

Towson University
Department of Physics, Astronomy and Geosciences

Syllabus: Fall 2025

Course Title: General Physics I
Course Number: **Physics 211**

Instructor:

Dr. Nicolas Kudsieh

E-mail:

Nkudsieh@towson.edu

Lectures:

Attendance is **highly** recommended and for credits
sections 004 006 **SC 1230** T R 12:30 PM – 1:45 PM

Laboratory:

Lab room: **SC 1323**

<i>Section</i>	<i>Time</i>	<i>Instructor</i>
004	W 2:005 PM – 4:45 PM	Dr. Nicolas Kudsieh nkudsieh@towson.edu
006	T 9:00 AM – 11:45 AM	Mary grace bartlett

Office Hours: T R 11:00 AM – 12:00 PM SC 2150 K

In case of emergency, I can meet with you online via Webex

(personal Webex room) <https://towson.webex.com/meet/nkudsieh>

Required Materials:

- 1) **Free: Textbook: OpenStax College Physics:**
<https://openstax.org/details/books/college-physics?Book%20details>
- 2) The Expert TA Online Account for online homework
- 3) Lab Manual for PHYS 211 for life science by Schaefer and Oldak
- 4) Scientific Calculator
- 5) Flash drive for storing data and class materials
- 6) Binder or several spiral bound notebooks for keeping track of class notes, homework, labs

Course Website (www.towson.edu/blackboard): You are responsible for checking the blackboard course website regularly during the semester. Important announcements, homework assignments, and your grades will be posted on the course website.

Course outline

This is an introductory Physics course for since majors. The course is algebra and trigonometry-based dealing with the following topics: Kinematics, Newtonian mechanics, periodic motion, solids and fluids. Prerequisite: MATH 115 or good standing in high school algebra and trigonometry. GenEd II

Course Objectives

1. To gain an understanding of the physical phenomena
2. To learn how to approach physical problem in scientific methods
3. To practice and understand the process of scientific research
4. To develop a good knowledge on classical physics
5. To gain laboratory experience classical mechanics

Grading Scheme

The final grade will be calculated by total points as listed below:

Lab Grade	25%
Homework + Attendance	25% +2%
Class exams	33%
Final Exam	15%
Total	100%

+ possible extra credits adjustment

- **Laboratory Grade**

Lab grades are provided by the Lab Instructor. The detailed laboratory schedule is shown below.

- **Homework Grade**

Homework will be assigned throughout the semester. The homework assignment will be available through ExpertTA website and graded online.

- **Class Exams**

During the whole semester there will be 3 exams with questions on all topics that have been previously discussed in class. Questions will include multiple choice and/or open response.

- **Final Exam**

The final exam is schedule is TBA

- The final exam will be closed notes (2 hours, not comprehensive)
- Final exams can be rescheduled only for medical reasons. In this case, verification from a medical doctor is required to be submitted.

The final grade will be calculated on an absolute scale. The letter grade will be based on a point total of 100 points as follows:

Grade	Range	Grade Point Per Unit
A	91→100	4
A-	89→90	3.67
B+	86→88	3.33
B	81→85	3.00
B-	78→80	2.67
C+	75→77	2.33
C	64→74	2.00
D+	60→63	1.33
D	50→59	1.00
F	< 50	00.00

Class Conduct

- 1- **Attendance** is mandatory (and for credit). You are responsible for all announcements, materials, and handouts given out in class. These assignments are listed on the class schedule at the end of this syllabus.
- 2- **Be on time.**
- 3- **Have a question:** Just raise your hand
- 4- **University code of conduct:** By registering in this course you indicate that you will honor Towson University code of conduct. Please review the “Code of Conduct,” Appendix F of the Towson University Undergraduate Catalog 2013-2014, pp. 214-224. Cheating on the examination, or at any phase of the course, will result in failure of the course.

Masking Statement (if applicable)

The University has set clear expectations about mask wearing for the safety of all in our community. Face coverings over the nose and mouth are required at all times while indoors. There are no exceptions to this rule. Students not wearing a mask--or wearing a mask improperly--will be asked to wear a mask or to fix their mask position. Any student refusing to put on or wear a mask will be asked to leave the classroom immediately. Students who have additional incidents with the mask expectation after a first warning will be referred to the Office of Student Conduct for failure to comply with this University directive

Diversity Mission Statement

The Department of Physics, Astronomy and Geosciences (PAGS), in accordance with the Fisher College of Science and Mathematics (FCSM) and with the Towson University Strategic Plan, support initiatives that promote diversity among FCSM faculty, staff and students. We are committed to increasing the quality and diversity of our students, faculty and staff while increasing retention and curriculum initiatives. To obtain further information related to diversity initiatives, please visit

<http://wwwnew.towson.edu/fcsm/diversity/>
http://wwwnew.towson.edu/physics/Diversity_Plan.asp

Week		Date	Topic	Chapter reading
1	T	8/26	Intro /Math practice / Measurements	
	R	8/28	1D Kinematics intro	2.1-2.4
			No lab	
2	T	9/2	1D Kinematics “Motion equations”	2.5- 2.6
	R	9/4	1D Kinematics /Examples	
	LAB1		<i>Basic measurements and excel tutorials</i>	
3	T	9/9	1D kinematics/free fall	2.7-2.8
	R	9/11	2D Kinematics introduction	
	LAB2		Relating position, velocity and acceleration	
4	T	9/16	2D kinematics/ Projectile motion	3.1-3.4
	R	9/18	2D kinematics examples	
	LAB3		Acceleration and Free fall	
5	T	9/23	Force and motion	4.1-4.5
	R	9/25	Newton's laws/ examples	4.6-4.7
	LAB4		Projectile motion	
6	T	9/30	Force and motion examples	
	R	10/2	Work and energy introduction	7.1-7.4
			Exam 1 review session	
7	T	10/7	EXAM #1	
	R	10/9	Work and energy contin'd	7.5-7.7
	LAB5		Newton's 2 nd law	
8	T	10/14	Linear Momentum	8.1-8.7
	R	10/16	Collisions / examples	
	LAB6		Traction and equilibrium	
9	T	10/21	Linear Momentum contin'd	8.1-8.7
	R	10/23	Linear momentum examples	
	LAB7		Work and energy	
10	T	10/28	Gravitation	6.5
	R	10/30	Circular Motion	6.1-6.3
			Exam 2 review session	
11	T	11/4	EXAM # 2	
	R	11/6	Circular Motion contin'd	10.1-10.2
	LAB8		Contact friction	
12	T	11/11	Intro to rotational motion	9.1-9.2
	R	11/13	Rotational motion	10.3-10.5
	Lab 9		Centripetal motion	
14	T	11/18	Torque and motion/moment of inertia	
	R	11/20	More on rotational motion	9.3-9.6
	Lab 10		Moment of inertia	
15	T	11/25	Problem solving	
	Lab		No lab	
11/27- 121 Thanksgiving holiday university closed				
16	T	12/2	New mechanics	
	R	12/4	Final exam review	
	Lab		No lab	
	TBA			Final exam