READ THIS SYLLABUS CAREFULLY. YOU ARE RESPONSIBLE FOR KNOWING THIS INFORMATION!

Prerequisite: Math 221 with a C- or better

**Course Description:** MATH 222 is the start of the study of multivariable Calculus.

**Students for whom this course is intended:**

- B.S. Mathematics Majors
- B.S. Biology, Chemistry, & Physics Majors and Minors
- B.A. Mathematics majors and concentrates
- B.A. Chemistry, Earth Science, Natural Science, & Physics majors and concentrates

**Basics course goals:**

This course introduces polar, cylindrical, and spherical coordinate systems; vectors in two and three dimensional space; functions of more than one variable; and multiple integration. This should include a presentation of the definition and derivations of fundamental ideas. Students will be responsible for the statement and application of basic definitions, formulas, and theorems, and for some simple proofs and derivations. However, the emphasis of the course will be on understanding rather than on rigorous proof and derivation.

**Instructor:** Dr. Jeff McGowan – call me Jeff!

**Phones:** Office: (860)832-2850

**Email:** mcgowan@ccsu.edu best way to reach me

**Office:** Marcus White 108

**Office Hours:** by appointment online

**Textbook:** *University Calculus* by Hass, Weir, and Thomas, published by Pearson.

**Coverage:** We will cover the following material,

Chapter 10 - review
Chapter 11 - Vectors, dot and cross product, lines and planes in 3 space.

Chapter 12 - Vector valued functions. Arc length and curvature. Velocity and Acceleration


Chapter 14 - Double and triple integrals, with applications

Chapter 15 - if time permits, vector fields, Green’s theorem.

In general, I will assign a limited set of homework, and you should make a real attempt to do them all! We now have Mathematica and Maple available for use on computers in the micro lab, and I will give some assignments which use the software.

University Policies:

1. You must take the final examination at the time specified in the course selection book add time appropriate for your section.

2. If you need course adaptations or accommodations because of a disability, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible. My telephone numbers and office hours are given above.

3. In the event of a weather emergency which requires curtailment or cancellation of classes, listen to WTIC (1080 AM) or call (860) 832-3333 for the “general snow message.”

4. Last day to drop a course is November 19. Forms are available in the Enrollment Center, Willard Hall. Cessation of attendance, notice to the instructor, or telephone calls to the Enrollment Center are not considered official notice of a student’s intention to drop the course. Undergraduate full time students for whom dropping a course would reduce their credit load to fewer than 12 credits MUST apply for withdrawal.

Central Connecticut State University provides reasonable accommodations in accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act for students with documented disabilities on an individualized basis.
If you are a student with a documented disability, and would like to request academic accommodations, you are encouraged to contact Student Disability Services (SDS) at 860-832-1952, or email disabilityservices@ccsu.edu. Please visit the SDS website at http://www.ccsu.edu/sds/ to download an Intake form and documentation requirements. Once approved, SDS suggests that students discuss their approved accommodations with their professors, as well as any other additional medical emergency needs. Temporary impairments may also qualify for accommodations. Please note that accommodations are not retroactive and must be requested each semester.

Statement on Discrimination and Harassment

Central Connecticut State University strives to maintain our campus as a place of work and study for faculty, staff, and students that is free of all forms of prohibited discrimination and harassment based upon age; ancestry, color; gender identity and expression; intellectual disability; learning disability; mental disorder; physical disability; marital status, national origin; race; religious creed; sex, (including pregnancy, transgender status, sexual harassment and sexual assault); sexual orientation; or any other status protected by federal or state laws. Any student who has concerns about should contact the Office of Diversity and Equity (ODE) at 860–832–1652, Student Affairs at 860–832–1601, or his/her faculty member. The ODE is located on the main floor of Davidson Hall, room 102.

Sexual Misconduct, Intimate Partner Violence and Stalking

Option 1. Central Connecticut State University is committed to providing a learning and working environment that emphasizes the dignity and worth of every member of its community. Sexual harassment (including sexual assault) in any form will not be tolerated. Sexual harassment" means unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working or academic environment in any University activity or program. For additional information, please consult the CCSU policies at http://www.ccsu.edu/diversity/policies/index.html. All faculty members and staff have a duty to report incidents of sexual harassment including sexual violence to Rosa Rodriguez, Title IX Officer, Office of Diversity and Equity, Davidson Hall, room 102.

Option 2. Central Connecticut State University (CCSU) will not tolerate sexual misconduct against students, staff, faculty, or visitors in any form, including but not limited to: sexual assault, sexual exploitation, sexual harassment or stalking, as defined in CCSU policies. For additional information, please consult the CCSU policies at http://www.ccsu.edu/diversity/policies/index.html. All faculty members and staff have a duty to report incidents of sexual harassment including sexual violence to Rosa Rodriguez, Title IX Officer, Office of Diversity and Equity, Davidson Hall, 102.
To file a report contact: Diversity and Equity (860–832–1652); Student Affairs (860–832–1601); Student Conduct (860–832–1667) or the University Police (860–832–2375).

For support and advocacy contact: Office of Victim Advocacy & Violence Prevention (Carroll Hall 248) at 860-832-3795 to speak with Sarah Dodd {sarahdodd@ccsu.edu}; Student Wellness Services at 860–832–1945 (confidential), the Women’s Center at 860–832–1655, the local YWCA’s Sexual Assault Crisis Services Hotline at 860–223–1787 (confidential) and Prudence Crandall Center for Domestic Violence (confidential) at 888–774–2900 (24-hour hotline).

**Evaluation**

Your grade is based on the following

I’ve always hated in class tests, and now that we finally have a good online system up and running, I’m doing something about it. No in class tests at all. You will have 5 online homework assignments and 3 online tests. The homework assignments will be up for several weeks, as will the tests - you can complete them anytime in that window. For homework you can log in and out and finish over the course of days or even weeks. For tests you get three tries and have 200 minutes to complete it each time. Each test is 10 questions so that’s 20 minutes per question. When you finish the test make sure to hit the “Grade Test” button, that records your answers. You get unlimited tries on each test, so the first time you hit “Grade Test” it will tell you which are correct and which are wrong. You can then go back and fix the wrong ones, and hit “Grade Test” again. You can keep doing this until you run out of time. You can work on homework together, but must do tests alone. You can use any resources for either, books, notes, online sources, etc. Each homework counts 5 points, the first three tests 15 and the fourth test 20, so the maximum possible grade is 100.

The online work is available at ccsuwebworks.website/webwork2. You will get an email with login information. As far as I’ve been able to tell, it works in any browser on any system, including phones and tablets.