



## PHYS 2426.02E, University Physics II

### COURSE SYLLABUS: Spring 2026

#### INSTRUCTOR INFORMATION

**Instructor:** Dr. Blake Head

**Office Location:** STC 340

**Office Hours:** TBA

**Class Time:** MWF, 2:00pm - 3:50pm: STC 135

**University Email Address:** thomas.head@etamu.edu

**Preferred Form of Communication:** Office Hours or E-mail! Or just chat with me after class.

**Communication Response Time:** I will do my best to respond to your e-mails as soon as possible, definitely within 24 hours.

**Learning Assistants:** Shreya Dhuri & Kitty Todd

**Graduate Assistant:** TBA

#### COURSE INFORMATION

##### Materials – Textbooks, Readings, Supplementary Readings

Textbook(s) Required: [\*Introductory Physics: Building Models to Describe our World\*](#) – Ryan Martin, Emma Neary, Joshua Rinaldo, Olivia Woodman  
This is an Open Source Textbook (free!). It has been adapted for this course, and will be available on D2L.

**Access to D2L.** This is the university's learning management system, accessed through MyLeo. This will serve as the central hub for the course. All deadlines and announcements will appear here. All links to videos and other material will appear here.

***If in doubt, go to the 2426 course shell in D2L and it will tell you what you are supposed to be doing.***

*The syllabus/schedule are subject to change.*

## Course Description

Physics 2426 is the second semester of a calculus-based physics sequence. University Physics II introduces electrical and magnetic phenomena in nature, including the concepts of electrical charges, electric and magnetic fields, the application of Gauss' Law, electric potential, conductors and insulators, currents, basic circuits, and induction.

## Student Learning Outcomes

- Students will be able to demonstrate the following skills when analyzing situations involving electrostatic fields and potentials and their sources, currents, voltage, capacitance, power, basic electrical circuits, magnetic fields and their sources, and induction:
- Students will be able to conduct qualitative analysis of electromagnetism problems which demonstrates conceptual understanding as measured by performance in visualizing problems through diagrams, estimating answers, assessing and justifying answers, analyzing graphs and clear, written explanations.
- Students will be able to perform quantitative calculations in situations involving electric and magnetic fields, and demonstrate knowledge of the relevant basic units, vector addition, and application of basic calculus. Students will be able to assess answers to questions for plausibility.
- Students will be able to use simple laboratory demonstrations and computer simulations to explain the basic properties of electric and magnetic fields, and electrical circuits.

## COURSE REQUIREMENTS

### Minimal Technical Skills Needed

Students should be able to use D2L (myLeo Online), view videos on YouTube, use a calculator, use Excel and/or a graphing calculator or app, convert work to a pdf, take screenshots, use a variety of online communication methods such as Zoom, Discord, D2L, and email.

### Instructional Methods

This course is taught in '*studio mode*'. Studio mode is a student centered active learning environment that concentrates on group work. When learning how to do something, there is no better teacher than experience and practice. In order to learn physics, you will be actively doing physics every day.

Activities will be completed in groups of 3-4, assigned by the instructor. These groups will change 2-3 times throughout the semester. During class, you and your group will work through labs, conceptual work, and solve problems together. Meanwhile, the

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instructor, learning assistants, and graduate assistant will visit each table to listen in on your discussion, observe your problem solving process, ask / answer questions, and generally poke at you to gauge what things make sense and what things don't. Our goal is to make it so you are able to ask the right kind of questions that allow you to solve problems yourself. Our goal is NOT to give you the answers.

Research in physics education has shown that students learn best when they are actively engaged in class. Studio mode has been implemented at many universities and has been found to have positive impacts on conceptual understanding and problem-solving ability.

## **Student Responsibilities or Tips for Success in the Course**

The vast majority of class time will be spent working in groups. Students are expected to participate fully in group-work in their assigned roles. Students are expected to have completed any assigned reading / watch assigned videos by the due date. Students are expected to take notes on all problems you solve in class, any notes shared by other groups on whiteboards. For work displayed on whiteboards, the easiest thing to do is to just take photos of the work using camera phones. All students are expected to complete the tutorial worksheets.

## **GRADING**

Assignments will be scored in points. In addition, you will see associated learning outcomes on each homework assignment. These are there to inform you what ideas, concepts, and goals you will be assessed on. They also serve as a place for you to clearly see what things we are expecting you to do!

