Course Syllabus

MATH 2415
Calculus III (2701016119)

***** Note to Student *****

Student success is our number one priority at Coastal Bend College and we realize that prompt, effective communication plays a significant role in achieving that goal. It is vitally important that you have the proper contact information for your instructor. This should include their phone number, email address, and if applicable, their office number, and office hours. If you ever have any problems contacting your instructor, or do not receive a prompt response to your inquiries, please contact the Director of Academics, or the Dean of Academics, as soon as possible. Their contact information is provided below:

Director of Academics, Dr. Kevin Behr: 361-354-2338; kevind@coastalbend.edu

Dean of Academics, Mark L. Secord: 361-354-2529; secordm@coastalbend.edu

We wish you all the best in your education and encourage you to contact us if you have any questions or concerns.

Course Description: Advanced topics in calculus, including vectors and vector-valued functions, partial differentiation, Lagrange multipliers, multiple integrals, and Jacobians; application of the line integral, including Green’s Theorem, the Divergence Theorem, and Stokes’ Theorem.

Semester Hours Credit: 4

Lecture/Lab Hours: 4-2

Prerequisite: MATH 2414

Textbook(s): Calculus (2nd edition) – optional
MyMathLab Student Access Kit (4th edition) – required
ISBN: 9780321954350
ISBN: 9780321199911

At all times, in all ways, the student is at the heart of all we do.
Required Supplies:  
TI-83/84 Plus Graphing Calculator  
Internet Access for completing MyMathLab assignments

Course Learning Outcomes:
Upon successful completion of this course, students will:

1. Perform calculus operations on vector-valued functions, including derivatives, integrals, curvature, displacement, velocity, acceleration, and torsion.

2. Perform calculus operations on functions of several variables, including partial derivatives, directional derivatives, and multiple integrals.

3. Find extrema and tangent planes.

4. Solve problems using the Fundamental Theorem of Line Integrals, Green's Theorem, the Divergence Theorem, and Stokes' Theorem.

5. Apply the computational and conceptual principles of calculus to the solutions of real-world problems.

Evaluation Methods:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>15%</td>
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<tr>
<td>Quizzes</td>
<td>15%</td>
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<tr>
<td>Exams</td>
<td>40%</td>
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<tr>
<td>Final Exam</td>
<td>30%</td>
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</tbody>
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A = 90 – 100%  
B = 80 – 89%  
C = 70 – 79%  
D = 60 – 69%  
F = Below 60%

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See at: [GL (Legal)](https://example.com/GL)
Special Needs Services: Students with special needs, including physical and learning disabilities, who wish to request accommodations in this course should contact the Student Development Office as soon as possible to make arrangements; this should occur no later than the second week of class or as soon as the student has the documentation on the disability and requested accommodation per a certified medical or psychological professional. In accordance with federal law, a student requesting accommodations must provide documentation of disability to the Student Development Advisor.

For more information, contact: in Alice at sdalice@coastalbend.edu; Beeville at sdbeeville@coastalbend.edu; Kingsville at sdkingsville@coastalbend.edu; and Pleasanton at sdpleasanton@coastalbend.edu.

Academic Dishonesty: Each student is charged with notice and knowledge of the contents and provisions of Coastal Bend College’s rules and regulations concerning student conduct. All students shall obey the law, show respect for properly constituted authority, and observe correct standards of conduct. Scholastic dishonesty shall constitute a violation of these rules and regulations and is punishable as prescribed by Coastal Bend College Policies FLB (Local) and FM (Local). Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism, and collusion.

See at: FLB (Local) and FM (Local).

See the Student Handbook for further explanation of Scholastic Dishonesty.

Copyright Law and Intellectual Property Rights Policy: Copyright is the right of an author, artist, composer or other creator of a work of authorship to control the use of his or her work by others. Protection extends to literary works, musical works, dramatic works, pantomimes and choreographic works, pictorial and graphic works, sculpture, motion pictures and other audiovisual works, sound recordings and architectural works. Generally speaking, a copyrighted work may not be reproduced by others without the copyright owner's permission. The public display or performance of copyrighted works is similarly restricted. Generally, the unauthorized reproduction, performance or distribution of a copyrighted work is copyright infringement and may subject the infringer to civil and criminal penalties. The Fair Use Doctrine outlines exceptions to this Law and is outlined in Coastal Bend College Policy, CT (Local).

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Questions regarding this information should be directed to the Director of Library Services at: library@coastalbend.edu or the Office of Marketing and Public Relations at: socialmedia@coastalbend.edu.
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**NOTE:** The College website ([www.coastalbend.edu](http://www.coastalbend.edu)) serves as the main source with the most current version of the Coastal Bend College Board Policies and the Coastal Bend College Catalog.