University of Rhode Island - Preliminary Syllabus

Physics 203, Winter 2025 Elementary Physics 1

Instructor: Michael Antosh
Office Location: East Hall 210
Email: mantosh@uri.edu

Office Hours: By email, and by appointment

Class Days/Time: In person: 10:00-1:00 on Fridays (January 3, 10, 17)

Online asynchronous: January 2, 6, 7, 8, 9, 13, 14, 15, 16

See schedule on last page

Online lectures posted on <u>brightspace.uri.edu</u>

Classroom: To be announced at a later date

Other requirements: Must have credit for PHY 273, which can only have

happened if you have taken PHY 203 previously.

Course Website: On brightspace (brightspace.uri.edu)

Course Goals and Outcomes

Upon completion, successful students will be able to:

- Solve physics problems in the areas of motion, forces, energy, momentum, rotation, gravity, and periodic motion
- Develop problem-solving skills. For example, compiling important information from the text of a word problem and then successfully using that information in equations to solve for an unknown variable.

Texts/Readings

Textbook

"University Physics" by Ling et al. This book can be downloaded for free at: https://openstax.org/details/books/university-physics-volume-1/ and is also available to be purchased as a printed book online. Volume 2 of the same book will be used for the very last topic of this course; this is available at https://openstax.org/details/books/university-physics-volume-2/

General Education Information

PHY 203 is a general education course. It fulfills learning outcome A1: "Understand and apply theories and methods of the science, technology, engineering, and mathematical (STEM) disciplines"

Other necessary equipment

A calculator, and something to write with (paper and pen/pencil, tablet, etc.). A scientific calculator works well. A way to access the internet.

Expectations of Students

- If you have a question, please ask! For this course, this will often mean sending me an email (mantosh@uri.edu). If you're stuck on a problem, I can help the most if you send me your work in the email.
- Please stay home if you are sick even for exams. If you are unable to attend lecture, email me and I will provide you with assistance in making up the material. If you are unable to attend an exam, email me and we will work out a solution.
- Please bring a calculator and pencil/paper to class.
- Please do not disrupt class. I ask that electronic devices are put away during class, with the only exceptions being specific in-class uses. If you need to look at something, I ask that you not distract other students; for example, you could go outside in the hallway.
- Academic honesty. URI has a policy, referenced below. You may work with each other on the homework, but you must submit your own answers. You are not allowed to work on exams with other students.

Assignments and Grading Policy

Grades are based on the following criteria:

- Homework: 15%
- Unit exams: 60% total (3 exams, 20% each)
- Final exam (covering all course content): 25%

<u>Homework:</u> The homework will be given through the course website on Brightspace (<u>brightspace.uri.edu</u>). For each assignment, you will be given a set of questions, and the numerical answer to each question. You will then answer a "quiz" where, for each question, you are asked whether are able to solve this question. Please answer with how you actually feel; every answer will give full points. The point of this homework is to encourage you to learn for yourself how each problem can be solved, since that is what will help the most on an exam. If there is a problem you can't solve, please ask me for help, even if the deadline has passed.

<u>Exams</u>: The course will be broken into 4 units. See the schedule below for what content is in each unit. There will be separate exams on the first three units.

<u>Final Exam:</u> The final exam will be on all of the course content, from the start to the end of class. There will be 4 sections on it: one for each unit (see the schedule for the units). *As long as the final exam happens in person*, I will raise your exam scores to

match any sections where you get a higher score than the original exam on the corresponding unit. For example, if you get a 70% on exam 1 and 90% on section 1 of the final exam, I will raise your exam 1 score to be 90%. The last section of the final exam will count double, since it is the only time unit 4 is on an exam.

Missed Assignments: if you miss (or don't finish) homework, contact me sometime before the end of classes and you can have a short extension to try for 80% of the points. If you have an excused absence reason (for example an illness), contact me and the makeup can be for full credit. Contact me if you miss an exam, as soon as possible and before the end of classes.

