MTH 3470.001 Syllabus  
Calculus III  
Texas A&M University – Corpus Christi

Professor:  Dr. Jordan Alexander  
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Office:  CI 213  
Office Phone:  
Course Times:  TR 5:30-6:45 (EN-107)

Office Hours:  MWF 9:30-10:30, TR 3:30-5:00, or by appointment

Required Text:  James Stewart’s *Calculus: Early Transcendentals, 7th Edition* together with WebAssign.

Description:  This course covers parametric equations, vectors, functions of two and three variables. Contains a one-hour lab component. 4 credit hours.

Associated lab:  Students also need to register for the lab associated with this course. Lecture and lab together count as a four-hour course. You will need to print out parts of the lab manual. Labs 1-10 are available on the math webpage at http://math.tamucc.edu/MATHlabs/MATHlabs. Labs 11 and 12 will be available on BlackBoard. From there you can print the parts you need.

Homework:  Homework will be administered through WebAssign, accessed by logging into BlackBoard at https://bb9.tamucc.edu/. Clicking the WebAssign button on the top left should take you directly into WebAssign. You will either need the access code that comes with the book or will need to buy an access code online. There is an initial grace period where you can use the system without an access code, so “I don’t have the textbook yet” is not a valid excuse not to do homework right away. In an effort to keep the length of the assignments reasonable, we will have three assignments per week, due Tuesday, Thursday, and Saturday. Late homework will receive a grade of “0”, and the lowest three homework grades will be dropped.

Exams:  Three exams will be given during the semester, not including the final exam. The dates for these exams will tentatively take place September 25, October 23, and November 18. Students **will not be allowed to use any calculator on any exam**. Makeup exams are possible only if the student provides a good reason for missing an exam, such as a doctor’s note if the reason for missing an exam was illness.

Final Exam:  The final exam is cumulative. Problems on the exam will be similar to homework exercises and previous exam problems, so if you master the homework exercises you should be able to do well on the final. The final exam is scheduled for Thursday, December 4, 4:30-7:00 pm.

SEMESTER GRADE:  Grades will be calculated on a 90—80—70—60 percent scale. There is no extra credit. Each regular exam will be worth 15% of your final grade, the final exam will be worth 25%, and your homework and lab averages will be worth 15% each.

My Expectations:

- I expect you to be respectful toward everyone in the classroom. Please turn phones, laptops, and other electronic devices off before class, and be mindful of things you do that might distract others from learning.

- *** Students are expected to spend **at least 6-9 focused hours outside of class and lab every week** working on homework and studying for exams. Too many students fail math classes, and the main reason is lack of consistency in putting in the appropriate number of hours each week.
**Student Learning Outcomes:** At the end of the course the student should be able to
- graph a parametric curve
- convert between rectangular and polar coordinates
- calculate and use dot products and cross products of vectors
- give the equation of a plane in 3 dimensional space
- calculate derivatives and integrals of vector-valued functions
- calculate arc length for vector-valued functions
- match 3d plots and contour plots of functions in 2 variables
- calculate and use partial derivatives
- calculate tangent planes to the graph of a function in two variables
- use the chain rule for functions in several variables
- take directional derivatives and determine gradient vectors
- determine minimum and maximum values of functions in several variables with or without constraints
- evaluate double and triple integrals over general regions
- use the change of variable formula for multiple integrals
- change the order of integration in multiple integrals
- evaluate line integrals
- state and use Green's theorem

**Academic Integrity/Plagiarism:** University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one's own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a grade of zero for the assignment or test and will be reported to the appropriate authorities for further action.

**Dropping a Class:** I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with me before you decide to drop to be sure it is the best thing to do. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation will not automatically result in your being dropped from the class. Friday, November 15 is the last day to drop a class with an automatic grade of “W”.

**Classroom/Professional Behavior:** Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor's ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

**Grade Appeals:** As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the
class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at [http://www.tamucc.edu/provost/university rules/index.html](http://www.tamucc.edu/provost/university rules/index.html) and the College of Science and Engineering Grade Appeals webpage ([http://sci.tamucc.edu/students/GradeAppeal.html](http://sci.tamucc.edu/students/GradeAppeal.html)). For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

Disabilities Accommodations: 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 believe you have a disability requiring an accommodation, please call or visit Disability Services at (361) 825-5816 in Corpus Christi Hall 116. If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

Statement of Academic Continuity: In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University-Corpus Christi, this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.