

# Physics 1410B, Elementary Physics (1 credit)

UVM Physics Department – Fall 2023

## **Class schedule:**

Lecture: Mondays, 1:10-2:00 in Votey 305

1 credit pass/fail session to help students develop problem solving skills for Physics 1400.

## **Instructor:**

Professor Luke Donforth (he/him)

Office Hours: M & W 11-12 or by appointment

Office: Innovation E227

Email: [luke.donforth@uvm.edu](mailto:luke.donforth@uvm.edu) (I will respond, but not on evenings or weekends.)

Phone: 802-656-0052 (landline, no text)

*Please utilize office hours for help and/or to discuss interesting aspects of the physics we're studying. Answering questions about material is easiest in person. If you have questions about grading, please email so that we both have a record of the conversation.*

**TAs:** there are multiple TAs for introductory physics. You can go to any TA office hours, the TA office hour schedule is posted at <https://www.uvm.edu/cems/physics/help-sessions>

**Supplemental Instruction:** the Center for Academic Success also offers tutoring and supplemental instruction: [https://www.uvm.edu/academicsuccess/tutoring\\_center](https://www.uvm.edu/academicsuccess/tutoring_center)

**Pre-requisites:** Algebra and Trigonometry. Co-enrollement in Physics 1400.

## **Grading:**

This is a PASS/FAIL course graded on participation.

Students upload images of their in-class work into Brightspace. Students are allowed three missed weeks for the semester. Missing more than three classes without excuse or failing to participate in class (hence no evidence of participation available) will result in failing the class.

You must upload your work before you leave class. You must attend for credit.

There are no exams or tests. There is not a final exam.

## Course Description:

Physics, at its heart, is a set of tools to help you analyze and understand the universe around you, from subatomic particles to galactic structures. Physics 1400 is a small step on that path, as a first semester introductory algebra-based college physics course. Students will be presented with the topics of linear and rotational motion, kinematic, momentum, and energy; as well as conservation laws and oscillations.

Physics 1410 exists as an opportunity to work on problem solving skills for Physics 1400 in a structured and supportive environment.

## Course Learning Objectives

Provide additional insight into and practice with algebra-based physics and problem solving skills.

## Land Acknowledgement:

UVM is located on the lands and waters which has long served as a site of meeting and exchange among indigenous peoples for thousands of years and is home of the Western Abenaki People. UVM honors, recognizes, and respects these peoples, especially the Abenaki, as the traditional stewards of the lands and waters on which we gather today. In that spirit, we begin by acknowledging we are guests in this land, and we need to respect and help protect the land and water within our use. In offering this land acknowledgement, UVM affirms Indigenous People's sovereignty, history, and experiences. We note that a land acknowledgement is only a beginning in a larger process of naming injustices and relationship building.

## Required Course Materials:

### Textbook:

#### **Modified Mastering Physics for College Physics: A Strategic Approach 4th Edition**

Author(s): Knight, Jones, Field

You may procure a hardcopy (bound or looseleaf) and/or ebook option of the textbook. You will ALSO need to make sure you have **online access to Mastering Physics**.

A hard-copy of the text is on reserve at Howe Library.

### Calculator:

You should have a scientific or graphing calculator.

### Equipment:

You will need a portable computer (see [CEMS Laptop Recommendations](#)) to access the in-class assignments, course Brightspace page ([brightspace.uvm.edu](https://brightspace.uvm.edu)),

## **Attendance and illness:**

If a student will not be able to attend in-person classes for qualifying health reasons, Student Health Services (SHS) will send a notification to the appropriate student services office or designated staff member informing them of this along with the dates the student is unable to attend. The SHS notification will specify whether the request for flexibility is only around in-person class attendance or includes additional flexibility for assignments and tests because the student is too ill to participate. Students are responsible for working with their faculty to make up class content and work they miss due to a documented illness.

## **Lived Name and Pronoun Information**

The UVM Directory includes fields for indicating your lived name and your pronouns. Lived names (preferred names, names in use) are names that an individual wants to be known by in the University community. Entering your pronouns is strongly encouraged to help create a more inclusive and respectful campus community. To update your information, login to the UVM Directory. A preview box will allow you to see how this information will appear in other systems used on campus such as Microsoft Teams and Blackboard.

More information about how to make changes to your lived name and pronouns is available in the [Knowledge Base](#).

To read more about official UVM policies, events, and initiatives regarding diversity, equity, and inclusion: <https://www.uvm.edu/diversity>

## **Sexual Assault, Relationship Violence, Harassment, & Discrimination Disclosure:**

All course instructors (including graduate and undergraduate students hired for the course) are “Responsible Employees” or mandatory reporters, meaning we are responsible for reporting to the Title IX Coordinator instances of sexual assault, intimate partner violence, harassment, and discrimination disclosed to any of us, including the names of the person that disclose the information, for institutional review. If you would like to speak confidentially with someone (i.e. someone not required to make a report for institutional review) you may contact the following resources directly for support:

[Campus Victim’s Advocacy](#)

[HOPE Works](#)

[UVM Counseling & Psychiatry Services](#)

[Student Health Center](#)

[UVM’s Affirmative Action and Equal Opportunity Office](#)

## Course Evaluation:

All students are expected to complete a **mid-term** evaluation and final evaluation of each course they are enrolled in. Indicate that the evaluations will be anonymous and confidential, and that the information gained, including constructive criticisms, will be used to improve the course.

