

Introductory Physics I (PHYS 1111) Fall 2018 Syllabus

Department of Physics

Kennesaw State University

Lecture: MWF in Clendenin Building Room 1008: 2:00 - 2:50 PM

Recitation:

MW in Clendenin Building Room 2009: 3:00 - 3:50 PM

F in Mathematics & Statistics Building Room 112: 3:00 - 3:50 PM

1. Instructor

Dr. Ayao Mamert Sossah

Office: SC 538 (Science Building, Kennesaw Campus)

E-mail: asossah@kennesaw.edu

Phone: 470-578-2482

Office Hours: MW: 10:00 - 11:30 AM, F: 10:00 - 12:00 PM, and/or by appointment.

2. Course Catalog Description

The PHYS1111 is a trigonometry- and algebra-based introductory physics course, and constitutes the first part of the general physics series; classical mechanics, thermodynamics, and waves are covered in this course. A large proportion of this course is focused on classical mechanics and its applications.

3. Prerequisites

MATH 1112, MATH 1113, or MATH 1190 with Minimum Grade of C

4. Required Course Materials

4.1. Textbook

Cutnell & Johnson Physics, 10th Edition: Volume One; Wiley

The schedule for the course covers Chapters 1-17, with a loose coverage of 11-14.

4.2. Calculator

A simple scientific or graphing calculator for exams. Smart phones, iPhones, iPads, tablets, PDAs are not allowed during in-class or final exams.

5. Course Resources

5.1. Course Materials and Information

All course materials and information are accessible through the Desire2Learn (D2L) account. It is very important that you check your Desire2Learn account regularly.

<https://kennesaw.view.usg.edu>

5.2. Homework Assignments

Students access homework assignments on the WebAssign web site at:

<https://www.webassign.net/login.html>

To sign up for an account or for student support of WebAssign, go to:

<https://webassign.com/support/student-support/>

The Web Assign class key to enroll in this class is: kennesaw 6026 8810.

5.3. Other resources

For additional help or in case my regularly scheduled office hours do not match your schedule, set up, please, an appointment with me through email or office phone.

6. Grading and Evaluation

6.1. Recitation

Every student enrolled in this class is required to attend his/her recitation session. The recitations are designed to give direct guidance to students on how to apply their learning from in-class materials (lectures) to develop and improve their problem solving skills.

6.2. Homework assignments

There will be homework assignments posted on Web Assign, and students are required to complete it within one (1) week starting from posting dates or prior to the deadlines shown on Web Assign website. Students are encouraged to collaborate on homework assignments; however, each student must turn in (submit) his/her own personal work.

6.3. Exams

Exams consist of multiple-choice questions, short-answer questions, and problem solving questions.

There will be four (4) in-class exams, and the lowest grade will be dropped, and will not be counted toward the cumulative grade for this class.

The final exam is a comprehensive exam, and it is scheduled on Wednesday, December 05 2018 (01:00 PM - 3:00 PM). <http://registrar.kennesaw.edu/dates-deadlines/final-exams-fall.php>

6.4. Grading policies and assignments

8 %: Recitation

17 %: Homework assignment grade

45 %: Cumulative in-class exam grade (3 out of 4)

30 %: Final exam grade

Letter Grade: A = 90 – 100 % of total points; B = 80 – 89 %; C = 70 – 79 %; D = 60 – 69 %; F = Below 60 %.

There will be no make-up of in-class exams. Missing more than one (1) in-class exam will result in a grade of zero (0) that will lower the overall semester grade.

A make-up final exam will be given only to students with legitimate and documented reasons. As soon as the student is aware of the unavoidable situation regarding the final exam, he/she must contact me (instructor), and present sufficient documentation justifying his/her absence at the final exam.