Extra Credit: There will be two extra credit assignments offered during the semester, each worth 5% of the points on an exam. These assignments will be available on brightspace, and I will announce them in class. Each assignment will be a survey – one on your math background (first week or class, bonus for exam 1), and one survey that will happen around exam 2. You will get the full amount of extra credit for filling out the assignment.

In-Class Problems

In many lectures, you will be asked to attempt a practice problem during class. These practice problems are given for 3 reasons:

- To give you extra practice on important problem types
- To break up the lecture with an activity
- For me to evaluate how well the class understands a given topic

Your responses on these questions will not be graded, since questions will often be on something we just introduced in class.

Highlighted URI Policies

(Note: these policies are sent to professors by the university administration)

Viral Illness Precautions Statement: The University is committed to delivering its educational mission while protecting the health and safety of our community. Students who are experiencing symptoms of viral illness should NOT go to class/work. The CDC says people with these types of illnesses should stay home until they have been fever-free without medication for at least 24 hours and their symptoms have been improving. If you are unable to attend class, please notify me prior to the start of class at mantosh@uri.edu

Academic Honesty: Students are expected to be honest in all academic work. A student's name on any written work, quiz or exam shall be regarded as assurance that the work is the result of the student's own independent thought and study. Work should be stated in the

student's own words, properly attributed to its source. Students have an obligation to know how to quote, paraphrase, summarize, cite and reference the work of others with integrity.

Excused Absences: Absences due to serious illness or traumatic loss, religious observances, military service, or participation in a university sanctioned event are considered excused absences. Students are responsible for work missed during an excused absence but will not be penalized by grading or assignment/exam make-up policies. Students should notify faculty in advance of absences due to religious observance or university-sanction events, and as soon as possible for other absences See <u>University Manual sections 8.51.11-8.51.16</u> for details.

Mental Health and Wellness: We understand that college comes with challenges and stress associated with your courses, job/family responsibilities and personal life. URI offers students a range of services to support your mental health and wellbeing, including the URI Counseling Center, TELUS Health Student Support App, the Wellness Resource Center, and Well-being Coaching.

Land Acknowledgement: The University of Rhode Island land acknowledgment is a statement written by members of the University community in close partnership with members of the Narragansett Tribe. The statement recognizes and pays tribute to the people who lived on and stewarded the land on which the University now resides. The statement seeks to show gratitude and respect to Indigenous people and cultures and build community with the Narragansett Nation and other Native American tribes.

University of Rhode Island Land Acknowledgment

The University of Rhode Island occupies the traditional stomping ground of the Narragansett Nation and the Niantic People. We honor and respect the enduring and continuing relationship between the Indigenous people and this land by teaching and learning more about their history and present-day communities, and by becoming stewards of the land we, too, inhabit.

Anti-Bias Syllabus Statement: We respect the rights and dignity of each individual and group. We reject prejudice and intolerance, and we work to understand differences. We believe that equity and inclusion are critical components for campus community members to thrive. If you are a target or a witness of a bias incident, you are encouraged to submit a report to the URI Bias Resource Team at www.uri.edu/brt. There you will also find people and resources to help.

Disability, Access, and Inclusion Services for Students Statement: Your access in this course is important. Please send me your Disability, Access, and Inclusion (DAI) accommodation letter early in the semester so that we have adequate time to discuss and

arrange your approved academic accommodations. If you have not yet established services through DAI, please contact them to engage in a confidential conversation about the process for requesting reasonable accommodations in the classroom. DAI can be reached by calling: 401-874-2098, visiting: web.uri.edu/disability, or emailing: dai@uri.edu.

Academic Enhancement Center: The Academic Enhancement Center (AEC) offers face-to-face and online services to undergraduate students seeking academic support. Services are based out of Roosevelt Hall, the Carothers Library room LL004, and online.

