PHYS 1402 01W (lecture) and 1LW (lab) – College Physics II

COURSE SYLLABUS: Summer II 2026

INSTRUCTOR INFORMATION

Instructor: W. Lee Powell Jr.
Office Location: Online
Office Hours: On Zoom – by appointment or occasional sessions as announced in D2L
Office Phone: 903-886-5488 (department office) – NOTE – email is the best way to reach me!
University Email Address: Lee.Powell@etamu.edu
Preferred Form of Communication**:** Email
Communication Response Time: Typically less than 24 hours on a weekday.

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Textbook(s) Required – College Physics – Modified Mastering, 11th edition 2020, Young (ISBN 9780136780977) – NOTE – homework will be done in MasteringPhysics.

No lab manual is required. All lab assignments will be in the LMS.

Software – You need a computer that can be used to work with MS Office files, PDFs, web materials (including the homework website – MasteringPhysics) and the LMS (D2L). Taking an online class without access to a computer will likely be impossible.

Optional Texts and/or Materials – a scientific calculator or equivalent is needed for this class. The calculator can be used throughout the course as needed.

Course Description

Catalog description -
PHYS 1402 - College Physics II Hours: 4
Topics include electric charges and fields, DC circuits, magnetic fields, fields due to currents. Prerequisites: PHYS 1401Min Grade C

The *syllabus/schedule are subject to change.*

Student Learning Outcomes (Should be measurable; observable; use action verbs)

Upon successful completion of this course, students will:

1. Solve problems involving the inter-relationship of fundamental charged particles, and electrical forces, fields, and currents.
2. Apply Kirchhoff's Rules to analysis of circuits with potential sources, capacitance, inductance, and resistance, including parallel and series capacitance and resistance.
3. Solve problems in the electrostatic interaction of point charges through the application of Coulomb's Law.
4. Solve problems involving the effects of magnetic fields on moving charges or currents, and the relationship of magnetic fields to the currents that produce them.
5. Use Faraday's and Lenz's laws to determine electromotive forces and solve problems involving electromagnetic induction.
6. Articulate the principles of reflection, refraction, diffraction, interference, and superposition of waves.
7. Describe the characteristics of light and the electromagnetic spectrum.
8. LAB – Demonstrate techniques to set up and perform experiments, collect data from those experiments, and formulate conclusions from an experiment. For this online class, students will interact with simulations and provided datasets rather than work directly with equipment.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Basic algebra, standard form of quadratic equation and finding the roots, trigonometry and vectors

Instructional Methods

This class is entirely online. Lecture videos will be posted covering the material. Lecture slides will also be posted to D2L. There will be required online discussion posts, and homework will be completed on each chapter on MasteringPhysics, the platform that comes with the textbook. Finally, all labs will also be completed online.

Student Responsibilities or Tips for Success in the Course

This is an entirely online class, in a very short timeframe. With just 5 weeks to master this material, please be prepared to spend time daily on this class. The work will very quickly become overwhelming if you fall behind. If you are struggling, ask for help!

GRADING

Final grades in this course will be based on the following scale:
A = 90%-100%
B = 80%-89%
C = 70%-79%
D = 60%-69%
F = 59% or Below

Lab grade: There will be 8 lab assignments completed in D2L (NOTE – they will be in the page for the lecture, not the lab. Everything will be in the lecture page). These are equally weighted and comprise 25% of the final grade. You must pass the lab to pass this course!

Overall grade:

Lab	25%
Discussions	10%
Homework (MasteringPhysics)	25%
Exam 1 and 2	20%
Final Exam	20%

Assessments

Discussions

This is an entirely online class which means at no point will we be together in the classroom to have the usual discussions that would happen in a class. Students lose the connection with their professor and their peers. Discussion questions for online classes are one way to regain that. The questions will cover course topics, either directly or in a way related to applications of those topics. Students must reply to the prompt to meet the rubric supplied in the D2L. Grades are based upon meeting the rubric for length, and based upon the level of participation and thoughtfulness. As part of building community, the grade on each discussion also depends on you responding to at least 2 student postings on the topic. I will drop at least one discussion grade from the final average.

Homework

Homework needs to be submitted by the due date. All homework assignments will be completed in the MasteringPhysics platform. That allows for instant feedback on what you are doing, especially with an online class. The homework will be aimed at preparing students for the exams.

You can discuss the homework problems with fellow students, and some of the discussion topics will focus on doing that. However, you should use the homework to

practice solving problems on your own whenever possible. Late homework will not be accepted except for the pre-approved excuses from the instructor. There will be one assignment due per chapter. That means in total there will be around 10-12 assignments due in the 5 weeks of this course! I will be dropping the lowest two homework grades.

Exams

There will be two regular exams in this course (10% each), and a comprehensive final exam (20%). The exams will be taken in D2L, with more instructions included there on the process and what to expect. There will be a 48 hour window in which each exam can be taken, and once started each exam will have a set time limit. The exams may require the use of a lockdown browser. You need to work alone on the exams. No outside help is allowed from a person (or AI) is allowed.

Note on exams –The final exam grade can replace your lowest grade from exam 1 and 2! If you miss an exam, the grade from the final exam will replace the missing exam grade.

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 the 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

Zoom Virtual Classroom Requirements:
https://support.zoom.us/hc/en-us/articles/201362023-Zoom-system-requirements-Windows-macOS-Linux

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**.**

Note: 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.

