# PHYS 211 General Physics I Fall 2020 Section 006-008, 103, 104

Instructor: Dr. Rajeh Mundle Email: <a href="mailto:rmundle@towson.edu">rmundle@towson.edu</a>

**Lecture:** Tuesday, Thursday 3:30 – 4:45 PM on Blackboard

#### **Lab Instructors & Contact Info:**

Dr. Nicolas Kudsieh - <a href="mailto:nkudsieh@towson.edu">nkudsieh@towson.edu</a>

Dustin Baird - dbaird1@students.towson.edu (TA)

Bailey Conrad - <u>bconra4@students.towson.edu</u> (TA)

Calin Reamy - <u>creamy1@students.towson.edu</u> (TA)

Will Korzi - wkorzi1@students.towson.edu (TA)

Kameron Langford - klangf2@students.towson.edu (TA)

Section 006 (Friday 2:00 pm – 4:45 pm) Instructor: Dustin Baird
Section 007 (Tuesday 9:30 am – 12:15 pm) Instructor: Bailey Conrad
Section 008 (Thursday 9:30 am – 12:15 pm) Instructor: Calin Reamy
Section 103 (Tuesday 6:00 pm – 8:45 pm) Instructor: Will Korzi

Section 104 (Thursday 6:00 pm – 8:45 pm) Instructor: Kameron Langford

### Course Description:

Learn about the nature of science and physics. Use mathematical equations to describe and calculate the position, velocity, and acceleration of solid objects (kinematics). Study forces and Newton's laws (dynamics), work, energy, power and momentum conservation. Learn to apply Newton's laws to friction, drag and elasticity when calculating the motion of physical objects. Solve problems using the equations of circular motion and Newton's universal law of Gravitation. This is an introductory course in mechanics and attempts to describe the physical world around us using math and the concepts of classical physics. This class is for Arts and Sciences, Biology and Geosciences majors: Three lecture units and one three-unit laboratory period.

Prerequisite: MATH 115 or good standing in high school algebra and trigonometry.

### Course Administration:

We will use the Blackboard website http://blackboard.towson.edu which you can access using your university userID. The website contains news and announcements, the course syllabus, lab information, lecture notes, quiz solutions and other useful information. Bookmark it and check it often. The lectures will be posted online weekly, and the scheduled class time will become the office hours.

### Laboratory:

Each week we will post the lab of the week on Monday at 9 am eastern time, and it will be due Tuesday at 11:59 am Eastern Time. There will be a total of 9 labs. Labs will be supplemented with video when needed. The students will receive data from lab instructors to complete their PHYS 211 lab manual. The labs will consist of recorded video, walking students through the experiment. They will be provided with raw data for calculations, and for completing their Lab Manual.

### Homework:

Homework assignments will be provided each week through the ExpertTA online system. All problems must be worked out on paper and saved for any homework discussions about grade. Homework will be due as announced. It is your responsibility as a student to keep track of the due dates. Do not wait until the due date to work on problems try to spread it out over the week. It is important that you the student read all chapters and sections assigned before attempting homework problems. Homework will be uploaded Thursday at 8 pm Eastern Time and will be due 11:59 pm Thursday the following week. Last two homework assignments will be given out on a Tuesday and will be due the following Tuesday at 8 pm Eastern time.

### Test and Quizzes:

Two exams and one final exam will be administered online and will be open notes. When taking the test the browser will not allow you to do anything else on the computer. You will not be allowed to leave the view of the web camera while the test is being administered.

### Course Materials:

The textbook we will be using is the free online text <u>Openstax.org</u> college level Along with ExpertTA for Homework and test. The OpenStax College Physics textbook is a free PDF that can be downloaded an unlimited number of times with no strings attached.

The link is available here: <a href="https://openstax.org/details/books/college-physics">https://openstax.org/details/books/college-physics</a>

Registration information for ExpertTA:

Class Info - Physics 211 (Fall 2020) Gen Physics I w/ Prof Mundle \$32.50 Student Registration Link: <a href="http://goeta.link/USH22MD-DBD6CD-22T">http://goeta.link/USH22MD-DBD6CD-22T</a> Further instructions will be posted on Blackboard.

A standard PHYS 211 Lab Manual is required and can be purchased from the TowsonUStore book Store, <a href="https://towsonustore.com/home.aspx">https://towsonustore.com/home.aspx</a>.

A scientific calculator is required for the course. (That includes graphing calculators) Calculators on cell phones will not be permitted for Exams and quizzes.

