

PHYS1111 Fall Semester 2022

Introductory Physics - Mechanics, Waves and Thermodynamics

Syllabus:

25664 , Period 5: 12:40pm - 1:30pm MWF Room 202 Physics Building.

25666 , Period 6: 1:50pm - 2:40pm MWF Room 202 Physics Building.

Course Instructor: Professor K K Mon

kkmon@uga.edu

Office: 223D, 542-3454

In-person weekly office hours will not be available to maintain social distance. This may change as conditions improves.

Professor Mon is available in-person after each in-person lecture in Room 202 of Physics Building. Please maintain social distance.

Professor Mon can be reached via email.

(Sec A) The course policy on absence from in-person lecture attendance.

No record of in-person lecture attendance will be taken and no demerit for absence from in-person lecture will be given.

[Your health, safety and well-being are of the highest concerns. If you are not well or in difficult circumstances, UGA wants you to immediately seek medical and professional help provided by UGA. See (Sec J) below for more information.]

(Sec B)

I. Officially, UGA has returned to normal modus operandi. This course has in-person lectures MWF in Room 202 Physics Building. There are no online option and no ZOOM access to lectures.

II. Online homework assignments at Mastering Physics.

III. There will be two midterm-tests and another final-test. These will be in-person.

Do not discuss the test questions with anyone before, during or after taking the tests, until all the tests have been graded and scores posted. Any form of assistance will constitute cheating.

There will not be a standard 3 hours final exam.
The standard final exam is replaced by the final-test.

Dates and more specific details of the three tests will be announced. The test average is calculated using only the two highest scores of the midterm-test 1, midterm-test 2, final-test. The lowest score of the three will not be counted.

If you have valid excuse for not taking a scheduled test, you must provide documentation. There will be no makeup midterm-tests. The score for a missing excused midterm-test will be replaced by the final-test's score. If you missed both midterm-tests for valid

reasons, you should seek a withdrawal from the course.

IV. There is a separate lab component of this course, which is managed by the Lab coordinator with graduate Lab TA.

Academic integrity will be strictly enforced.

(Sec C)

Grading Policy:

20% (Mastering Physics Online homework)

+ 40% (ave of the two highest [midterm-1, midterm-2, final-test])

+ 40% (Lab)

= 60% lecture + 40% lab = 100%

The partition of the total grade into lecture (40% + 20%) and lab (40%) is guided by the course description for PHYS 1111-1111L (3 hours lecture and 2 hours lab per week), as listed on the UGA Course Bulletin at the Registrar website.

<https://bulletin.uga.edu/CoursesHome?cid=3899>

The letter grade will be assigned as:

A = 90 to 100

A- = 87 to 89

B+ = 83 to 86

B = 80 to 82

B- = 73 to 79

C+ = 66 to 72

C = 56 to 65

C- = 50 to 55

D = 46 to 49

F = 0 to 45

Standard rounding will be used for the final numerical grade. For example, 89.4999 will be 89 and A-, but 89.5 will be 90 and A.

There are no exceptions to these assignments.

All withdrawals will be processed in accordance with University policy as stated in the undergraduate bulletin. For withdrawals before the midpoint, a grade of "w" will be assigned for all cases.

(Sec D) Course materials:

1. Textbook:

This is for the two sections of PHYS1111 of Professor Mon only. Other sections of PHYS1111 may have different textbook policy.

"Physics, 5th ed" by J.S. Walker (Pearson).
Mastering Physics is needed.

Other editions, eText, paperback, or hardcover are all acceptable.

<https://www.pearson.com/us/higher-education/program/Walker-Modified-Mastering-Physics-with-Pearson-e-Text-Standalone-Access-Card-for-Physics-5th-Edition/PGM284039.html?tab=order>

2. You will need to enroll in the lab component of PHYS1111.

3. A simple basic scientific calculator is needed.

(Sec E) Homework assignment:

Frequent online homework assignments will be an important part of the course. Homework grade is 20% of your total score.

Help will be provided for doing the homework assignments.

Regular online ZOOM homework help session by TA will also be scheduled, subjected to availability of TA.

Since solutions will be posted after due date, do not ask for homework due date extension. Plan ahead to avoid conflicts with other courses.

Students in difficult circumstance will be excused for the specific homework assignment due at that time.

All such request for excuse from homework must be submitted by email within one week of the due date with supporting documentation.

Students are reminded that fraudulent request are considered violation of UGA honor code and subjected to investigation. Equally important, UGA wants students in difficult circumstances to seek help and counseling from UGA.

If students have difficulties in keeping up with academic, get help from UGA. See section F.

Instructors are not trained and thus incompetent to advise students on non-academic situations.

Since homework solution will be posted after due date, excused student need not submit overdue assignments.

Excused homework assignments will not enter in the total number of homework assignments used to calculate homework grade average.

Independent of excused homework, the two lowest required homework grades will be dropped in the calculation of grade.

To allow students to improve their homework grade, the last homework assignment will be optional and for extra credit only.

If there are a total of 16 homework assignments, hw₁₆ will be for extra credit only.