COMMUNICATION AND SUPPORT

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

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

Interaction with Instructor Statement

This course is entirely online. I am available via zoom to help, but we will no required synchronous (scheduled) meetings. The best way to reach me is via email. I can make you an appointment if needed so we can meet online.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Attendance Policy

This course is asynchronous, but not self-paced! While it is possible to work ahead on most assignments, you will need to work in concert with your classmates on the weekly discussion questions (the participation portion of your grade), and the exams will only be available to take during a pre-scheduled window of time. You should plan to check in at least daily to keep up with assignments and to read any class announcements.

We will never meet in a synchronous (all together) sort of way. However, I have to certify that you attended and continued to attend the class. **For an online class, doing work (discussion posts, homework, etc.) will be what counts as attendance!** In particular, make sure you complete the first homework and discussion post as assigned so I can certify that you have attended by census date!

Netiquette Expectations

1. Standards of courtesy and respect must be maintained at all times in our online “classroom.” Join in to the discussion, but remember that this is still a “classroom” setting and that respect and consideration are crucial for any intellectual discussion.

2. Discussion areas are the place for intelligent and respectful airing of ideas. Name-calling and personal attacks are not permitted.

3. Any violation of the standards of appropriate behavior online will be reported to the Dean of Students and appropriate disciplinary action will be taken by the college.

Remote proctoring may be utilized in this course.

Late Work Policy

Late work will not be graded - exceptions may be made for the Orientation Assignments if students communicate technical difficulties to me *before* the missed due date. Missed exams may not be made up without medical documents. However, as noted elsewhere in this syllabus, I will drop at least two of your homework grades, at least one discussion grade, and I will allow the final exam grade to replace your lowest grade for exams 1 and 2 (if it is an improvement). That means that while I may not allow late work, as long as you don't miss more than one or two items you are unlikely to be negatively impacted in a large way.

Requirements For Participation In Online Discussion Or Collaborative Activities

Participation in weekly discussion questions is a part of your grade in this course. For the discussion question assignments you will post an original thread as well as responses to two other students' posts. Your original post and responses should be on topic, informed by the reading assignment and/or other research, be fully in your own words, and make use of correct grammar, spelling, and punctuation for full points. See the Week 1 Learning Activities page for information about grading.

Delivery Method Of Feedback and/or Graded Material

Grades on assignments will be posted on D2L. Graded individual assignments will often include comments and/or feedback. It is up to the student to find and read these comments.

MasteringPhysics will typically grade an assignment as soon as it is submitted. Those grades will be set to autopopulate the LMS gradebook.

Communication Policy

Email or LMS message (preferred): Please include your name and the name of the class you are enrolled in. If you don't receive a response within two business days, please email me again, but in general you should hear something within one business day if the message is sent during the week.

Assignment Submission Requirements

Assignments will be submitted through either the LMS or through MasteringPhysics. No email submissions will be accepted under any circumstances

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.

University Specific Procedures

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 in the Student Guidebook

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum:
https://www.britannica.com/topic/netiquette

ETAMU Attendance

For more information about the attendance policy, please visit the webpages below.
https://www.etamu.edu/attendance/

Academic Integrity

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

Undergraduate Students Academic Integrity Policy and Form

Undergraduate Academic Dishonesty 13.99.99.R0.03

https://inside.etamu.edu/aboutus/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Undergraduate Student Academic Dishonesty Form

https://inside.etamu.edu/aboutus/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf

Graduate Students Academic Integrity Policy and Form

Graduate Student Academic Dishonesty

https://inside.etamu.edu/aboutus/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10.pdf

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Graduate Student Academic Dishonesty Form

http://www.etamu.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf

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 Services
Velma K. Waters Library- Room 162
Phone (903) 886-5930
Fax (903) 468-8148
Email: StudentDisabilityServices@etamu.edu
Website: https://www.etamu.edu/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 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 East Texas A&M University 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.

Web url:
http://www.etamu.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

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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 University Supports Students' Mental Health

Counseling Center 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.etamu.edu/counsel**

Department or Accrediting Agency Required Content

NA

COURSE OUTLINE / CALENDAR

Week #	Date	Due dates (all at 11:59pm)	Topic
Week 1	6-Jul	**Thursday July 9 -** DQ1 and Intro to Mastering (HW0) **(CENSUS)** **Sunday July 12-** DQ2, HW1, HW2	Orientation; Ch17 Charge & Electric field; Ch 18 Electric Potential and Capacitance
Week 2	13-Jul	**Sunday, July 19-** Labs 1-3; DQ 3 and 4; HW 3, 4 **Thurs and Fri July 17-18: Exam 1**	Ch19 Current, Resistance & DC circuits; Ch 20 Magnetic Field & Magnetic Force; **Exam 1**
Week 3	20-Jul	**Sunday July 26 –** Labs 4 and 5; DQ 5 and 6; HW 5 and 6.	Ch21 Electromagnetic Induction; Ch22 Alternating current
Week 4	27-Jul	**Sunday Aug 2** – Labs 6 and 7; DW 7 and 8; HW 7 and 8. **Thurs and Fri July 30-31: Exam 2**	Ch23 Electromagnetic waves; Ch 24 Geometric Optics; **Exam 2**
Week 5	3-Aug	**Thursday Aug 6 –** Lab 8; HW 9 and 10 **Wed and Thurs Aug 5 and 6: Final Exam**	Ch 25 Optical Instruments; Ch26 Interference & Diffraction; **Final Exam**

Important dates – July 9 – Census day; Aug 6 – last day of class/final exams.
Exact due dates are in D2L.

Material on each exam –
Exam 1 – Ch 17 - 20
Exam 2 – Ch 21 - 24
Final exam – all previous chapters plus Ch 25 and 26

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