Instructor:
Jayant Bhalerao (jbhalerao@dcccd.edu)
Physics classroom and lab: W16 (now moved online because of COVID-19)
Credit Hours: 4
Office Hours: please see “Virtual office hours” below.

Meeting Days & Time: online lectures and labs.

Division: STEM
Office: STEM Division Office, Office Hours: 8:00 A.M.-5:00 P.M.
Office email: evaperez@dcccd.edu
Office Location: Online (due to COVID-19)

Communicating with the instructor:
email is the preferred method for communication with the instructor.
Instructors typically respond to emails from students within 24 hours; however, over the weekend and holiday periods, there may be a delay in response. Find out more about contacting your instructor.

If I do not respond to your email within 24 hours, please send a reminder.
In your emails please include:
1. Your full name as it is in eCampus
2. Your course and section number (since the instructor may be teaching more than one section of the course).
3. A detailed error message with a screenshot of the error, if applicable.

Virtual office hours: the following hours have been set aside to meet with you individually when you have a question or concern that cannot be answered by email. Our meetings will use the Blackboard Collaborate Ultra platform on eCampus. To set up a meeting, please email the instructor in advance with your question and preferred time from the choices listed below. The link for the virtual
meeting is on the left panel of the course page on eCampus and is called Virtual meeting with the instructor.” You will need to click on this link to join the meeting.

Times available for you to meet with the instructor virtually:
Monday: 2:00 P.M. - 3:30 P.M.
Tuesday: 5:00 P.M. - 6:00 P.M.
Wednesday: 10:00 A.M. – 11:00 A.M.
Thursday: 11:00 A.M. - 12:30 P.M.

Physics is “The mystery of being!”

"We each exist for but a short time, and in that time explore but a small part of the whole universe. But humans are a curious species. We wonder, we seek answers. Living in this vast world that is by turns kind and cruel, and gazing at the immense heavens above, people have always asked a multitude of questions: How does the universe behave? What is the nature of reality? Where did all this come from? Did the universe need a creator? Most of us do not spend most of our time worrying about these questions, but almost all of us worry about them some of the time.
Why is there something rather than nothing?
Why do we exist?
Why this particular set of laws and not some other"

Steven Hawking

Course Description: A survey of Physics for liberal arts and other non-science majors. Topics include mechanics, energy conservation, atomic nature of matter and thermodynamics. The history of scientific developments and their impact on daily life are discussed. Also included are laboratory experiments that emphasize a conceptual understanding of Physics. (3 Lec., 3 Lab.)

Note: this course is completely online, you do not need to come to campus. You can work at your own pace and convenience however; you are required to complete certain assignments on eCampus (Blackboard) every week. No lab kit is required for this course. A few inexpensive items are needed for some labs, but these can be found at home or the Dollar Store.

Course prerequisites: One of the following must be met:
(1) Developmental Reading 0093 AND Developmental Writing 0093;
(2) English as a Second Language (ESOL) 0044 AND 0054; or
(3) Have met the Texas Success Initiative (TSI) Reading and Writing standards.
Course procedure

♥ The lecture and lab will be delivered to you through the Internet using two portals: Blackboard on the DCCD district eCampus server and the publisher’s website: masteringphysics.com. For many of you, this may be your first online (or Internet) course. You do not need to be a computer whiz to be successful in this course. From a computer standpoint, absolutely everything is simple. By the time you review all the documents posted on (ecampus.dcccd.edu) and (masteringphysics.com,) you will know almost everything needed to be successful in this course. **It is important that you read and review everything in both systems.**

♥ This is a web-based course, but the instructor is easily accessible by email whenever help is required.

♥ A reminder, this is **NOT a self-paced** online course with all assignments due at the end of the semester. **This course includes daily assignments and weekly deadlines scheduled throughout the semester. Students need to follow this schedule since all late assignments are penalized.**

♥ Please verify your eCampus email address to ensure that you receive the instructor’s emails.

Course Materials/Supplies Needed:
The required course materials will be provided as part of the IncludED program (see dccd.edu/included), or as free materials you can access in your online course shell.

If you opt out of the IncludED program, you are responsible for obtaining all your required learning materials by the first day of the class (for more details: Institutional Policies).

The textbook we will be using is shown below. **Important:** this book and access code must be purchased from the Mountain View College bookstore. If you purchase it elsewhere, your access will **not** be valid. However, this is **ONLY** if
you opt out of the IncludeED program. If you do not opt out, then you will automatically get free access to the homework and eText.


2. Lab Experiments:
This folder on eCampus includes all the labs for this class. These labs are in a variety of formats:
**Practical Labs: no lab kit is required for this course.** Some labs need a few supplies, but these are inexpensive and can be found at home or the Dollar Store.
**Virtual labs:** in which you will use interactive figures in the "Study area" of masteringphysics.com, and other similar online animation software. You will need Adobe Flash Player and Java installed on your computer for the animations to work. You will also need Microsoft Office, and an Internet connection. Please check in advance that the animations work on your computer. If you get an error please do a *google* search with the error message to look for possible solutions.

3. Project:
You are required to submit a semester project that includes a written report, PowerPoint slides, and a recorded video presentation. Instructions for the project will be posted on eCampus.

Reading and homework assignments:
The course portal for our online class is a course shell on Blackboard (ecampus.dcccd.edu). You will find all the due dates for various assignments in their corresponding folders such as: Reading assignments, HW assignments, Lab assignments, Project etc.

