MATH 222.03: Calculus III

Room: EDB 311
Days: Tuesdays & Thursdays
Time: 16:30 - 18:10
Lecturer: Dr. Zachary McGuirk
E-mail: mcguirk@ccsu.edu
Office hour: Monday to Friday 14:00 - 15:00 & by appointment (MW 122)

Course Text: *Calculus Volume 3* by Edwin Herman and Gilbert Strang, published by OpenStax (Online:https://openstax.org/details/books/calculus-volume-3).

Grade Scale

A: 0.925 – 1.00
A-: 0.90 - 0.924
B+: 0.875 - 0.899
B: 0.825 - 0.874
B-: 0.8 - 0.824
C+: 0.775 - 0.799
C: 0.725 - 0.774
C-: 0.70 - 0.724
D+: 0.675 - 0.699
D: 0.625 - 0.674
D-: 0.60 - 0.624
F: <0.60

Distribution

0.70 : 3 Tests & Final (Sept. 23rd, Oct. 14th, Nov. 9th, Dec. 14th)
0.20 : Homework and Quizzes
0.10 : Class Participation (depending on ability)

Course Learning Objectives

1. Begin to understand the geometry and topology of Euclidean Spaces.
2. Understand multi-dimensional differentiation and how to apply it.
3. Understand higher order multi-dimensional derivatives and their applications to min/max problems.
4. Begin to understand vector-valued functions, the calculus of vector-valued functions, and derivations.
5. Understand double and triple integrals in multiple coordinate systems.
6. Be able to apply a change of variables and use it to solve multi-dimensional integrals.
7. Be able to solve integrals over paths and surfaces.
8. Understand and be able to apply important integral theorems in vector analysis.

Topics & Schedule
Please see the attached spreadsheet

Classroom Policies

- The Final has the weight of two exams and it must be taken at the scheduled time and place, so there are ultimately 5 exam grades in total.
- Your single lowest test grade will be dropped at the end of the semester when grades are computed.
- This course’s homework is to be physically submitted in class at the beginning of class on the day it is due.
- Class participation is mandatory and important when it comes to fostering an environment for all to learn.
- If you come late to class, it is your responsibility to inform me of such at the end of class.
- No electronic devices are allowed in class. This includes cell phones, iPads, calculators, and laptops.
- There are no make-up exams, if you have a valid reason for missing an exam that exam will simply not exist in the calculation of your final grade (except for the Final Exam, come see me ASAP).
- In case of extreme weather or emergency cancellations call CCSU or (860) 832-3333 for information.
- The Final Exam is cumulative and will take place on Tuesday, December 14, 2021 at 17:30.
- If you happen to have a medical emergency or you require special dispensation, please contact me immediately or come see me or make an appointment (don’t just disappear or hide).
- There is no extra-credit (please don’t ask).
- Every student’s grade must and will be calculated in the exact same way, as listed in the distribution above.
- Any academic dishonesty (i.e. cheating, plagiarizing, or fraud) will result in an immediate failure of the course.
Addendums

- The last day to withdraw from the course without paperwork is November 17, 2021. However, withdrawing after September 16, 2021 will result in a “W” grade for the course (it won’t impact your GPA but will sit there).
- One must do their homework and pass the tests in order to pass this class. This is a merit based course.
- The CCSU Office of Student Accessibility Services must directly inform me of any required dispensations.

Legalese

Statement on Accessibility
Central Connecticut State University (CCSU) complies with the letter and spirit of the Federal laws, the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act. CCSU Student Disability Services (SDS) staff approves and coordinates reasonable accommodations that provide equal access and educational equity to undergraduates and graduate students who have a documented disability. Through an individual interactive process, SDS arranges reasonable accommodations, auxiliary aids, and modifications to the learning environment and/or campus based on received documentation and functional limitations of the student.

While it is advisable that students arrange for accommodations prior to the start of the semester, a request and approval for accommodations can be made at any time during the semester. SDS notifies faculty of approved accommodations through an emailed accommodation letter, and students are copied and advised to discuss class accommodation arrangements with their instructors. SDS provides some auxiliary aids and a proctored testing center for accommodated exams. In some cases, SDS staff may contact and consult with faculty to discuss essential requirements of a course or program of study. SDS encourages faculty to also call when questions arise about accommodation arrangements.

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 disabilitieservices@ccsu.edu. Please visit the SDS website at http://www.ccsu.edu/sds/ to download an Intake form and documentation requirements. Temporary impairments may also qualify for accommodations. 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.

Statement of Academic Dishonesty
Central Connecticut State University regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The University is committed to enforcing the CSU Policies on Academic Integrity and will pursue cases of academic dishonesty according to the Academic Integrity Procedures.

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 for Equity & Inclusion (OEI) at 860-832-1652, Student Affairs at 860-832-1601, or their faculty member. The OEI is located on the main floor of Davidson Hall, room 119.

Sexual Misconduct, Intimate Partner Violence and Stalking
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 policy at https://www.ccsu.edu/diversity/policies/index.html. All faculty members and staff have a duty to report incidents of sexual harassment including sexual misconduct, intimate partner violence and stalking to Pamela Whiteley, Title IX Officer, Office for Equity & Inclusion, Davidson Hall, 119. To file a report, contact: Equity & Inclusion (860-832-1652), Student Conduct (860-832-1667) or Student Affairs (860-832-1601). For criminal complaints, contact the University Police (860-832-2375). For support and advocacy, contact: Office of Victim Advocacy at 860-832-3795; Student Wellness Services at 860-832-1945 (confidential); 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).