6.5. Exams Schedule

Exam	Date	Time
In-class Exam #1	09/07/2018	2:00 - 2:50 PM
In-class Exam #2	09/28/2018	2:00 - 2:50 PM
In-class Exam #3	10/26/2018	2:00 - 2:50 PM
In-class Exam #4	11/16/2018	2:00 - 2:50 PM
Final Exam	12/05/2018	1:00 - 3:00 PM

7. Learning Objectives

- 7.1. Explain and interpret physical situations as stated in a word problem
- 7.2. Demonstrate a working knowledge in kinematics
- 7.3. Understand the principles of forces, energy and work and have a working knowledge of its application.
- 7.4. Effectively apply knowledge to solve problems in rotational kinematics and dynamics
- 7.5. Demonstrate knowledge in core principles of waves and vibrations

8. Reading assignments

Students are required to read assigned textbook sections before those topics are discussed in class. Regular reading is an important part of class preparation, and allows the student to ask questions in order to improve his/her understanding of the subject.

9. Academic Honesty Statement

Every Kennesaw State University student is responsible for upholding the provisions of the Student Code of Conduct, as published in the Undergraduate and Graduate Catalogs. The Student Code of Conduct addresses the university's policy on academic honesty, including provisions regarding plagiarism and cheating, unauthorized access to university materials, misrepresentation/falsification of university records or academic work, malicious/intentional misuse of computer facilities and/or services, and misuse of student identification cards. Incidents of alleged academic misconduct will be handled through the established procedures of the Department of Student Conduct and Academic Integrity (SCAI), which includes either an "informal" resolution by a faculty member, resulting in a grade adjustment, or a formal hearing procedure, which may subject a student to the Code of Conduct's minimum one semester suspension requirement. See also <http://www.kennesaw.edu/scai/content/ksu-student-code-conduct>.

10. Disability and Accommodations

student with a documented disability or medical condition requiring accommodations must contact the instructor immediately, and present a Written verification from the KSU Student Disability Services (http://www.kennesaw.edu/stu_dev/dss/welcome.html). All discussions are confidential.

11. Student Responsibilities

Students are strongly encouraged to arrive on time, and stay until the end of class. Disruptions or distracting behavior are not tolerated. Cellular phones or any communication devices need to be put on silent mode.

Students should maintain high level of attendance in order to maximize their learning outcome. You are responsible for all topics discussed in class, all class announcements, and all assigned textbook reading (even if some sections are not explicitly covered in class). Absence does not excuse you from this responsibility.

Students need to be aware of the university policies on withdrawals and incompletes. The last day of Drop/Add is Sunday, August 19 2018 (08/19/2018, S) at 11:45 PM. This is the last opportunity to get out of the class without a grade appearing on your academic record.

The withdraw deadline is Wednesday, October 03 2018 (10/03/2018, W). This is the last opportunity to get out of the class with a W grade.

12. Course Contents

Chapter 1: Introduction and Mathematical Concepts

Chapter 2: Kinematics in One Dimension

Chapter 3: Kinematics in Two Dimensions

Chapter 4: Forces and Newton's Laws of Motion

Chapter 5: Dynamics of Uniform Circular Motion

Chapter 6: Work and Energy

Chapter 7: Impulse and Momentum

Chapter 8: Rotational Kinematics

Chapter 9: Rotational Dynamics

Chapter 10: Simple Harmonic Motion

Chapter 11: Fluids

Chapter 12: Temperature and Heat

Chapter 13: The Transfer of Heat

Chapter 14: The Ideal Gas Law and Kinetic Theory

Chapter 15: Thermodynamics

Chapter 16: Waves and Sound

Chapter 17: The Principle of Linear Superposition and Interference Phenomena

13. Important Dates

- 08/19/2018 (Sunday): Drop/Add ends at 11:45 PM.

- **10/03/2018 (Wednesday): Last Day to Withdraw Without Academic Penalty**

- 12/03/2018 (Monday December 03, 2018): Last Day of Classes

- **12/05/2018 (Wednesday December 05, 2018): Final Exam 01:00 PM - 03:00 PM**

- 12/13/2018 (Thursday December 13, 2018) at 5:00 PM: Final Grades Due

NOTES:

1. Web Assign class key to enroll in this class: kennesaw 6026 8810.
2. Do not email me from D2L or WebAssign. You are recommended to use the KSU email system to communicate with me. My email is asossah@kennesaw.edu.
3. **Changes** and **modifications** to this syllabus will be **announced in class** and on **D2L website**.
4. You are strongly advised to log into your D2L account regularly.