Conceptual Physics

PHYS 100, Spring 2026

Instructor	Mark McKinnon	Phone	ТВА
Office Location	ТВА	Email	mckinnonm@lindsey.edu
Course Meeting Days and Time	Tues/Thur 11:00-12:15	Student Drop-In Office Hours	ТВА
Course Mode	In person		

Course Information

Catalog Description:

Presents basic principles of physics through descriptive and demonstrative techniques. For non-science majors. (Credit may not be counted toward graduation for physics or engineering majors.) Prerequisite: One year of high school algebra.

Credit Hour Policy Statement:

Standard lecture: "This class meets the federal credit hour policy of 1 hour of class with an expected 2 hours of additional student work outside of class each week for approximately 15 weeks for each hour of credit, or a total of 45-75 total hours for each credit." (Def 1)

Course Learning Outcomes:

• Through participation, students will be able to identify the key elements of scientific inquiry

Students will be able to:

- Generate and identify a testable scientific question
- Design an experiment to answer their question
- · Identify flaws in experimental design and sources of experimental error and uncertainty
- Collect and analyze data
- Make connections between their data and existing scientific understanding.
- Present scientific findings through posters, reports and oral presentations.

Assessment of inquiry skills will include:

- Exams will require students to write a testable inquiry and design an experiment to test it.
- Group inquiry projects will be conducted in and outside of class. The inquiry projects will produce a
 poster presentation, written report and/or slides for an oral presentation. All inquiry projects will be
 graded using a checklist of key elements and a rubric. The checklist and rubrics will be provided before
 the beginning of the projects.

Required Materials:

All materials will be provided on Blackboard

Methods of Instructions:

This will be a hands-on, inquiry-based, active-learning environment. Students will be involved in activities in the classroom with only a modicum of lectures. Students will spend some outside time performing simple scientific experiments and presenting results in class.

Withdrawal and Attendance policies:

The learning occurs during the class and through collaboration with your fellow students. Thus, you must attend the classes. Please, do not miss more than three classes. If you have conflicts with the current schedule, meet with the instructor during office hours ASAP.

The last to withdraw from the class is TBD.

Grading Criteria:

Grade Scale: Grades will based on a 5 point scale as follows (Note: There is no curve).

Α	В	С	D	F
> 3.99	> 2.99	>1.99	> 0.99	0.99 or lower

Evaluation: (Absence penalties will be assessed after the following calculation):

Exams (one will be dropped) (No make-ups)	= 20%
Quizzes (two will be dropped) (No make-ups)	= 20%
Inquiry Projects	= 40%
Final Exam (No make-up)	<u>= 20%</u>
Total	= 100%

Extra Credit: Each of the following will raise your grade for the exam by $1/3^{rd}$ point:

Task	Description
Redo each exam	For each question of the exam for which you did not score 4.0 or better:
	- Explain what you did wrong
	- Explain what you were thinking
	- Provide "A" level response (in your own words)

Note on Curving: The grade for this course is not curved. Therefore, you are not competing with the other students in the class. Please work together as much as possible (except on tests!). Every time you help your fellow student; you will learn the material a bit better yourself.

Make-Up Policy: There are no make-ups for quizzes & exams. If you miss a test, that will be the one you will drop. If you are an inter-scholastic athlete that must miss a class for an event, contact your coach so that s/he can provide a proctor for you to take tests while you are traveling.

Quiz Policy: Each Thursday, there will be a quiz **based on homework, textbook examples, lectures, & laboratory activities**. No make-up quizzes will be given. You have the option to drop your lowest two quiz scores or, equivalently, miss up to two quizzes during the semester.

Exam Policy: Three exams will be held on Thursday during the semester. The tentative dates are TBD. No make-up exams will be given. You have the option to drop your lowest exam score or, equivalently, miss one exam during the semester.

Final Policy: Final Exam will be held during the last week of class. No make-up final will be given. You must take the final during this time.

Homework: Homework (or "For Next Time" a.k.a. FNT's) assignments are assigned to engage your understanding from class activities to new (or apparently new) situations. Additionally, problems may be given to stimulate new discussions in anticipation of new physical concepts. It is important that you come prepared to participate in activities and discussions in class. If you have a difficult time with the problem, you should include notes and

specific questions about how to go about addressing the problem. These notes and questions can be used to start or enrich the group discussion during class. Failure to do so will cost you significant progress in developing understanding of the physical concepts. Additionally, it robs the other participants your small group from your assistance in tackling the class assignments. Therefore, your progress on the assignments will be checked at the beginning of class.

