Course Description:
This course is the third semester of the Math 150-155-260 calculus sequence. Topics include vectors in the plane, vectors in space, vector-valued functions, solid analytic geometry, functions of several variables, partial differentiation, multiple integration, vector fields, line integrals, Green's theorem, and an introduction to differential equations.

Required Text:
Calculus, Stewart, 4th Ed.

Course Objectives:
At the end of the course, students should be able to:
1. Graph a vector-valued function; take the limit of a vector-valued function; compute the derivative and integral of a vector-valued function; find arc length, curvature, and tangent and normal lines for curves defined by vector-valued functions.
2. Sketch graphs of functions of several variables; compute limits, derivatives and integrals of functions of several variables.
3. Calculate double and triple integrals of functions of several variables in rectangular, polar, or spherical coordinates, whichever is most appropriate in the given application.
4. Evaluate line integrals. Use these integrals to solve applied problems.

Grading Procedures:
There will be four 100-point quizzes, one 50-point homework grade, and one 200-point cumulative final exam. Thus, 650 points may be earned this semester. The grading scale is:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Total Points</th>
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<tbody>
<tr>
<td>A</td>
<td>585-650</td>
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<tr>
<td>B</td>
<td>520-584</td>
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<tr>
<td>C</td>
<td>455-519</td>
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<tr>
<td>D</td>
<td>390-454</td>
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<td>F</td>
<td>Below 390</td>
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Homework:
A practice set is assigned at every class meeting. Complete each practice set before the next class. I will be available in my office, room 3620, at 8:30am each Monday and Wednesday to answer any questions that you have about your practice sets. Practice sets will not be collected.

Eight homework sets will be assigned, collected and graded during the semester. These sets are due at the beginning of class on the dates noted on the Graded Homework Assignment Sheet. These sets will consist of even problems from the text and/or problems that are not in our text. For each assignment, the key will be posted online after the due date for the assignment. Each assignment will be worth approximately seven points. To receive full credit, you must copy the problem, show all steps neatly and completely and get the correct answer. Late work is not accepted. One of the graded homework sets will be dropped at the end of the semester. The completion of all practice sets and every homework set is important to your success in this class. Mathematics is a "learn by doing" subject. A good rule is to set aside eight to ten hours per week to do your homework. Do not allow yourself to fall behind in your work. Catching up before a test is an extremely difficult task.

Quizzes:
Please be aware of the following tentative quiz dates. Mark them in your calendar, and be sure that you don't schedule any conflicting event. Quizzes may be given early to students if the circumstances warrant. Please see me if you find that you need to take a quiz early. Make-up quizzes (quizzes given after the in-class quiz) are given only if the student provides the instructor with documentation that the instructor agrees shows the absence on quiz day was due to an unforeseeable circumstance that was beyond the control of the student. Since each test counts 100 points, a missed test counts as a zero and drops your total score by 100 points.

<table>
<thead>
<tr>
<th>Quiz</th>
<th>Day</th>
<th>Date</th>
<th>Chapter</th>
</tr>
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<tbody>
<tr>
<td>I</td>
<td>Mon</td>
<td>2/23</td>
<td>13</td>
</tr>
<tr>
<td>II</td>
<td>Wed</td>
<td>3/17</td>
<td>14, 15.1-15.4</td>
</tr>
<tr>
<td>III</td>
<td>Mon</td>
<td>4/19</td>
<td>15.5-15.7, 16.1-16.5</td>
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<tr>
<td>IV</td>
<td>Wed</td>
<td>5/12</td>
<td>16.7, 16.8, 17.1-17.3</td>
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Final Exam: Monday, May 24, 9:30am

Office Hours:
Regular Office Hours are:
Mondays, 8:30-8:50am, Room 3620
Tuesdays, 8:30-8:50am, Room 3620
Tuesdays, 2:00-2:45pm, Room 3620
Wednesdays, 8:15-8:50am, Room 3620

Please take advantage of my regular office hours if you need help. I am also available at other times-drop by or schedule an appointment for help. Please do not hesitate to ask for help. You may reach my office by phone (757-2121, ext. 6255), and the voice mail system allows you to leave a message 24 hours a day.
Attendance Policy:
Attendance is an important element in your academic success. To be successful, you must attend class and complete homework assignments. Some students, for various reasons, may miss class. If you miss class, it is your responsibility to learn the material covered the day of the absence. Office hours may not be used to repeat lectures given on class days that you missed.

Academic Honesty:
I fully support MiraCosta College's belief that academic honesty is a cornerstone of the educational community. To that end, I expect academic honesty of my students. Students who bring unauthorized material to a quiz or copy from another's quiz will receive a zero on that quiz. Removal of reserve materials from the LRC is considered an act of academic dishonesty. Doing your homework in groups is encouraged, however copying someone else's homework or allowing someone else to copy your homework is considered an act of academic dishonesty. Certain quizzes may be given in the Math Learning Center. Do not discuss any aspect of these tests with anyone until after the class period when the quizzes are returned. Any such discussion will be considered an act of academic dishonesty and will result in a zero on that quiz to all participants in the discussion.

Study Aids:
1. Solutions to most homework problems and to the review problems at the end of each chapter are available for your reference in the MLC. You must attempt the problem before the MLC staff will allow you to see the solution manual.

2. The Student Solutions Manual may be purchased in the bookstore. It contains the detailed solutions of many of the problems in the text.


4. Tutoring assistance is available in the Tutoring Center.

5. Student readers, tutors, instructional aides and mathematics faculty are available in the Mathematics Learning Center (MLC) to assist you with questions. Also, I will be on duty in the MLC on Tuesday evenings from 3:00pm-8:00pm.

6. Software packages are available in the MLC to assist you by providing extra practice. The package “Graphing Calculator” is an excellent 3d graphing package, and it is available for your use in the MLC (ask the instructor on duty- this software is only loaded on certain computers).

7. Houghton Mifflin has an interactive calculus web site to which students may subscribe for a small fee. Visit the web site for details. The address is http://hmco.tdlc.com
8. Visit www.miracosta.edu/home/ccongleton for web access to the syllabus, homework assignments, and various other class resources.

9. The keys to graded homework assignments are posted on the web after the due dates. You may access these through my web site.

NOTE: A student with a verified disability may be entitled to appropriate academic accommodations. Please contact your instructor and/or the Disabled Students Program and Services Office for further information.