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

REIC 114:

Office Hours I am in Reichardt ~8-4 Mon - Fri.

Office hours Monday 10AM-12PM or by appointment

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 6th, covering Chapters 1 - 7.

The Final Exam will be on Thursday, May 1st, 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, F, NB, and I,				

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 14	Intro to Course and Physics		
R Jan 16	Speed, Velocity, & Acceleration	HW 1	
T Jan 21	Uniform Acceleration	Quiz 1	Lab 1
R Jan 23	Falling Objects	HW 2	
T Jan 28	Projectile Motion	Quiz 2	Lab 2
R Jan 30	Newton's Laws	HW 3	
T Feb 4	Applications of Newton's Laws	Quiz 3	Lab 3
R Feb 6	Centripetal Motion	HW 4	
T Feb 11	Planetary Motion	Quiz 4	Lab 4
R Feb 13	Work, Power, & Energy	HW 5	
T Feb 18	Conservation of Energy	Quiz 5	Lab 5
R Feb 20	Momentum & Impulse	HW 6	
T Feb 25	Collisions	Quiz 6	Lab 6
R Feb 27	Rotational Motion	HW 7	
T Mar 4	Angular Momentum	Quiz 7	Recitation

R Mar 6	Midterm	Exam	
T Mar 11	Spring Break		
R Mar 13			
T Mar 18	Fluids		Lab 7
R Mar 20	Temperature & Heat	HW 8	
T Mar 25	Heat Engine and 2nd Law	Quiz 8	Lab 8
R Mar 27	Heat Pump & Entropy	HW 9	
T Apr 1	Coulomb's Law	Quiz 9	Lab 9
R Apr 3	Electric Field & Potential	HW 10	
T Apr 8	Electric Circuits & Ohm's Law	Quiz 10	Lab 10
R Apr 10	Electrical Energy and Power	HW 11	
T Apr 15	Magnetic Force	Quiz 11	Make Up Lab
R Apr 17	Faraday's Law	HW 12	
T Apr 22	Waves, Sound, & Light	Quiz 12	Recitation
R Apr 24	Finish Light, Review for Final		
T Apr 29	No Class		
R May 1	Final Exam 5:45 - 7:45		

^{*}Instructor reserves the right to make changes as needed

Student Code of Conduct:	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.
	https://catalog.uaf.edu/academics-regulations/students-rights-responsibilities/

Student Resources & Disability Services	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. • 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
Student Academic Support	Physics HW Help REIC 122 (Schedule on Canvas) UAF Academic Support: https://www.uaf.edu/advising/students/support-resources.php Includes links for tutors and general support
Student Protections & Services	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/
Nondiscrimination Statement	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,

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Office of Rights, Compliance, and Accountability

1692 Tok Lane, 3rd floor, Constitution Hall, Fairbanks, AK 99775 907-474-7300 uaf-deo@alaska.edu



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:	fr Ster
Student Name Printed:	
Student Signature:	