For synchronous Meetings a <u>computer with a working webcam and mic</u> is required.

### Grading Policy:

Home Work	20 %
Weekly Quizzes	15 %
Lab	20 %
Exam 1	15 %
Exam 2	15 %
Final Exam	15 %
Total	100 %

Percentage	Grade
93-100	A
89-92	A-
86-88	B+
82-85	В
79-81	B-
75-78	C+
70-74	С
60-69	D
< 60	F

Final Course grades will be based on the percentage of total points earned. Grades will be rounded to the nearest percentage point.

# Tentative Class Schedule Ch = Chapter, Sec. = Section

Week	Tuesday	Thursday	Lab
August 24 - Aug. 28	Ch. 1 Sec. 1.1 - 1.4	Ch. 2 Sec. 2.1 - 2.4	No Lab
Aug. 31 -September 4	Ch. 2 Sec. 2.5 - 2.8	Ch. 3 Sec. 3.1 - 3.3	Lab 1
Sept. 7 - Sept. 11	Ch. 3 Sec. 3.4, 3.5	Ch. 4 Sec. 4.1, 4.2	Lab 2
Sept. 14 - Sept. 18	Ch. 4 Sec. 4.3, 4.4	Ch. 4 Sec. 4.5, 4.6	Lab 3
Sept. 21 - Sept. 25	Ch. 4 Sec. 4.7	Review for Exam I	Problem Solving and review
Sept. 28 - October 2	Exam I Ch 1 - 4	Ch 5 Sec. 5.1-5.3	No Lab
Oct. 5 - Oct. 9	Ch 6 Sec. 6.1, 6.2	Ch 6 Sec. 6.3, 6.4	Lab 4
Oct. 12 - Oct. 16	Ch 6 Sec. 6.5, 6.6	Ch 7 Sec. 7.1	Lab 5
Oct. 19 - Oct. 23	Ch 7 Sec. 7.2	Ch 7 Sec. 7.3	Lab 6
Oct. 26 - Oct. 30	Ch 7 Sec. 7.4	Ch 7 Sec. 7.5	Lab 7
November 2 - Nov. 6	Ch 7 Sec. 7.6	Ch 7 Sec. 7.7	Problem Solving and Review
Nov. 9 - Nov. 13	Review for Exam II	Exam II Ch. 5 - 7	No Lab
Nov. 16 - Nov. 20	Ch. 8 Sec. 8.1, 8.2	Ch. 8 Sec. 8.3, 8.4	Lab 8
Nov. 23 - Nov. 27	Ch. 8 Sec. 8.5, 8.6	No Class: Thanksgiving Break Nov 25-29	No Lab
Nov. 30 - December 4	Ch. 9 Sec. 9.1-9.3	Review for final exam	Lab 9
Dec. 7 - Dec. 11	Final Exam Ch. 1 - 9	No class	
Dec. 14 - Dec. 18	End of Semester		

## Copyright Notice:

My lectures and course materials, including, but not limited to Powerpoint presentations, tests, outlines, and similar materials, are protected by copyright. I am the exclusive owner of copyright in those materials they create. You may take notes and make copies of course materials for your own use; however, you may not, nor may you allow others to, reproduce or distribute lecture notes and course materials publicly whether or not a fee is charged without my express written consent. Similarly, you own copyright in your original papers and exam essays. If I am interested in posting your answers or papers on the course web site, I will ask for your written permission.

### Attendance:

"Attendance" in a course that is fully online or has an online component may be evaluated differently. Online attendance, like in-person attendance, is more than just logging into the course or being physically present. Attendance in any case is measured by your intellectual and active engagement with the course content, course tools, course instructor, and with other students in the course.

## Academic Integrity:

Students are responsible members of the academic community. You are therefore obligated not to violate the basic standards of integrity. You are also expected to take an active role in encouraging other members of the community to respect those standards. Should you have reason to believe that a violation of academic integrity has occurred, you are encouraged to make the suspicion known to a member of the faculty or University administration.

Cheating means using, attempting to use, and/or disseminating unauthorized materials, information, notes, study aids, videos or other devices in any academic exercise. This includes unauthorized communication of information during an exercise or exam. Some examples include but are not limited to: Copying from another student's paper or receiving unauthorized assistance during any graded deliverable; using books, notes or other devices (e.g., calculators, phones, watches, laptops, or other internet enabled devices) when these are not authorized; procuring without authorization tests or examinations before the scheduled exercise (including discussion of the substance of examinations and tests when it is expected these will not be discussed); copying reports, laboratory work, computer programs or files and the like from other students; collaborating on laboratory or computer programs or files and the like with other students; collaborating on laboratory or computer work without authorization and without indication of the nature and extent of the collaboration; sending a substitute to take an examination, using solutions manuals, providing exam and assignment questions to student websites or using such a website to

complete an assignment and/or exam (including free or pay websites that maintain textbook and/or instructor solutions). To clarify, copying or collaborating with other students or using external resources, including other people, on any type of assignments that are expressly designed to be completed individually is cheating.

