

Physics 50: Preparatory Physics Syllabus Winter 2019

Class Details:

4 units
Lecture Tue/Thurs 5:30pm-7:20pm
Room S34

Instructor:

Megan Ulbricht

Email:

ulbrichtmegan@fhda.edu

Office Hour:

Thursdays 4:30pm-5:20pm
January 10 - March 21

Final Exam:

Tuesday March 26, 2019 6:15pm-8:15pm in S34

Text:

Physics, 4th or 5th edition, volume 1 by James S. Walker
You will have the option of purchasing the eText with the Pearson online homework submission program. A physical copy of the text is not required.

Course Description:

This course serves as an introduction to the basic laws and theories of classical mechanics and utilizes primarily algebra based mathematical methods with some calculus. This course will help students develop the problem solving skills required for Physics 4A. The topics covered in this course include kinematics in one and two dimensions, vectors and trigonometry as they relate to the physical world, Newton's Laws of motion, work, conservation of energy and momentum, rotational kinematics and dynamics, and equilibrium of rigid bodies.

Important Dates:

January 20, Last day to drop a class
January 21, Martin Luther King Jr. Holiday, campus closed
February 15-18, President's Holiday, campus closed
March 1, Last day to drop with a "W"

Homework	20%
Midterm I	22.5%
Midterm II	22.5%
Participation	5%
Final Exam	30%

Course Grade Distribution:

Letter Grade Distribution:

Percent	Grade	Grade Points
>97.5%	A+	4.0
92.5% - 97.4%	A	4.0
90% - 92.4%	A-	3.7
87.5% - 89.9	B+	3.3
82.5% - 87.4%	B	3.0
80% - 82.4%	B-	2.7
77.5% - 79.9%	C+	2.3
70% - 77.4%	C	2.0
67.5% - 69.9	D+	1.3
62.5% - 67.4%	D	1.0
60% - 62.4%	D-	0.7
<60%	F	0.0

Exams:

There will be two midterms and one comprehensive final. The exams will include a multiple choice and a free response section. You may use any calculator that you would like, with the exception of a cellphone calculator, as well as a 3" x 5" notecard containing any equations/notes that you find helpful. **There are no make up exams.**

Homework:

Homework will be submitted online via Pearson Mastering Physics. There is a link on Canvas to get started with the program. Homework done on paper will not be accepted.

Participation:

At some point during each lecture I will give a short quiz relating to current material or pass around a sign-in sheet. The participation portion of your grade is based on whether or not you take part in these quizzes/sign in. The quizzes are not graded. You may miss up to two classes and still get full credit on the participation portion of your grade.

Student Learning Outcome(s):

*Critically examine new, previously un-encountered problems, analyzing and evaluating their constituent parts, to construct and explain a logical solution utilizing, and based upon, the fundamental laws of mechanics.