encouraged to utilize the Office of Undergraduate Student Success to locate information about university-wide resources designed to promote student success.

Library Resources: Students conducting research for class assignments may use the Alvin Sherman Library, which provides extensive access to print and electronic books and academic/scholarly journals and hundreds of databases in a variety of subject areas with full-text articles, videos, reference books, statistics, company profiles, and general news. Reference librarians are available in person at the Reference Desk as well as by phone (954-262-4613), email, chat, text, and individual appointment to provide instruction on how to identify and use library resources. For times and details, visit the library's Ask a Librarian webpage. Library Guides and Tutorials are also available online.