

## General Physics A

### PHY2048C

**Course Description:** This calculus-based course serves as the first in a two-part series, covering topics like kinematics, dynamics, energy, momentum, rotational motion, fluid dynamics, oscillatory motion, and waves. Designed for science and engineering majors, the course integrates critical thinking, analytical skills, and real-world applications.

**Student Learning Outcomes:** • Students will solve analytical problems describing different types of motion, including translational, rotational, and simple harmonic motion. • Students will apply Newton's laws, and conservation laws to solve analytical problems of mechanics. • Students will identify and analyze relevant information presented in various formats such as graphs, tables, diagrams, and/or mathematical formulations. • Students will solve real world problems using critical thinking skills and knowledge developed from this course.

This course has been approved to meet FSU's Liberal Studies Natural Sciences requirement and helps you become an effective interpreter of scientific results and a critical analyst of claims about the natural world.

By the end of this course, students will:

- Pose questions or hypotheses based on scientific principles.
- Use appropriate scientific methods and evidence to evaluate claims or theoretical arguments about the natural world.
- Analyze and interpret research results using appropriate methods.

For laboratory (L) or combined lecture/laboratory (C) courses:

As required by Florida State University, the student must earn a course grade of "C-" or higher in order to meet the Liberal Studies 1-credit laboratory requirement.

**Grading Assignments:** (Assignments typically associated with the course. Not every section is expected to have all the assignments on this list; but the list should include all possible assignments.)

- Participation
- Laboratory reports
- Reading assignments
- Homework
- Exams
- Quizzes

### **University Attendance Policy**

Excused absences include documented illness, deaths in the family, and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid written excuse. Consideration will also be given to students whose dependent children experience serious illness.

### **Academic Honor Policy**

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of student's academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to ". . . be honest and truthful and . . . [to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at <http://fda.fsu.edu/Academics/Academic-Honor-Policy>)

### **Academic Success**

Your academic success is a top priority for Florida State University. University resources to help you succeed include tutoring centers, computer labs, counseling and health services, and services for designated groups, such as veterans and students with disabilities. The following information is not exhaustive, so please check with your advisor or the Department of Student Support and Transitions to learn more.

### **Americans With Disabilities Act**

Florida State University (FSU) values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive, and welcoming. FSU is committed to providing reasonable accommodation for all persons with disabilities in a manner that is consistent with the academic standards of the course while empowering the student to meet the integral requirements of the course. Students with disabilities needing academic accommodation should:

- (1) register with and provide documentation to the Office of Accessibility Services; and
- (2) request a letter from the Office of Accessibility Services to be sent to the instructor indicating the need for accommodation and what type; and,
- (3) meet (in person, via phone, email, skype, zoom, etc...) with each instructor to whom a letter of accommodation was sent to review approved accommodations. Please note that instructors are not allowed to provide classroom accommodations to a student until appropriate verification from the Office of Accessibility Services has been provided.

This syllabus and other class materials are available in an alternative format upon request. For the latest version of this statement and more information about services available to FSU students with disabilities, contact the: Office of Accessibility Services, 874 Traditions Way, 108 Student Services Building, Florida State University, Tallahassee, FL 32306-4167 (850) 644-9566 (voice), (850) 644-8504 (TDD), [oas@fsu.edu](mailto:oas@fsu.edu), <https://dsst.fsu.edu/oas>

### **Confidential Campus Resources:**

Various centers and programs are available to assist students with navigating stressors that might impact academic success. These include the following:

Victim Advocate Program  
University Center A, Room 4100  
(850) 644-7161, Available 24/7/365,  
Office Hours: M-F 8-5  
<https://dsst.fsu.edu/vap>

### Counseling and Psychological Services (CAPS)

Florida State University's Counseling and Psychological Services (CAPS) primary mission is to address psychological needs and personal concerns, which may interfere with students' academic progress, social development, and emotional well-being. The following in-person and virtual (tele-mental health) services are available to all enrolled students residing in the state of Florida:

1. Individual therapy
2. Group therapy
3. Crisis Intervention
4. Psychoeducational and outreach programming
5. After hours crisis-hotline
6. Access to community providers for specialized treatment

Call 850-644-TALK (8255) for more information on how to initiate services. Counseling & Psychological Services

250 Askew Student Life Building 942 Learning Way  
Tallahassee, Florida 32306  
Phone: 850-644-TALK (8255)  
Walk-in and Appointment Hours:  
M-F 8 am – 4 pm

Services at UHS are available to all enrolled students residing in Florida:

The mission of University Health Services (UHS) is to promote and improve the overall health and well-being of FSU students. UHS provides a coordinated continuum of care through prevention, intervention, and treatment. Services include general medical care, priority care, gynecological services, physicals, allergy injection clinic, immunizations, diagnostic imaging, physical therapy, and a medical response unit. The Center for Health Advocacy and Wellness (CHAW) assists students in their academic success through individual, group, and population-based health and wellness initiatives. Topics include wellness, alcohol and other drugs, hazing prevention, nutrition and body image, sexual health, and power based personal violence prevention. For more information, go to [uhs.fsu.edu](http://uhs.fsu.edu).

University Health Services  
Health and Wellness Center  
960 Learning Way  
Tallahassee, Florida 32306  
Hours: M-F, 8 am – 4 pm  
Phone: 850-644-6230