COLLEGE PHYSICS II

PHYSICS 1402

COURSE SYLLABUS: Spring 2022

INSTRUCTOR INFORMATION

Instructor: Christopher Lloyd-Davies

Office Location: C222

Office Hours: 3:00 - 3:50 PM

Email Address: christopher.lloyddav@rcisd.org
Communication Response Time: 24 hours (except during weekends)

COURSE INFORMATION

Textbook(s) Required Cutnell & Johnson Physics

David Young and Shane Stadler

Wiley, 11 e, 2018 ISBN: 978-1-119-39187-6

Course Description

Topics include heat transfer, ideal gas laws, thermodynamics, electric charges and fields, DC circuits, magnetic fields, fields due to currents

College Physics

Four semester hours (3 lecture, 1 lab) including one two-hour laboratory period per week.

This is an algebra based physics course. It covers the topics of heat transfer, ideal gas laws, thermodynamics, electric charges, fields, electric potential, capacitance, resistance, circuits and magnets.

Student Learning Outcomes

- 1. You will be able to apply the laws of thermodynamics
- 2. You will be able to calculate electric forces on charge
- 3. You will be able to calculate electric fields due to charge
- 4. You will be able to calculate electric potential and potential energy
- 5. You will be able to analyze simple and complex electrical circuits
- 6. You will be able to calculate magnetic interaction on electrical charge

COURSE REQUIREMENTS

Minimal Technical Skills Needed

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

Instructional Methods

Class room lecture and laboratory work.

Student Responsibilities or Tips for Success in the Course

Students who do well in this course share most of the following common habits:

- 1. Being honest with yourself regarding the homework
- 2. Conference with the instructor
- 3. Seeking help and advice early in the semester
- 4. Arriving a couple of minutes early for class or virtual meet and not leaving early
- 5. Not using phones, tablets, or computers inappropriately during the class
- 6. Checking the online classroom often for announcements and assignments
- 7. Completing and turning in all assignments on time
- 8. Taking responsibility for their own grade

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 = Below 60%

<u>Lab Grade</u>: The laboratory grade counts for 25% of the total class grade. The lab grading procedure will be discussed in lab. Labs will be due the first day of

the week after the lab, usually a Monday. You must pass the lab to pass

this course. Late labs will be graded as a zero.

<u>Lecture Grade</u>: The lecture portion of the grade is determined from homework, exams, quizzes, and the final exam as outlined below:

•	Homework and attendance	15 %
	(Late Homework is a zero)	
•	Quiz (After each chapter)	15 %
•	Exams	30 %
•	Final exam (comprehensive)	15 %

COURSE OUTLINE / CALENDAR

Lecture and Test (Tentative)

Chapter 12	Temperature and Heat (8 days) (01/05-01/14)
Chapter 13	The Transfer of Heat (7 days) (01/18-01/26)
	FIRST EXAM (02/04)
Chapter 14	The Ideal Gas Law and Kinetic Theory (5 days) (01/27-02/02)
Chapter 15	Thermodynamics (7 days) (02/03-02/11)
	SECOND EXAM (02/17)
Chapter 18	Electric Forces and Fields (8 days) (02/14-02/25)
Chapter 19	Electric P.E. and the Electric Potential (10 days) (02/28-03/18)
	THIRD EXAM (03/25)
Chapter 20	Electric Circuits (10 days) (03/21-04/01)
Chapter 21	Magnetic Forces and Magnetic Fields (9 days) (04/04-04/14)
	FOURTH EXAM (04/22)
Chapter 22	Electromagnetic Induction (9 days) (04/19-04/29)
Chapter 23	Alternating Current Circuits (5 days) (05/02-05/06)

Final Exam is on Friday, May 13th (Tentative)

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce 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

YouSeeU Virtual Classroom Requirements:

https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

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 <a href="https://heb.edu.needu.

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 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

Interaction with Instructor Statement

The graded quiz, homework, and the tests (except the finals) will be returned to the students as a feedback for the course.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Missing an exam without first making arrangements for make-up with the instructor (excused absence cleared before the exam) will automatically result in the failing grade. Missing other class periods will result in penalties as described under the university policies.

Any decision to curve the grade will be taken at the end of the semester Five unexcused absences will automatically result in a failing grade

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 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.

 $\frac{http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentG}{uidebook.aspx}$

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

TAMUC Attendance

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure 13.99.99.Ro.01</u>.

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.Ro.01.pdf

Academic Integrity

Students at Texas A&M University-Commerce 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 Academic Dishonesty 13.99.99.Ro.03

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.Ro.o3UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.Ro.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.Ro.10GraduateStudentAcademicDishonesty.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 Resources and Services

Texas A&M University-Commerce

Gee Library- Room 162

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

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndSe

rvices/

Nondiscrimination Notice

Texas A&M University-Commerce 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.