Recorded sessions and any associated materials are designated ONLY for registered students in the class. Any sharing or dissemination of recordings beyond the student body registered in the course and section constitutes a violation of privacy and may also be categorized as cheating or defamation of character (depending on the circumstance), a possible copyright infringement.

Complicity in Academic Dishonesty means helping or attempting to help another commit an act of academic dishonesty. Some examples include but are not limited to: Allowing another to copy from one's paper during an examination or test; distributing test questions or substantive information about the material to be tested without authorization before the scheduled exercise; collaborating on academic work that is expressly designed to be completed individually; taking an examination or test for another student; signing a false name on an academic exercise; or sharing assignment or exam information before, during, or after the deliverable in written, electronic, video, or verbal form. (Note: Collaboration and sharing information are characteristics of academic communities. These become violations when they involve dishonesty. Students should seek clarification when in doubt).

Abuse of Academic Materials means destroying, stealing, or making inaccessible library or other resource materials. Some examples include: Stealing or destroying library or reference materials needed for common academic exercises; hiding resource materials so others may not use them; destroying computer programs or files needed in academic work; stealing or intentionally destroying another student's notes or laboratory experiments; receiving assistance in locating or using sources of information in an assignment where such assistance has been forbidden by the instructor.

## Online Conduct:\*

The discussion board should be viewed as a course forum to discuss the readings, videos, and other course-related content. Your participation in the discussions counts as attendance in this asynchronous online course. The tone of all posts should be respectful and professional in nature.

· Treat the other students and your faculty member the same online as you would in person. Engage with others in a respectful manner.

- · Keep in mind that written communication lacks the non-verbal cues we use to understand each other. It may be helpful to review what you write to ensure the message reads the same way you are intending it to.
- · Remember the TU Student Code of Conduct in all online engagement.
- It is not appropriate to post statements of a personal or political nature, or statements criticizing classmates or faculty. Inappropriate statements/language will be deleted by the course faculty.

## Loaner Laptop Availability and Student Support Funds:

The Office of Technology Services (OTS) has a limited number of laptops to loan to students whose personal computers are unable to run Blackboard, WebEx, Zoom or applications required by the curriculum. If you need to borrow a device, talk to your instructor; they can submit a request on your behalf.

The Towson University Foundation has created the Student Emergency Fund, which has some funds available to assist students in purchasing hotspots, upgrading home internet, and other necessary technologies. For more information, see their <u>website</u>.

# *Netiquette:\**

Students in this online course are expected to observe common rules of netiquette (or Internet etiquette). Those rules include but are not limited to:

- 1. Proofread your message before you hit send.
- 2. ALL CAPITALS are the same as shouting your message, check your caps' lock button.
- 3. Don't flame—everyone is entitled to the right to speak their opinion. Respect the opinions of others.
- 4. Make meaningful replies. Don't just agree—say why you agree! Or disagree, as the case may be—just do so respectfully.
- 5. Follow the TU Student Conduct Code.
- 6. Know that students who do not follow basic netiquette rules may be suspended from discussion board use.

Online Course: This program and course depend upon synchronous online meetings and you are expected to be "virtually" present for these just as if you were meeting in a regular classroom. You must have a working computer, microphone, webcam, and internet connection.

- · In the event of technical difficulty for the student: Email your professor immediately. Do your best to resolve the issue before class.
- · In the event the instructor has technical difficulty If the instructor disappears and doesn't return in 3 minutes, please wait an additional ten minutes before logging off. The instructor will be trying to reestablish the connection and/or may be trying to reach an alternate internet connection. If the professor does not return within those 10-15 minutes, see Blackboard for instructions which will be posted as soon as possible. You are not expected to wait longer than twenty minutes.
- · In the event of a snowstorm, hurricane, or any widespread loss of power and/or internet connections which disrupts many participants, alternate materials will be posted on Blackboard. Make sure to check as soon as you are able to connect to the internet.

## Diversity 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 <a href="https://www.towson.edu/fcsm/about/diversity/">https://www.towson.edu/fcsm/about/diversity/</a>