- → Peer tutoring is available for STEM & BUS-related courses through the Drop-In Center and small group tutoring.
- → The Writing Center peer consultants offer feedback focused on supporting undergraduate writers at any stage of a writing assignment.
- → UCS 160 and 161 courses and one-to-one Academic Skills Consultations offer strategies for improving planning, studying and test-taking skills.
- → Academic Skills Consultations offer personalized peer support through 1-to-1 meetings focused on helping students build skills and strategies to meet their academic goals. Complete details about each of these programs, up-to-date schedules, contact information, and self-service study resources are all available on the AEC website, <u>uri.edu/aec</u>.
- The Undergraduate Writing Center provides peer writing support to students in any class, even if you haven't started writing yet. Peer writing consultants work with students at any stage, from understanding an assignment and brainstorming ideas to developing, organizing, and revising a draft. Writing consultations are available in person and online, and can be scheduled through <a href="https://link.nic.org/link.nic..org/link.nic.org/link.nic.org/link.nic.org/link.nic.org/link.ni

Center for Career and Experiential Education: The Center for Career and Experiential Education (CCEE) supports undergraduate students with career preparation through one-on-one advising, 24-7 online resources, career education courses, and career events that prepare you for life after graduation and connect you with employers and community partners. Your Career Education Specialist (CES) is available to meet with you all year long, as early as your first-year, both in-person and virtually, to assist with exploring your career options, resume and cover letter writing, interview preparation, job and internship search, and more. We use Handshake to connect you to on and off campus jobs and internships and RhodyServes to connect you with volunteer opportunities in RI. Our team on the first floor of Roosevelt Hall can help you learn how to use Handshake effectively to find amazing opportunities. For more information or to meet with a CES, go to uri.edu/career.

Rhody Outpost Basic Needs Pantry: Food insecurity affects up to 30% of college students. That means you might not have enough food to get through a day or week, you don't have money to purchase groceries or personal products, or you are primarily eating foods that don't provide a lot of nutrition because they're all you can afford. This can all impact your academic success.

<u>Rhody Outpost</u> provides URI students who are food insecure with emergency food services and resources. The Outpost is housed at the Dining Services Warehouse at <u>10 Tootell Road</u>, between Flagg Road and West Alumni Avenue. We are open every Friday from 3-5:30. Any student in need is welcome to visit the Outpost after filling out a brief <u>request</u> form.

If you have questions about food or housing insecurity, contact Barbara Sweeney, Coordinator of Food Security Outreach, at <u>barbara sweeney@uri.edu</u>, or 401-874-5633. We want to help all students succeed and make URI a place with #NoRamHungry.

Course Schedule

Textbook sections and homework due dates are noted. Note: schedule is subject to change; any changes will be announced in class.

Week	Monday	Tuesday	Wednesday	Thursday	Friday
Dec 30 – Jan 3 (Monday- Friday)				(Online video) Start of Unit 1 Sections 1.2- 1.3, 1.6, 3.1-3.4	(In person) Sections 3.4-3.5, 2.1-2.3, 4.1-4.3
Jan 6-10	(Online video) Sections 3.4, 4.3, 4.5, review of unit 1 Start of Unit 2 Sections 5.1-5.7, 6.1	4.4, 7.1-7.4	review of unit 2	(Online video) Start of Unit 3 Sections 9.1-9.6, 10.1-10.3 Homework Sets for Unit 2 Due	(In person) Review session Exam on Unit 1 Exam on Unit 2
Jan 13-17	(Online video) Sections 10.4-10.8, 11.1	(Online video) Sections 11.2- 11.3, review of unit 3 Start of Unit 4 Sections 13.1- 13.3 Homework Sets for Unit 3 Due	(Online video) Sections 13.3-13.5, 15.1	(Online video) Sections 15.2- 15.4, review of unit 4 Homework Sets for Unit 4 Due	(In person) Exam on Unit 3 Final Exam

<u>Unit 1 Sections:</u> 1.2-1.3, 1.6, 3.1-3.5, 2.1-2.3, 4.1-4.3, 4.5

<u>Unit 2 Sections:</u> 5.1-5.7, 6.1-6.4, 4.4, 7.1-7.4, 8.1-8.3

<u>Unit 3 Sections:</u> 9.1-9.6, 10.1-10.8, 11.1-11.3

<u>Unit 4 Sections:</u> 13.1-13.5, 15.1-15.4