

# Phys 170A: Honors General Physics I

Spring semester 2025

<b>Instructor:</b>	Prof. Peter Lewis ( <a href="mailto:peter.mandeville.lewis@hawaii.edu">peter.mandeville.lewis@hawaii.edu</a> )
<b>Classroom:</b>	WAT 415
<b>Class hours:</b>	MWF 9:30-10:20 am [lecture] F 10:20-11:20 am [recitation]
<b>Office hours:</b>	After recitation on Fridays (until 2pm) or by appointment. WAT 227.
<b>Pre/co-requisites:</b>	MATH 242 or 252A, or 216 with instructor consent
<b>Textbook:</b>	Young and Freedman: <i>University Physics, 15th edition</i> , chapters 1-16. This course will be participating in the Bookstore's <i>Interactive Digital Access Program</i> (IDAP). Through this program, you will access your textbook and homework online.
<b>Homework:</b>	Homework is on the Pearson Mastering Physics website. It will be assigned Fridays at 9:30am and due the following Friday at the same time. Late homework will be accepted with a deduction of 14% for every 24 hours late, rounded up (for example: one minute late is 14%, 24 hours + 1 minute late is 28%, etc). No homework will be accepted or graded after one week past the due date.
<b>Recitation:</b>	Friday recitations will include problem-solving examples and small-group exercises. Grades for these exercises will be based on a set of standardized problem-solving steps that will be detailed in the first week.
<b>Grading:</b>	The grading breakdown is as follows: <ol style="list-style-type: none"><li>1. [30%] Homework</li><li>2. [20%] Friday problems (done during recitations)</li><li>3. [10%] Midterm 1: Chapters 1-4</li><li>4. [10%] Midterm 2: Chapters 5-8</li><li>5. [10%] Midterm 3: Chapters 9-12</li><li>6. [10%] Midterm 4: Chapters 13-16 (first half of final exam)</li><li>7. [10%] Comprehensive exam (second half of final exam)</li></ol>
<b>Course goals:</b>	This is an intensive course designed specifically to set a strong and rigorous foundation for new physics majors. There is a very strong emphasis on problem solving techniques.
<b>Learning outcomes:</b>	You will understand how to apply Calculus principles and tools to basic physics problems in mechanics and waves/acoustics. You will develop problem-solving skills that will translate into upper-division major coursework.

Wk	Date	Lecture	HW	Reading
1	M Jan 13	CH1	0 →	CH1
	W Jan 15	CH1		
	F Jan 17	CH1 + recitation	0 ←, 1 →	
2	M Jan 20	No class: MLK Jr. Day		CH2
	W Jan 22	CH2		
	F Jan 24	CH2 + recitation	1 ←, 2 →	
3	M Jan 27	CH3		CH3
	W Jan 29	CH3		
	F Jan 31	CH3 + recitation	2 ←, 3 →	
4	M Feb 3	CH4		CH4
	W Feb 5	CH4		
	F Feb 7	Review CH 1-4 + recitation	3 ←, 4 →	
5	M Feb 10	Midterm 1		CH5
	W Feb 12	CH5		
	F Feb 14	CH5 + recitation	4 ←, 5 →	
6	M Feb 17	No class: President's Day		CH6
	W Feb 19	CH6		
	F Feb 21	CH6 + recitation	5 ←, 6 →	
7	M Feb 24	CH7		CH7
	W Feb 26	CH7		
	F Feb 28	CH7 + recitation	6 ←, 7 →	
8	M Mar 3	CH8		CH8
	W Mar 5	CH8		
	F Mar 7	Review CH 5-8 + recitation	7 ←, 8 →	
9	M Mar 10	Midterm 2		CH9
	W Mar 12	CH9		
	F Feb 14	CH9 + recitation	8 ←, 9 →	
(Spring Break)				
10	M Mar 24	CH10		CH10
	W Mar 26	No class; Kuhio Day		
	F Mar 28	CH10 + recitation	9 ←, 10 →	
11	M Mar 31	CH11		CH11
	W Apr 2	CH11		
	F Apr 4	CH11 + recitation	10 ←, 11 →	
12	M Apr 7	CH12		CH12
	W Apr 9	CH12		
	F Apr 11	Review CH 9-12 + recitation	11 ←, 12 →	
13	M Apr 14	Midterm 3		CH13
	W Apr 16	CH13		
	F Apr 18	No class: Good Friday	12 ←, 13 →	
14	M Apr 21	CH13		CH14
	W Apr 23	CH14		
	F Apr 25	CH14 + recitation	13 ←, 14 →	
15	M Apr 28	CH15		CH15
	W Apr 30	CH15		
	F May 2	CH16	14 ←, 15 →	
16	M May 5	CH16		CH16
	W May 7	Review	15 ←	
	F May 9	No class: study day		
	F May 16	9:45am FINAL EXAM: Chapters 1-16		