Your grade will be entirely be determined by **Formative Assessments, Group Assignments**, and **Homework** Assignments. The weights of each assignment type are given below:

Formative Assessments - 60%

Group Assignments - 10%

Homework Assignments - 30%

**Total** - 100%

Myself or the GAT will provide feedback on each of your assignments. Using this feedback, you will have the opportunity to revise your work and resubmit within one week of receiving a grade. Remember, college is about **learning**, so as long as you are making the effort to learn, that is what is most important!

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A brief description of each assignment type is given below.

### Formative Assessments

These assignments will occur roughly once per week and will consist of 3-4 physics problems over the relevant section. These are to be completed individually in class. Students may bring handwritten notes. Once graded, you may address any feedback you've received on these assignments, and re-submit to earn any missed points. Revisions must be checked in person by an LA, GA, or the professor.

On each *Formative Assessment*, you will receive 1 of 3 marks:

Label	What it means
Accepted	This work is completed for the most part correctly. Any errors are fairly minor. You are done!
Revise	You have attempted the work, but there are some things you need to work on learning better. You should revise your assignment.
No credit	You either submitted nothing, accidentally submitted the wrong assignment, or submitted work that is barely started.

### You should expect most of your assignments first attempts to be marked Revise.

This is not a bad thing and you should not feel discouraged! In a real job (even mine!) things nearly always need to be revised once or twice. My goal is to have you learn this stuff, so I will hold you to a high standard to support that learning process.

If your work comes back Revise, that means you have one week to revise it if you choose. You have *unlimited* revision attempts, but you always need to complete your next revision within 1 week of when I last sent you feedback. Any submissions after this week will not be accepted and your grade will be locked in.

- You must complete your revisions individually because these are how I see how much you can do on your own.
- You must include in your revision what you went back and changed / fixed, and provide some explanation of why it is important.
- The revised portion should be \*visually distinct\* from your original submission so I know what to look at
- You must have revisions checked in person by someone.

You **MUST** turn your work in on time. I don't accept late work outside of extenuating circumstances! It is okay, however, if your first attempt simply says something like, "I think this has something to do with X, but I feel really lost." That will allow you to submit revisions. There must be evidence that you made a legitimate attempt!

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## **Group Assignments**

During class, students will work on a variety of assignments together in groups. When completed, these assignments must be uploaded to the course shell under the relevant heading. Group members may all upload the same image of their group work, but each student must make their own submission. These are primarily graded on completion as it is expected that you will make lots of mistakes here.

## **Homework Assignments**

Occasional homework assignments will be assigned for students to complete outside of class. Just like *Formative Assessments*, you may also revise these assignments based on any feedback you receive. The same one-week grace period applies here as well.

## **Attendance Policy**

This course is a studio-mode active learning classroom. This requires that students are present and actively participating in **all** lessons. If students fail to show up, then we create a situation where no group work can happen, defeating the entire purpose of the class. For this reason, this course has a strict attendance policy.

Students have a maximum of 3 unexcused absences. After this, each additional unexcused absence will result in your maximum possible grade in this course being reduced by 5 points (one half of a letter grade). We will be taking attendance each day at the start of class. If you are significantly late, it is the student's responsibility to meet with an instructor to be marked present for that day.

If you let someone know you will be missing class beforehand, that absence will be considered excused. Additional proof may be requested if necessary.

## COURSE OUTLINE / CALENDAR

Below is a tentative schedule for the material we will be covering this semester. This could change depending on pacing!!

### Content schedule

Weeks 1-2	Electrostatics and Electric Forces
Weeks 3-5	Electric Field and Charge Distributions
Weeks 6-8	Electric Potential and Electric Potential Energy
Weeks 9-10	Gauss's Law
Weeks 11-12	DC Circuits
Weeks 13-15	Magnetism
Week 16	Finals Week

## TECHNOLOGY REQUIREMENTS

### LMS

All course sections offered by East Texas A&M University have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

[https://documentation.brightspace.com/EN/brightspace/requirements/all/browser\\_support.htm](https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm)

Zoom Video Conferencing Tool

[https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom\\_Account.aspx?source=universalmenu](https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom_Account.aspx?source=universalmenu)

## ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or [helpdesk@etamu.edu](mailto:helpdesk@etamu.edu).

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each

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student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

## **COMMUNICATION AND SUPPORT**

If you have any questions or are having difficulties with the course material, please contact your Instructor.

