

PHYS 115: Physical Sciences

Instructor	Joe Storm jhstorm@alaska.edu
Meeting Times	Lecture: Tues Thurs 5:20 - 6:50 PM REIC 202 Lab: Tues 7 - 10PM REIC 253
Office Hours	REIC 114: Mon 1:00-3:00PM and on Zoom: Storm Zoom I am in Reichardt ~8-4 Mon-Fri and available for appointments.
Credits	4 credits (3 hours of lecture + 3 hours of lab per week)
Text	Physics of Everyday Phenomena, 10e by Griffith
Prerequisites	Placement in WRTG F111X; placement in MATH F105. Must be enrolled in PHYS F115L

Course Requirements and Policies

Course Goals	The course will cover the fundamentals of classical physics in the real world: mechanics, thermodynamics, electricity, magnetism, and optics. It will also focus on how these topics are interrelated and interdependent.
Class Attendance	For the best understanding of the course material, attendance and participation during class is essential.

Homework Due each Thursday by midnight. Late work will receive a 50% deduction and will not be accepted beyond the following Monday by midnight. Homework will be posted on Canvas a week before it is due. Each assignment will generally be graded out of 100 points.

Quiz: A short quiz will occur at the start of Tuesday's class. It will be open notes but not open book.

Exams I will provide an equation sheet for exams and a study guide beforehand. The Midterm Exam will be on Thursday, March 7th, covering Chapters 1 - 7.

The Final Exam will be on Thursday, May 2nd, from 5:45 to 7:45, covering Chapters 8 - 14. Please notify me beforehand if you will be absent on the day of an exam.

Labs There is a lab component associated with this course. You are required to complete 9 of the 10 labs. I will drop the lowest lab grade. You may only make up a lab with the permission of the course instructor. A passing grade in the lab is required to pass the course.

Grade Weights	Quiz	Lab	Homework	Midterm	Final
	20%	15%	25%	20%	20%

Grading Range >90%=A >80%=B >70%=C >60%=D
Allowed grades will be limited to A, B, C, D, IN, NB, F, and no plus-minus grades will be given for this course.

Your instructor follows the University of Alaska Fairbanks Incomplete Grade Policy: "The letter "I" (Incomplete) is a temporary grade used to indicate that the student has satisfactorily completed (C or better) the majority of work in a course but for personal reasons beyond the students control, such as sickness, has not been able to complete the course during the regular semester. Negligence or indifference are not acceptable reasons for an "I" grade.

Class Schedule

Date	Topic	HW/Quiz	Lab
T Jan 16	Intro to Course and Physics		
R Jan 18	Speed, Velocity, & Acceleration	HW 1	
T Jan 23	Uniform Acceleration	Quiz 1	Lab 1
R Jan 25	Falling Objects	HW 2	
T Jan 30	Projectile Motion	Quiz 2	Lab 2
R Feb 1	Newton's Laws	HW 3	
T Feb 6	Applications of Newton's Laws	Quiz 3	Lab 3
R Feb 8	Centripetal Motion	HW 4	
T Feb 13	Planetary Motion	Quiz 4	Lab 4
R Feb 15	Work, Power, & Energy	HW 5	
T Feb 20	Conservation of Energy	Quiz 5	Lab 5
R Feb 22	Momentum & Impulse	HW 6	
T Feb 27	Collisions	Quiz 6	Lab 6
R Feb 29	Rotational Motion	HW 7	
T Mar 5	Angular Momentum	Quiz 7	Recitation

R Mar 7	Midterm Exam		
T Mar 12	Spring Break		
R Mar 14			
T Mar 19	Fluids		Lab 7
R Mar 21	Temperature & Heat	HW 8	
T Mar 26	Heat Engine and 2nd Law	Quiz 8	Lab 8
R Mar 28	Heat Pump & Entropy	HW 9	
T Apr 2	Coulomb's Law	Quiz 9	Lab 9
R Apr 4	Electric Field & Potential	HW 10	
T Apr 9	Electric Circuits & Ohm's Law	Quiz 10	Lab 10
R Apr 11	Electrical Energy and Power	HW 11	
T Apr 16	Magnetic Force	Quiz 11	Make Up Lab
R Apr 18	Faraday's Law	HW 12	
T Apr 23	Waves, Sound, & Light	Quiz 12	Recitation
R Apr 25	Finish Light, Review for Final		
T Apr 30	No Class		
R May 2	Final Exam 5:45 - 7:45		

*Instructor reserves the right to make changes as needed

Student Code of Conduct:	<p>You are expected to submit work that is your own and properly acknowledge the work of others. You are responsible for understanding and adhering to the Student Code of Conduct found in the UAF Course Catalog. Violations of the Code will be reported to the Dean of Students.</p> <p>https://catalog.uaf.edu/academics-regulations/students-rights-responsibilities/</p>
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<p>Student Resources & Disability Services</p>	<p>I will work with any student based on their needs to the best of my ability. If applicable, you are responsible for arranging for these services with Disability Services.</p> <ul style="list-style-type: none"> ● Disability Services 907-474-5655, uaf-disability-services@alaska.edu, Eielson 104 ● Student Health & Counseling 907-474-7043 https://www.uaf.edu/chc/appointments.php, Whitaker 203 ● ASUAF Student Government 907-474-7355, asuaf.office@alaska.edu, Wood Center 119
<p>Student Academic Support</p>	<p>Physics HW Help REIC 122 (Schedule on Canvas)</p> <p>UAF Academic Support: https://www.uaf.edu/advising/students/support-resources.php</p> <p>Includes links for tutors and general support</p>
<p>Student Protections & Services</p>	<p>UAF embraces and grows a culture of respect, diversity, inclusion, and caring. Students at this university are protected against sexual harassment and discrimination (Title IX). Faculty members are designated as responsible employees, requiring them to report sexual misconduct. Graduate teaching assistants do not share the same reporting obligations. For more information on your rights as a student and the resources available to you to resolve problems, please go to: https://catalog.uaf.edu/academics-regulations/students-rights-responsibilities/</p>
<p>Nondiscrimination Statement</p>	<p>The University of Alaska is an affirmative action/equal opportunity employer and educational institution. The University of Alaska does not discriminate based on race, religion, color, national origin, citizenship, age, sex,</p>

	<p>physical or mental disability, status as a protected veteran, marital status, changes in marital status, pregnancy, childbirth or related medical conditions, parenthood, sexual orientation, gender identity, political affiliation or belief, genetic information, or other legally protected status. The University's commitment to nondiscrimination, including against sex discrimination, applies to students, employees, and applicants for admission and employment. Contact information, applicable laws, and complaint procedures are included on UA's statement of nondiscrimination, available at www.alaska.edu/nondiscrimination.</p> <p>Office of Rights, Compliance, and Accountability</p> <p>1692 Tok Lane, 3rd floor, Constitution Hall, Fairbanks, AK 99775 907-474-7300 uaf-deo@alaska.edu</p>
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Source: xkcd

This syllabus represents an agreement between the instructor and student on the expectations of the class for both parties. Please sign below after reviewing the syllabus and turn in this signature page. Thank you for participating in this class, I look forward to the semester with you!

Instructor: Joe Storm

Instructor Signature:

Student Name Printed: _____

Student Signature: _____