You will also be using "masteringphysics.com" which is the “course management system” provided by the publisher in order to work on different types of assignments.

You **MUST** accomplish the following reading and preparation assignments on a regular basis **before** attempting to tackle your weekly assignments:

1. Read the assigned chapter contents in the textbook.
2. Study and review the lecture and PowerPoint slides.
3. Watch, and study the videos, animations, and interactive figures in the Study area for each chapter on Mastering Physics.
4. Complete a quiz for each chapter on eCampus.
5. Complete and submit homework for each chapter in the “Assignments” folder on Mastering physics. Your final homework grades will be transferred to the eCampus grade book at the end of the semester.

6. Perform practical labs or virtual labs each week and submit your lab reports on eCampus.

7. Complete and submit the assigned semester project. Instructions will be posted under the Project tab on eCampus.

Core Objectives:

The instructor will assess all the core objectives through the assigned project.

Teamwork - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.

Critical Thinking Skills - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.

Communication Skills - to include effective development, interpretation and expression of ideas through written, oral and visual communication.

Empirical and Quantitative Skills - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

Course Outline:
* Newton's First Law and Linear Motion
* Newton's Second and Third Laws of Motion
* Momentum and Energy
* Rotational Motion
* Gravity and Projectiles
* The Atomic Nature of Matter and Solids
* Change of phase
* Thermodynamics

Course Evaluation:
♥ Homework on masteringphysics.com and problem solving = 30%
♥ Labs and Activities = 25%
♥ Project = 30%
♥ Quizzes = 15%

Grading Scale: 90 & above = A, 80-89 = B, 70-79 = C, 60-69 = D, 59 & below = F

Certification Procedures
Students must log in and post a self-introduction on eCampus by the end of the first week as a proof of attendance. No exceptions. Financial Aid will be withheld
from students who have not attended by the certification date. For this online course, you also MUST submit your first week's assignments by the due date for attendance and Financial Aid. For certification dates, please check with the Financial Aid Office. Students who are not certified for attendance are responsible for any payments due as a result of non-certification, which includes dropped courses.

Instructor Attendance Policy:
Students are expected to submit all assignments by the due dates. Students have the responsibility to follow the due dates for the assignments and to consult with the instructor when an emergency occurs. If for some reason you cannot complete your assignments by the due date, you MUST inform the instructor at least two days before assignments are due. (Please see late work policy).

Group Work Opportunity:
♥ You are strongly encouraged to work on assignments in groups of up to two.
♥ You may post your information in the Discussions folder on eCampus to find a classmate to work with, in a group.

♥ Rules for groups: each group will be in contact with each other via email, telephone, etc.
While working on assignments:
   You will help each other with labs, homework, the project etc.
   Each person MUST submit his or her work to their own folder on eCampus or Mastering Physics. There will be no grade if the assignment has not been submitted, even if your partner has submitted his/her assignment.
   Each person is accountable. When one member of the group experiences lack of cooperation from the partner, she or he can work individually.
   Please email the instructor to report such a situation.

Late Work Policy: All late assignments will be penalized 10% per late day. NO exceptions.

Institutional Policies: Please visit https://www.dcccd.edu/about/legal/policies-for-syllabi/pages/default.aspx

for a complete list of institutional policies (Stop Before You Drop; Withdrawal Policy; Repeating a Course; Financial Aid; Academic Honesty; Americans with Disabilities Act Statement; Religious Holidays; and Campus, Emergency Operation Plan, and Contingency Plan).
**Course Calendar**
All the due dates for various assignments such as homework, labs, projects, quizzes are listed on the eCampus and Mastering Physics websites.

**Semester Calendar:**

<table>
<thead>
<tr>
<th>Fall Academic Semester 2020 Dates for 16-Week Semester</th>
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<tbody>
<tr>
<td><strong>August 17 (Monday)</strong> Faculty Reports Back to Campus</td>
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<tr>
<td><strong>August 21 (Friday)</strong> District Conference Day</td>
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<td><strong>August 24 (Monday)</strong> Classes Begin</td>
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<tr>
<td><strong>September 5 (Saturday)</strong> 12th Class Day (Certification Date)</td>
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<tr>
<td><strong>September 7 (Monday)</strong> Labor Day Holiday</td>
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<td><strong>September 8 (Tuesday)</strong> Classes Resume</td>
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<tr>
<td><strong>November 12 (Thursday)</strong> Last Day to Withdraw*</td>
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<tr>
<td><strong>November 26 (Thursday)</strong> Thanksgiving Holidays Begin</td>
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<tr>
<td><strong>November 30 (Monday)</strong> Classes Resume</td>
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<tr>
<td><strong>December 7-10 (Monday thru Thursday)</strong> Final Exams</td>
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<tr>
<td><strong>December 10 (Thursday)</strong> Semester Ends</td>
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<tr>
<td><strong>December 14 (Monday)</strong> Last day for faculty to submit grades electronically through eConnect to the Registrar's Office.</td>
</tr>
<tr>
<td><strong>December 24 (Thursday)</strong> Campus buildings and offices will be closed for the holidays at end of workday.</td>
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</tbody>
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**Class certification date: Saturday, 5 September 2020**
The last day to withdraw from this class is Thursday, 12 November 2020.

**Syllabus Change Disclaimer:** the instructor(s) reserve the right to amend the syllabus as necessary.

Thank you for reviewing the syllabus. Wish you good luck this semester! Please let me/us know if you have any questions.