### **Technical Support**

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

## **STUDENT RESPONSIBILITIES FOR COURSE**

### **CWID and Password**

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or [helpdesk@etamu.edu](mailto:helpdesk@etamu.edu).

### **Technology-Related Issues**

Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a ETAMU campus open computer lab, etc.

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## **TECHNOLOGY REQUIREMENTS AND SUPPORT**

### **Minimal Technical Skills Needed**

Students will need reliable computer and internet access for this course. Students must be able to effectively use myLeo email, myLeo Online D2L, and Microsoft Office.

### **Learning Management System (LMS) – D2L**

All course sections offered by East Texas A&M University have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are the technical requirements:

- View the [Learning Management System Requirements Webpage](#).
- Learn more on the [LMS Browser Support Webpage](#).

### **Technical Support**

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If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found on the [Brightspace Support Webpage](#).

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## **COMMUNICATION AND SUPPORT**

### **Interaction with Instructor Statement**

If you have any questions or are having difficulties with the course material, please contact your instructor. Correspondence will always be through university email (your “myLeo” mail) and announcements in myLeo online (D2L). You will not RECEIVE email through D2L, so be sure to check your ETAMU email for communication. Students are encouraged to check university email daily.

### **Include the Following in Emails with Instructor:**

- Course name and subject in the subject line
  - Salutation (Good afternoon, Dr. Jackson)
  - Proper email etiquette (no “text” emails – use proper grammar and punctuation)
  - Student name and CWID after the body of the email (possibly add to student signature on email)
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## **COURSE AND UNIVERSITY PROCEDURES/POLICIES**

### **Syllabus Change Policy**

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

### **Student Conduct**

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The [Code of Student Conduct](#) is described in detail online in the [Student Guidebook](#).

Students should also consult the [Rules of Netiquette Webpage](#) for more information regarding how to interact with students in an online forum.

### **ETAMU Attendance**

For more information about the attendance policy, please view the [Attendance Webpage](#) and the [Class Attendance Policy](#)

### **Academic Integrity**

Students at East Texas A&M University are expected to maintain high standards of integrity and honesty in all their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty University Procedure 13.99.99.R0.03](#)

[Undergraduate Student Academic Dishonesty Form](#)

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[Graduate Student Academic Dishonesty University Procedure 13.99.99.R0.10](#)

[Graduate Student Academic Dishonesty Form](#)

### **Use of Artificial Intelligence**

East Texas A&M University acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources

### **Students with Disabilities-- ADA Statement**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

### **Office of Student Disability Resources and Services**

East Texas A&M University

Velma K. Waters Library Rm 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: [studentdisabilityservices@etamu.edu](mailto:studentdisabilityservices@etamu.edu)

Website: [Office of Student Disability Services](#)

### **Nondiscrimination Notice**

East Texas A&M University will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information, or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

### **Campus Concealed Carry Statement**

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in East Texas A&M University buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified

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law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and ETAMU Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all East Texas A&M University campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

### **East Texas A&M Supports Students' Mental Health – Counseling Services**

The Counseling Center at East Texas A&M University, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit [www.tamuc.edu/counsel](http://www.tamuc.edu/counsel)

### **Mental Health and Well-Being**

The university aims to provide students with essential knowledge and tools to understand and support mental health. As part of our commitment to your well-being, we offer access to Telus Health, a service available 24/7/365 via chat, phone, or webinar. Scan the QR code to download the app and explore the resources available to you for guidance and support whenever you need it.



As an Institutional Member of the National Association of Schools of Music, East Texas State A&M University supports the Association's commitment to student health and wellness. The following web address provides links to information for resources related to physical and mental well-being, as well as assists in offering preventative measures that students can take to avoid serious and/or chronic conditions: [Musician Health and Safety - East Texas A&M University](#)

### **Department and Accrediting Agency Statement:**

School of Music Mission Statement:

The School of Music at East Texas A&M University promotes excellence in music through the rigorous study of music history, literature, theory, composition, pedagogy, and the preparation of music performance in applied study and ensembles to meet the highest standards of aesthetic expression.

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