Homework grade:

=

$$\frac{[(hw_1 + \dots \text{exclude \# of excused hw}.. + hw_{15}) + hw_{16} - \text{two lowest}]}{(13 - \# \text{ of excused_hw})}$$

Since extra credit is allowed, it is possible for students to have homework grade that is above 100%.

For example, a student has an average of 96 for 12 hw assignments, one excused hw, in addition has two other lowest hw with scores of 60 and 75, did the extra credit hw_16 with an extra credit of 80 :

$$\text{final hw grade} = [(12 \times 96) + 80] / 12 = 102.666$$

There will be no other extra credit assignment. Please do not ask for exemption from course policy as stated in this syllabus.

(Sec F)

If you are not well or in difficult circumstances, UGA wants you to immediately seek medical and professional help provided by UGA.

You are encouraged to contact Student Care and Outreach in the Division of Student Affairs at 706-542-7774 or visit <https://sco.uga.edu>. They will help you navigate any difficult circumstances you may be facing by connecting you with the appropriate resources or services.

By contacting Student Care and Outreach in the Division of Student Affairs, they can also assist you with documentation to obtain relief from submitting your homework or taking the tests.

(Sec G)

Learning from your peers can be valuable and encouraged but plagiarism is forbidden.

(Sec H)

We will study chapters 1-14 and 16-18 of Physics by Walker.

Course Schedule: (Changes are possible and will be announced.)

date	#	Week 1 of PHYS1111	
08/17/2022	1	Chapter 1	Intro to Physics.
08/19/2022	2	Chapter 2	One-dim kinematics.
		Week 2	
08/22/2022	3		
08/24/2022	4	Chapter 3	Vectors.
08/26/2022	5		
		Week 3	
08/29/2022	6	Chapter 4	Two-dim kinematics.
08/31/2022	7		
09/02/2022	8	Chapter 5	Newton's law of motion
		Week 4	
09/05/2022		Holiday: Labor Day-No Classes	
09/07/2022	9		
09/09/2022	10		
		Week 5	
09/12/2022	11	Chapter 6	Applications of Newton's laws.
09/14/2022	12		
09/16/2022	13		
		Date of Midterm-Test #1 and specifics to be announced.	
		Week 6	
09/19/2022	14	Chapter 7	Work and Kinetic energy.
09/21/2022	15		
09/23/2022	16		
		Week 7	
09/26/2022	17	Chapter 8	Potential energy and conservation
09/28/2022	18		
09/30/2022	19		
		Week 8	
10/03/2022	20	Chapter 9	Linear momentum and collisions.
10/05/2022	21		
10/07/2022	22		
		Week 9	
10/10/2022	23	Chapter 10	Rotational kinematics
10/12/2022	24		
10/14/2022	25		
		Week 10	
10/17/2022	26	Chapter 11	Rotational dynamics ...
10/19/2022	27		
10/21/2022	28		
		Date of Midterm-Test #2 and specifics to be announced.	
		Week 11	
10/24/2022	29	Chapter 12	Gravity.

10/26/2022 30
 10/28/2022 Fall Break - No Classes.

Week 12
 10/31/2022 31 Chapter 13 Oscillations about equilibrium.
 11/02/2022 32
 11/04/2022 33

Week 13
 11/07/2022 34 Chapter 14 Waves and sound.
 11/09/2022 35
 11/11/2022 36

Week 14
 11/14/2022 37
 11/16/2022 38 Chapter 16 Temperature and heat.
 11/18/2022 39

Week 15
 11/21/2022 40 Chapter 17 Phases and phase changes.
 11/23/2022 No Classes, Thanksgiving Holiday
 11/25/2022 No Classes, Thanksgiving Holiday

Final-test is: Monday, Dec 5, 2022
 This is subject to change and details to be announced.

Week 16
 11/28/2022 41
 11/30/2022 42
 12/02/2022 43 Chapter 18 Laws of Thermodynamics

Week 17
 12/05/2022 44 Final-test is: Monday, Dec 5, 2022
 12/06/2022 45 the last day of class for MWF classes.

There will be no three hour final exam.

(Sec I)

UGA Student Honor Code:

"I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others.
 " A Culture of Honesty, the University's policy and procedures for handling cases of suspected dishonesty, can be found at www.uga.edu/ovpi.

(Sec J)

Mental Health and Wellness Resources:

If you or someone you know needs assistance, you are encouraged to contact Student Care and Outreach in the Division of Student Affairs at 706-542-7774 or visit <https://sco.uga.edu>. They will help you navigate any difficult circumstances you may be facing by connecting you with the appropriate resources or services.

UGA has several resources for a student seeking mental health

phys1111_f22

services (<https://www.uhs.uga.edu/bewelluga/bewelluga>) or crisis support (<https://www.uhs.uga.edu/info/emergencies>).

If you need help managing stress anxiety, relationships, etc., please visit BeWellUGA (<https://www.uhs.uga.edu/bewelluga/bewelluga>) for a list of FREE workshops, classes, mentoring, and health coaching led by licensed clinicians and health educators in the University Health Center.

Additional resources can be accessed through the UGA App.