Honor Code:

All students at the University of Evansville agree to the University honor code: *I will neither give nor receive unauthorized aid, nor will I tolerate an environment that condones the use of unauthorized aid.*

Course Schedule:

Tentative Schedule of Content:

Weeks 1-5: Energy - Conservation of Energy - Internal Energy - Mechanical Energy

Weeks 6-9: Particle Model of Matter, Particle Model of Bond Energy, Particle Model of Thermal Energy

Weeks 9-12: Transport Model: Hydraulic, Electrical, Thermal Flow

Weeks 12-14: Electricity & Magnetism

Tentative Schedule of Inquiry Projects:

Weeks 4-7: Project 1 Weeks 11-14: Project 2

University Policy Statements

[**Required section.** University policy statements should not be altered.]

Disability Policy:

The University of Evansville is committed to providing an accessible and supportive environment for students with disabilities. It is the policy and practice of the University of Evansville to make reasonable accommodations for students with properly documented disabilities. Students should contact Disability Services at 812-488-2663 to seek services or accommodations for disabilities. Written notification to faculty from Disability Services is required for academic accommodations.

Institutional Equity and Title IX

UE is committed to fostering an atmosphere free from harassment and creating an inclusive campus for all members of the University community regardless of their sex, sexual orientation, gender identity, race, religion, ethnicity, country of origin, ability, or veteran status. All Faculty members are considered Responsible Employees and required to report instances of discrimination, harassment, or sexual violence to the Office of Institutional Equity

You may also choose to speak to a Confidential Resource about your experience. Confidential Resources at the University include:

Counseling Services: 812-488-2663, counselingservices@evansville.edu

Crayton E. and Ellen Mann Health Center: 812-488-2033, healthcenter@evansville.edu

Spiritual Formation Coordinator: 812- 488-5265, spiritualformation@evansville.edu

If you or someone you know has been harassed, assaulted, or discriminated against you can find the appropriate resources by contacting the Assistant Director of Institutional Equity and Title IX Coordinator: email titleix@evansville.edu; phone (812) 488-5261. For more information visit https://www.evansville.edu/offices/titleix/policy.cfm.

Non-discrimination Statement

The University of Evansville expects all members of its community to treat each other with respect and civility. Harassing behaviors directed towards any member of our community will not be tolerated. As part of its commitment to non-discrimination, the University specifically prohibits harassment based on any other characteristics set forth in its nondiscrimination statement as follows: including race, color, gender, gender identity and expression, sexual orientation, creed or religion, national origin, age, disability, veteran status and all federally protected groups/classes. Any form of harassment undermines the mission of the University and negatively impacts the University community as a whole. For more information contact the Center for Inclusive Excellence.

Campus Safety

All members of the UE community are automatically enrolled in the Ace Alerts Emergency Alert System. When the system is activated, emergency notification information is sent in the following manner: calls to campus IP phones, text messages, emails, campus housing speaker system, active threat sirens (non-weather related), digital signage, and AlertUS desktop on campus-owned computers.

To contact the Office of Public Safety:

Emergencies: 812-488-6911 Non-emergencies: 812-488-2051

Complaints, Grievances, and Appeals

The University of Evansville seeks to resolve all student concerns in a timely and effective manner through policies and processes documented in the University Course Catalog and Student Handbook.

Student Resources

Access the links below to connect with departments and resources that are here to support all UE students.

<u>Academic Services</u>: Contact the Center for Academic Advising to connect with academic support services including supplemental instruction, tutoring, and time management and study skills help.

<u>Blackboard Guides</u>: Blackboard is the University of Evansville's course management system for online courses. Guides on using Blackboard can be found within MyUE.

<u>Writing Center</u>: The Writing Center provides access to writing resources, appointments for one-on-one writing help, and assistance with any stage of the writing process.

<u>Counseling Services</u>: Counseling Services provides general, short-term counseling that assists students in identifying barriers and setting goals while improving coping strategies to achieve personal and academic goals.

University Libraries: Conduct research, access resources, and contact librarians for any research related help.