[Click here for instructions on how to access Blue course evaluations.](#)

## Technical support for students

Students, please read this technology check list to make sure you are ready for classes.

<https://www.uvm.edu/it/kb/student-technology-resources/>

Students should contact the Helpline (802-656-2604) for support with technical issues.

## Student Learning Accommodations:

In keeping with University policy, any student with a documented disability interested in utilizing ADA accommodations should contact Student Accessibility Services (SAS), the office of Disability Services on campus for students. SAS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations, which are communicated to faculty in an accommodation letter. All students are strongly recommended to discuss with their faculty the accommodations they plan to use in each course. Faculty who receive Letters of Accommodation with Disability Related Flexible accommodations will need to fill out the Disability Related Flexibility Agreement. Any questions from faculty or students on the agreement should be directed to the SAS specialist who is indicated on the letter.

### Contact SAS:

A170 Living/Learning Center;

802-656-7753

[access@uvm.edu](mailto:access@uvm.edu)

[www.uvm.edu/access](http://www.uvm.edu/access)

## Regarding potential changes during the semester:

<http://catalogue.uvm.edu/>

The University of Vermont reserves the right to make changes in the course offerings, mode of delivery, degree requirements, charges, regulations, and procedures contained herein as educational, financial, and health, safety, and welfare considerations require, or as necessary to be compliant with governmental, accreditation, or public health directives.

## **Intellectual Property Statement/Prohibition on Sharing Academic Materials:**

Students are prohibited from publicly sharing or selling academic materials that they did not author (for example: class syllabus, outlines or class presentations authored by the professor, practice questions, text from the textbook or other copyrighted class materials, etc.); and students are prohibited from sharing assessments (for example homework or a take-home examination). Violations will be handled under UVM's Intellectual Property policy and Code of Academic Integrity. **Please note that 'sharing assessments' includes course materials on study sites such as Chegg and Course Hero; and that uploading and downloading both count as unauthorized sharing.**

## **Important UVM Policies**

### **Academic Integrity:**

The policy addresses plagiarism, fabrication, collusion, and cheating.

<https://www.uvm.edu/policies/student/acadintegrity.pdf>

### **Code of Student Conduct:**

[UVM's Code of Student Conduct](#) outlines conduct expectations as well as students' rights and responsibilities.

### **FERPA Rights Disclosure:**

The purpose of UVM's [FERPA Rights Disclosure](#) is to communicate the rights of students regarding access to, and privacy of their student educational records as provided for in the Family Educational Rights and Privacy Act (FERPA) of 1974.

Final Exam Policy:

The University [final exam policy](#) outlines expectations during final exams and explains timing and process of examination period.

### **Grade Appeals:**

If you would like to contest a grade, please follow the procedures [outlined in this policy](#).

### **Religious Holidays:**

Students have the right to practice the religion of their choice. If you need to miss class to observe a religious holiday, please submit the dates of your absence to me in writing by the end of the second full week of classes. You will be permitted to make up work within a mutually agreed-upon time. The complete policy is [here](#).

### **Food Insecurity:**

The UVM Center for Health & Wellbeing provides several on- and off-campus resources for students struggling with food insecurity: <https://www.uvm.edu/health/food-insecurity-uvm>

## Promoting Health & Safety:

The University of Vermont's number one priority is to support a healthy and safe community:

[Center for Health and Wellbeing](#)

[Counseling & Psychiatry Services \(CAPS\)](#) Direct Phone Line: (802) 656-3340

**C.A.R.E.** If you are concerned about a UVM community member or are concerned about a specific event, we encourage you to contact the Dean of Students Office (802-656-3380). If you would like to remain anonymous, you can report your concerns online by [visiting the C.A.R.E. Team website](#).

## Statement on Alcohol and Cannabis in the Academic Environment

As a faculty member, I want you to get the most you can out of this course. You play a crucial role in your education and in your readiness to learn and fully engage with the course material. It is important to note that alcohol and cannabis have no place in an academic environment. They can seriously impair your ability to learn and retain information not only in the moment you may be using, but up to 48 hours or more afterwards. In addition, alcohol and cannabis can:

- Cause issues with attention, memory and concentration
- Negatively impact the quality of how information is processed and ultimately stored
- Affect sleep patterns, which interferes with long-term memory formation

## Finally, Thank You:

I appreciate that you're here taking physics with us. For many of you, this is a requirement for your major or future plans - experts in your field of study have decided that this information and these techniques are important for what you want to do. We've worked with some of them to try to make this an informative and useful course for you.

It is my belief and experience that comprehension of physics concepts and principles allows you to more fully understand and engage with the universe. While you may not use physics analytically every day, it is my hope that you succeed in the course and move on with tools to make meaning and sense of the world around you. I look forward to exploring physics with you.

Please come to my office hours or email me if you have questions or concerns, both from the course material or things outside of it. That invitation extends to after the semester as well, as you use or hone these tools in future steps along your life's path.