

#### **COLLEGE PHYSICS I**

### PHYSICS 1401-001

### **COURSE SYLLABUS: SUMMER 2020**

### **INSTRUCTOR INFORMATION**

Instructor: Prof. A. R. Chourasia

Office Location: S-113
Office Hours: 2 - 4 PM
Office Phone: 200, 886

Office Phone: 903-886-5491 Office Fax: 903-886-5480

University Email Address: anil.chourasia@tamuc.edu

Preferred Form of Communication: email

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 one-dimensional and two dimensional motions, dynamics, conservation of energy, conservation of momentum, and rotational motion

### **Prerequisites:**

MATH 141 Min Grade C or MATH 1314 Min Grade C or MATH 142 Min Grade C or MATH 2312 Min Grade C or MATH 176 Min Grade C or MATH 1325 Min Grade C or MATH 2413 Min Grade C or MATH 191 Min Grade C)

# **College Physics**

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

This is algebra based physics course. It covers the topics of motion, gravity, forces, energy, momementum and other topics typically referred to as mechanics.

# **Student Learning Outcomes**

- 1. You will be able to quantify motion of objects
- 2. You will be able to calculate forces causing the motion
- 3. You will be able to analyze two dimensional motion
- 4. You will be able to calculate energy associated with the motion
- 5. You will be able to calculate momentum associated with the motion

### **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 the laboratory

# **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. Joining the class a couple of minutes early for class and not leaving until the class is dismissed
- 4. Not using phones, tablets, or computer during the class
- 5. Checking MyLeo often for announcements and assignments
- 6. Completing and turning in all assignments on time
- 7. Seeking help and advice early in the semester
- 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 = 59% or Below

Lab Grade: The laboratory grade counts 25% of the total class grade. The lab grading

procedure will be discussed in lab.

You must pass the lab to pass this course

<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 penalty 10% each day)

• Two minitests 10 %

• Two Exams 15 % each

• Final exam (comprehensive) 20 %

#### Assessments

Please see the Grading section

### **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.

Policy for the Minitest/Test:

- (1) Do not use cell phone
- (2) Do not share calculator
- (3) No cheat sheet allowed
- (4) No bathroom break allowed

# Policy for the Final Test:

- (1) Max time allowed is 2½ hours from the scheduled start time
- (2) Do not use cell phone
- (3) Do not share calculator
- (4) Only one bathroom break, <u>with permission</u>, with a max time of 5 min. will be allowed

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 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 <a href="Student Guidebook">Student Guidebook</a>.

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

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:

# <u>Undergraduate Academic Dishonesty 13.99.99.Ro.03</u>

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: <a href="mailto:studentdisabilityservices@tamuc.edu">studentdisabilityservices@tamuc.edu</a>

Website: Office of Student Disability Resources and Services

 $\underline{http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndSe}$ 

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#### **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.

# **Campus Concealed Carry Statement**

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce 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 A&M-Commerce 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 <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

#### Web url:

 $\underline{http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf}$ 

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

### **COURSE OUTLINE / CALENDAR**

### Lecture and Test (Tentative)

Chapter 1	Introduction and Mathematical Concepts (Jun 1-2)
Chapter 2	Kinematics in One Dimension (Jun 3-4)
Chapter 3	Kinematics in Two Dimension (Jun 8-9)
<del>-</del>	First Mini Test (Jun 10)
	First Test (Jun 11)
Chapter 4	Forces and Newton's Laws of Motion (Jun 15-17)
Chapter 5	Dynamics of Uniform Circular Motion (Jun 17-22)
Chapter 6	Work and Energy (Jun 22-24)
<del>-</del>	Second Mini Test (Jun 24)
	Second Test (Jun 25)
Chapter 7	Impulse and Momentum (Jun 29-30)
Chapter 8	Rotational Kinematics (Jul 1)
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Final Exam is on Thursday, July 2 at 10:00 AM