

 <b>FLORIDA ATLANTIC UNIVERSITY</b>	<b>COURSE CHANGE REQUEST</b> <b>Undergraduate Programs</b>		UUPC Approval <u>2/26/24</u> UFS Approval _____ SCNS Submittal _____ Confirmed _____ Banner Posted _____ Catalog _____
	Department Physics College Science		
<b>Current Course Prefix and Number</b> PHY 2048		<b>Current Course Title</b> General Physics 1	
<i>Syllabus must be attached for ANY changes to current course details. See <u>Template</u>. Please consult and list departments that may be affected by the changes; attach documentation.</i>			
<b>Change title to:</b>  <b>Change prefix</b> From: _____ To: _____ <b>Change course number</b> From: _____ To: _____ <b>Change credits*</b> From: _____ To: _____ <b>Change grading</b> From: _____ To: _____ <b>Change WAC/Gordon Rule status**</b> Add <input type="checkbox"/> Remove <input type="checkbox"/> <b>Change General Education Requirements***</b> Add <input type="checkbox"/> Remove <input type="checkbox"/>		<b>Change description to:</b> 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.  <b>Change prerequisites/minimum grades to:</b>  <b>Change corequisites to:</b> MAC 2311  <b>Change registration controls to:</b> Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade (default is D-).	
<b>Effective Term/Year for Changes:</b> <del>Fall 2023</del> Fall 2024		<b>Terminate course? Effective Term/Year for Termination:</b>	
<b>Faculty Contact/Email/Phone</b> Korey Sorge / ksorge@fau.edu / 7-3380			
<b>Approved by</b> Department Chair _____ College Curriculum Chair _____ College Dean _____ UUPC Chair <u>Korey Sorge</u> Undergraduate Studies Dean <u>Dan Meeroff</u> UFS President _____ Provost _____		<b>Date</b> <u>2-1-24</u> <u>02/01/24</u> <u>2/11/24</u> <u>2/26/24</u> <u>2/26/24</u> _____ _____	

Email this form and syllabus to [mjenning@fau.edu](mailto:mjenning@fau.edu) seven business days before the UUPC meeting.

**PHY 2048-001**  
**General Physics 1**

WF 11:00 – 12:50  
4 credits

Semester, Year  
Prof. XXXXX YYYYY  
Office: XXXXXX  
Office hours: MWF 11-12  
Classroom: XXXX  
Telephone: 561-297-XXXX  
Email: [zzzzz@fau.edu](mailto:zzzzz@fau.edu)



TA name	xxxxxx xxxxxxxxx
Office	xxxxxx
Office hours	MWF xx:xx – xx:xx
Telephone	561-297-xxxx
Email	xxxxxx@fau.edu

## 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.

## Instructional Method

In-Person. There is no remote option for this course.

## Prerequisites

- MAC 2311 with a “C” or better

## Corequisites

- MAC 2311

## Course Objectives/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.

## Course Evaluation Method

- Homework 20%
- Exam 1 20%
- Exam 2 20%
- Exam 3 20%
- Exam 4 20%

## Course Grading Scale

A	92.5 – 100%
A-	87.5 – 92.5%
B+	82.5 – 87.5%
B	77.5 – 82.5%
B-	72.5 – 77.5%
C+	67.5 – 72.5%
C	62.5 – 67.5%
C-	60 – 62.5%
D+	55 – 60%
D	50 – 55%
D-	45 – 50%
F	<45%

## Policy on Makeup Tests, Late Work, and Incompletes (if applicable)

### Late Assignment Policy:

I do not accept late homework submissions for credit. Submissions made late will still be graded as normal, but for no points. Technological problems are not a valid reason for late work. I suggest that you start early so that if there is a technical glitch, we can come up with a solution to work around it.

### Make-up Policy for Exams:

Please note that you must have a genuine and valid reason for missing or taking a test at a later time. This could be something like surgery (with a doctor's note) or proof of jury duty. An excuse such as "I had a headache," or "my boss wanted me to work an extra shift" is unacceptable. The exam schedule is given. Valid reasons for missing the test must be given in advance. Not following this rule means that I don't have to reschedule a test for you.

### Incomplete Policy:

A student who is passing a course, but has not completed all work due to exceptional circumstances, may, with consent of the instructor, temporarily receive a grade of incomplete ("I"). The assignment of the "I" grade is at the discretion of the instructor, but is allowed only if the student is passing the course.

## **Policy on the Recording of Lectures**

Students enrolled in this course may record video or audio of class lectures for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach students about a particular subject. Recording class activities other than class lectures, including but not limited to student presentations (whether individually or as part of a group), class discussion (except when incidental to and incorporated within a class lecture), labs, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, and private conversations between students in the class or between a student and the lecturer, is prohibited. Recordings may not be used as a substitute for class participation or class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the University's Student Code of Conduct and/or the Code of Academic Integrity.

## **Attendance Policy**

*Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.*

## **Counseling and Psychological Services (CAPS) Center**

*Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to <http://www.fau.edu/counseling/>*

## **Disability Policy**

*In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at [www.fau.edu/sas/](http://www.fau.edu/sas/).*

## Code of Academic Integrity

*Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see [University Regulation 4.001](#).*

## Required Texts/Readings

“University Physics,” 15<sup>th</sup> edition, Young & Freedman  
ISBN-13: 978-0-1351-5955-2

## Course Topical Outline

- Week 1 – Mathematics and Measurement
- Week 2 – Kinematics
- Week 3 – Force (Exam 1)
- Week 4 – Energy
- Week 5 – Momentum
- Week 6 – Rotational Motion (Exam 2)
- Week 7 – Universal Gravitation
- Week 8 – Fluid Dynamics
- Week 9 – Equilibrium and Elasticity (Exam 3)
- Week 10 – Harmonic Motion
- Week 11 – Mechanical Waves
- Week 12 – Sound
- Week 13 – Temperature and Heat
- Week 14 – Thermodynamics
- Final Period – Exam 4

# Science and Natural World Syllabus Description

## Intellectual Foundation (General Education) Program Outcomes.

Scientific principles are behind what we find in nature and in natural occurrences. Scientific issues, such as those dealing with stem-cell research, cloning and global warming, are hotly debated by policy makers. Courses that meet this requirement share the goal of seeking to understand patterns and principles behind phenomena and occurrences, both in the inorganic world and in the living world. They typically fall within either the physical sciences (astronomy, physics, chemistry, and the earth sciences) or the biological sciences.

Students who satisfy the Science and the Natural World requirement will be able to:

- Explain important scientific concepts, principles, and paradigms.
- Explain how principles of scientific inquiry and ethical standards are used to develop and investigate research questions.
- Explain the limits of scientific knowledge and of how scientific knowledge changes.
- Critically evaluate scientific claims, arguments, and methodology.

After completion of the associated lab, the student will be able to:

- Demonstrate and explain how experiments are conducted.
- Analyze resulting data and draw appropriate conclusions from such data.