El Camino Real Charter HS
Multivariable Calculus / Differential Equations
Fall 2016 / Spring 2017

Course Description:

Multivariable Calculus is the 3rd course in the standard sequence of college Calculus. This course will extend the concepts that were taught in AP Calculus AB/BC to three dimensions. In the Spring 2017 semester, the course will change to an introductory course in Differential Equations. These courses have been approved thru the UC Doorways Program, allowing the successful students to begin in the subsequent course at their college or University. There is no AP Exam for either of these courses.

Multivariable Calculus Topics:

Chap. 12 ~ Vectors and the Geometry of Space
Chap. 13 ~ Vector Functions
Chap. 14 ~ Partial Derivatives
Chap. 15 ~ Multiple Integrals
Chap. 16 ~ Vector Calculus

Differential Equations Topics:

Chap. 1 ~ Introduction to Differential Equations
Chap. 2 ~ First - Order Differential Equations
Chap. 3 ~ Modeling with 1st Order DE's
Chap. 4 ~ Higher - Order Differential Equations
Chap. 5 ~ Modeling with High - Order DE's
Chap. 6 ~ Series Solutions of Linear Equations
Chap. 7 ~ The Laplace Transform

The grading scale is as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Work Habits (Homework)</th>
<th>Cooperation (Abs+Tardy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>E------------------ 90%</td>
<td>E------------------ 0 to 3</td>
</tr>
<tr>
<td>B</td>
<td>S------------------ 75%</td>
<td>S------------------ 4 to 8</td>
</tr>
<tr>
<td>C</td>
<td>U------------------ 65%</td>
<td>U------------------ above 8</td>
</tr>
<tr>
<td>D</td>
<td>------------------ below 65%</td>
<td></td>
</tr>
<tr>
<td>Fail</td>
<td>------------------ below 50%</td>
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The grading distribution is (approximately) as follows:

Tests 40 % ... drop the lowest score ...
Quizzes 20 % ... drop the lowest score ...
Homework 20 % ... online WEBASSIGN ...
Final Exam 20 % ... cumulative ...

Students must have the following materials...

1. 3 ring binder, for notes, tests, quizzes, etc…, which is clearly labeled with MVC/DE.
2. Calculator (TI-83+ Silver Edition…or the like)
3. Pencils (preferably mechanical), erasers, pens (multiple colors; blue, green, black, red, etc.), ruler, graph paper, and plenty of lined paper. **DO NOT USE TORN OUT PAPER FROM SPIRAL NOTEBOOKS…I WILL NOT ACCEPT IT!!!!!**

Student Expectations / Responsibilities / Requirements:

- ALL TESTS AND QUIZZES WHICH HAVE A GRADE BELOW A ‘C’, MUST BE SIGNED BY PARENT OR GUARDIAN AND RETURNED TO TEACHER!!!
- If you miss a quiz or test, it is your responsibility to come in and make it up. **DO NOT** take forever to make up a test or quiz. I will give you reasonable time upon your return to do it, either before school @ 7am or during lunch, **BUT NOT NUTRITION**…I need to eat, drink, and be merry. In general, I
do not allow make-ups during class time, since I do not want you to miss the material for that day. If you do not make up the test or quiz, the grade will be a zero (0%).

- If you are absent from class, it is your responsibility to find out what you missed and what was done in class. I will not try to hunt you down to inform you of missed work. Refer to your assignment calendar, or just ask a classmate. Since I have a web site, this can also be accomplished on line. If homework was collected during your absence, it is your responsibility to turn in the homework, as soon as you return to school.

- If you’re having problems with the material, then come and talk to me about it so we can get you some extra help. I get to school early, usually around 6:45AM, so I’m available before school. In most cases, I’m also available during lunch.

- I expect you to act in a mature fashion while in my class. This includes being on time, quiet, and respectful of your fellow classmates and me. Being tardy shows disrespect for everyone involved since it interrupts the flow of the class.

- I expect you to do whatever it takes to stay on top of things in my class…except cheating!!! You may want to exchange phone numbers with another person just in case.

- I expect you to remain in your seat during class. Do not get up to throw out trash, gum, or anything else that you don’t want. This can be done at the beginning or end of class.

- I expect you to be ready for class when the bell rings. Therefore, sharpen your pencil BEFORE the bell rings. Instead of talking to your friends in the hallway, try getting ready for class.

**Test / Quiz Make-Up Policy:**

If you miss a test or quiz, it is your responsibility to come in and make it up @ 7 am ASAP, or during lunch if there’s enough time. I will not track you down to remind you of your responsibility. Tests and quizzes are announced well in advance, so there’s no reason for you not to know that a test or quiz is coming up soon.

**Calculator Policy:**

Calculators are a useful tool to verify concepts and I encourage you to use them for that purpose. However, they will not be allowed on any quizzes or exams. Thus, if you’re using your calculator to differentiate or integrate, then you’re doing yourself a disservice.

**Cell Phone / iPod Policy:**

Under no circumstances will I allow the use of iPods or cell phones during my class. If your phone goes off during class, I will confiscate it and you can pick it up after school from the Deans office. This is an issue of respect for your classmates and me. In essence, you’re telling me that your phone needs are more important than my class. To avoid this hassle, turn it OFF before you enter my classroom. This includes playing games, checking for messages, using it as a calculator, or checking the time (THERE’S A CLOCK ON THE WALL FOR THAT!!!). The policy of ECR says that cell phones are NOT to be used during the school day.

**Tardy Policy:**

If you are in the habit of coming to class late, it WILL affect your grade. If you are late on the day of a test or quiz, you will not be able to take the test during the period. You must come in and take it during lunch that same day. I will decide on a case by case basis if the student will take the test during the class or during lunch. If the student is 15 minutes late, then no, but if only 1-2 minutes late, then probably yes. This rule is only to enforce the philosophy that punctuality is a necessity, not an occasional occurrence. Right now, school is the most important job you have, and believe me you don’t want to get fired from school. There’s a really easy solution to all these rules regarding tardiness…BE ON TIME!!!

**Field Trip Policy:**

From time to time, there are students who wish to go on a field trip for various reasons. It is my belief that if a student if receiving lower than a ’C’ in any class, that student should attend the class in which the low grade is received and not go on the field trip. I strongly recommend that you consider what you might be missing in my class when deciding if you go on the field trip or not.

**Late Homework Policy:**

Homework will be accepted at most 1 day late for half credit only. After that, it will NOT be accepted.
To The Parents:

I have a web site for my classes. It contains the grades, which can / will be accessed thru AERIES, and attendance of each student in the class as well as assignments. The address of my web site is:

http://faculty.piercecollege.edu/pederst/ecrwebsite/index.html

It can obviously be accessed at anytime, however, I will update it on a weekly basis (roughly) or when needed. *I encourage you to take advantage of this. It will keep you more informed about the status of your child.* In addition, you can contact me at:  t.pedersen@ecrchs.net

The only way to become successful at mathematics is to do mathematics. Therefore, if you think that mathematical osmosis is a reality, I’m sorry…it’s not! You have to work out the problems to become proficient at the subject. Otherwise you’re just wasting your time. Be patient, nothing is fully understood at first ... it takes time. Have a great semester, and good luck!!!

Parent Signature: _________________________________________  Date: ______________________

Student Signature: _________________________________________  Date: ______________________

Printed Student Name: _________________________________________

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