

PHY 317K - General Physics I - Fall Semester, 2016

(This course carries a Quantitative Reasoning flag.)

Class Meetings: Unique number 56110: T–Th 11:00 – 12:15 in Painter Hall 2.48

Unique number 56115: T–Th 2:00 – 3:15 in Painter Hall 2.48

Instructor: Karol Lang (RLM 10.206, 471-3528) – Office hours: T–Th 12:30–1:30 and by appointment

Instructor's e-mail address: phy317m@physics.utexas.edu (DO NOT USE any other!)

TA/Graders: Qianyu Hao, Yi Luo, and Aaron Webb,

Office hours by appointment. Contact info will be linked from the Home Page.

Discussion Sessions: The schedule (10 hours per week) can be found at the Problem Sessions link on the Home Page.

Textbook: *Essential University Physics*, Vol. 1, by Richard Wolfson (Pearson Addison Wesley), 2nd edition.

NOTE: the 1st edition is okay.

Prerequisites: A high school physics course, PHY 306, or consent of the undergraduate advisor;

Math 408C, or Math 408K and concurrent registration for M 408L;

and concurrent registration for PHY 117M.

Schedule: Back side of this page; pdf at the Schedule link on the Home Page.

This gives the schedule of class topics, exams, etc.

Homework: There will be five homework assignments. They will be available from the Homework link on the Home Page. Homework will not be graded, and it will not count in the course grade. However, it is important to do the homework, since working problems is an important part of learning physics. Doing the homework is the best way to prepare for the exams.

Exams: There will be three exams and a final. *They will be closed-book/closed-notes.* You **may not** use electronic devices of any kind. Exams will be multiple choice. Unless one and only one answer is clearly marked, there will be no credit. There will be no partial credit. Additional information on Exams can be found at the Exams link on the Home Page. The exams during the semester will be given according to the schedule in the table below. These evening exams were listed in the Course Schedule, so you should have checked for conflicts (e.g., evening exams in other classes) before registering. You **must** take exams in the section in which you are registered. If you have a conflict with any scheduled exam, notify the instructor as soon as possible. **Any** circumstances limiting your ability to take **any** of these exams as scheduled must be brought to the instructors attention **no later than September 9**. You **must** notify the Instructor by September 9 if you wish to request an alternate time for any exam.

Date	Unique 56110	Unique 56115
Sep 20	6:00 pm – 7:15 pm in WEL 2.246 & WEL 2.308	6:30 pm – 7:45 pm in WEL 3.502
Oct 13	6:00 pm – 7:15 pm in WEL 2.246 & WEL 2.308	6:30 pm – 7:45 pm in WEL 3.502
Nov 8	6:00 pm – 7:15 pm in WEL 2.246 & WEL 2.308	6:30 pm – 7:45 pm in WEL 3.502

A makeup will be granted only in cases of documented illness, emergency, or UT athletic competition out of town. A missed exam cannot be made up unless a request was made to an instructor before the scheduled exam. Makeup exams will be scheduled for 5:00 pm on the day after the scheduled exam.

Final Exam: A comprehensive final will be given at the time and in the location scheduled by the University.

Grades: Exams will be individually scored from 0 to 100 by dividing the number of correct answers by the number of questions. (A missed exam will be scored as 0.) The course grade will be based on the average of the highest four of the following five numbers: the three exam scores, the final exam score, and the safety net score. Thus, each of these four scores count for 25% of the course grade. The safety net score can be calculated in two steps as follows: (1) calculate the average of the three exam scores and (2) calculate the average of this result and the final exam score. The resulting number is the safety net score. Course grades will not be curved. Letter grades will be assigned as follows: A = 90-100, A- = 85-89, B+ = 82-84, B = 78-81, B- = 75-77, C+ = 72-74, C = 68-71, C- = 65-67, D+ = 62-64, D = 58-61, and D- = 55-57. Below 55 is F. (Note: in applying this method, the average of the four scores (a real number) will be rounded to an integer in the usual way; for example, 74.49999 is 74; 74.50000 is 75.) An applet that applies this algorithm is available at the Grades link on the Home Page.

Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities, 471-6259. **Note: a request for any accommodations needs to be delivered to the Instructor no later than September 9.**

PHY 317K

Course Schedule – Fall 2016

	Date of Class	Topic	Chapters to Have Read	Homework Assigned
1	8/25 Th	Orientation		#1
2	8/30 T	Physics Preliminaries / Motion in a Straight Line	1, 2	
3	9/1 Th	Motion in Two and Three Dimensions	3	
4	9/6 T	Force and Motion	4	#2
5	9/8 Th	Using Newton's Laws	5	
6	9/13 T	Work, Energy, and Power	6	
7	9/15 Th	Review		
8	9/20 T	Exam 1		
9	9/22 Th	Conservation of Energy	7	#3
10	9/27 T	Gravity	8	
11	9/29 Th	Systems of Particles	9	
12	10/4 T	Rotational Motion	10	
13	10/6 Th	Rotational Vectors and Angular Momentum	11	
14	10/11 T	Review		
15	10/13 Th	Exam 2		
16	10/18 T	Static Equilibrium	12	#4
17	10/20 Th	Oscillatory Motion	13	
18	10/25 T	Wave Motion	14	
19	10/27 Th	More Wave Motion		
20	11/1 T	Fluid Motion	15	
21	11/3 Th	Review		
22	11/8 T	Exam 3		
23	11/10 Th	Temperature and Heat	16	#5
24	11/15 T	The Thermal Behavior of Matter	17	
25	11/17 Th	Heat, Work, and the First Law of Thermodynamics	18	
26	11/22 T	The Second Law of Thermodynamics	19	
	11/24 Th	Thanksgiving		
27	11/29 T	Review		
28	12/1 Th	The End		
		Final – Unique #56110: Mon, Dec 12, 2:00–5:00 pm		
		Final – Unique #56115: Wed, Dec 14, 2:00–5:00 pm		