

Physics 212 General Physics with Calculus Syllabus, Winter 2021

Instructor: Daniel Summerton

Lab Instructor: Kelby Hahn

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Lab Instructor e-mail: hahnk@linnbenton.edu

Link to Lab Syllabus:

https://docs.google.com/document/d/1t0IVHZTIDW7cQ7JW43txVENFSuYcwNVc-d_T0tzuDQ8/edit?usp=drivesdk

Office Hours: Available by appointment

Zoom Link for Lecture: <https://linnbenton.zoom.us/j/2719266016>

Due to the current Covid 19 pandemic Physics 212 will be taught entirely online. The general format of the lecture portion of the class is outlined below.

Monday: Live lecture will begin at 5pm PST on zoom and will cover new material for the week. The lecture will be recorded and posted on Moodle Tuesday. Attending the live lecture is not required for the class.

Tuesday: Previous weeks homework is due on Moodle.

Wednesday: I will be hosting a live zoom session to go over questions and manage breakout sessions for group work. The sessions will begin at 5 pm and go till 7 pm. This will be recorded and posted on moodle.

Thursday: Online lab meeting. Time depends on registration. Find zoom link at

<https://linnbenton.zoom.us/j/95113273967> Password: ph212

Contact Kelby Hahn for questions regarding the labs.

Saturday: Chapter HIP will be due by midnight.

See the schedule below for further details.

Physics 212 introduces the concepts of universal gravitation, rotational motion and waves.

Math requirements for this class and for physics in general

Math is the language of a large part of what we do in physics.

Completion of MTH 251 (Differential Calculus) with a “C” grade or better.

Completion of MTH 252 (Integral Calculus) with a “C” grade or better.

Required Materials for the Class:

Textbook – Knight 4 th Edition “Physics for Scientists and Engineers” , 3rd Edition would work as well.

Computer and webcam with internet access.

Grading:

Find the Course on gradescope.com

Course Name: Physics 212

Entry Code: RWZ45Y

Grade Calculation:

HIPs: 20%, assigned on Monday of each week. Due on Saturday of each week at midnight.

Requirements: HIPs must be handwritten, scanned and uploaded to gradescope. All work must be shown to receive full credit. Two late HIPs will be accepted for full credit if less than a week late. Additional late HIPs will receive half credit. HIPs will be graded based on correctness, work shown and legibility. If a problem is unsolvable, an explanation is required

Weekly Homework: 15% Assigned Monday and due the following Tuesday at midnight. Homework assignments will be posted on Moodle as HWA on Tuesday and HWB on Thursday.

Labs: 20%: Live Zoom lab sessions will be held every week during their regularly scheduled times. Informal group lab reports will be due on Gradescope at the end of each lab session. Contact Kelby Hahn (hahnk@linnbenton.edu) if you are unable to attend your scheduled time, will be more than 10 minutes late, or have any questions.

Exams: 45%: Three equally weighted exams will be given, each covering the material since the previous exam. The exams will be sent out Wednesday at 5 pm and will be due back by Wednesday at 7 pm. The exams must be returned as a handwritten single pdf attachment.

Grading Scale:

90%-100%	A
80%-89%	B
70%-79%	C
60%-69%	D
< 60%	F

Other possible grades at LBCC:

I -- Incomplete.

Students in need of accommodations: Students who may need accommodations due to documented disabilities, who have medical information which the instructor should know, or who need special arrangements in an emergency, should speak with the instructor during the first week of class. If you have not accessed services and think you may need them, please contact Disability Services, 541-917-4789.

Tutoring and Tass sessions:

link to tutoring page

<https://www.linnbenton.edu/current-students/study/learning-center/tutoring/>

Tass schedule help via zoom will be posted as soon as it is available at

<http://minirov.info/ph212>

04-Jan	06-Jan	07-Jan	08-Jan
Chapter 13 lecture	Chapter 13 meeting	Lab#1: Universal Gravitation	HIP1 Due
11-Jan	13-Jan	14-Jan	15-Jan
Chapter 12 lecture	Chapter 12 meeting	Lab#2: Torques in Equilibrium	HIP2 due
18-Jan	20-Jan	21-Jan	22-Jan
LBCC Closed, no live	Chapter 12 continued	Lab#3: Torques and	HIP3 due

lecture.	meeting	Angular Acceleration	
25-Jan	27-Jan	28-Jan	29-Jan
Chapter 14 lecture	Chapter 14 meeting	Lab#4: Archimedes' Principle	HIP4 due
01-Feb	03-Feb	04-Feb	05-Feb
Chapter 15 lecture	EXAM 1	Lab #5: Simple Harmonic Motion	HIP 5 due
08-Feb	10-Feb	11-Feb	12-Feb
Chapter 16 lecture	Chapter 16 meeting	Lab#6: Doppler Effect	HIP6 due
15-Feb	17-Feb	18-Feb	19-Feb
LBCC closed, no live lecture		Lab 7: Standing Waves	HIP7 due
22-Feb	24-Feb	25-Feb	26-Feb
Chapter 17 lecture	Exam 2	Lab#8: Diffraction	HIP8 due
01-Mar	03-Mar	04-Mar	05-Mar
Chapter 33 Lecture	Chapter 33 meeting	Project Evaluation	HIP9 due
08-Mar	10-Mar	11-Mar	12-Mar
Chapter 34 lecture	Chapter 34 lecture	Lab#9 Telescopes	HIP10 due
15-Mar	17-Mar	18-Mar	19-Mar
	Exam 3 (comprehensive)		