Time: MWF 9:25 am - 10:35 pm

Instructor: Luis Recoder-Núñez, Ph.D.

E-mail: recoderl@ccsu.edu

Office Hours: M 1:30-3:00 pm; T 11:00 am-1:30pm; F 1:30-2:30 pm


Prerequisite: MATH 221 (C- or higher)

Course Description: Continuation of MATH 221. Parametric equations, polar coordinates, two- and three-dimensional vectors, three-dimensional analytic geometry, functions of several variables, partial differentiation, double and triple integrals.

Topics covered:

11 Vectors and the Geometry of Space
11.1 Three-Dimensional Coordinate Systems 596
11.2 Vectors 601
11.3 The Dot Product 610
11.4 The Cross Product 618
11.5 Lines and Planes in Space 624
11.6 Review of Conic Sections. Cylinders and Quadric Surfaces 632

12 Vector-Valued Functions and Motion in Space
12.1 Curves in Space and Their Tangents 642
12.2 Integrals of Vector Functions; Projectile Motion 650
12.3 Review Parametric Curves (10.1, 10.2). Arc Length in Space 656
12.4 Curvature and Normal Vectors of a Curve 661
12.5 Tangential and Normal Components of Acceleration 667
12.6 Velocity and Acceleration in Polar Coordinates 669

13 Partial Derivatives- 9 hours total
13.1 Functions of Several Variables 676
13.2 Limits and Continuity in Higher Dimensions 684
13.3 Partial Derivatives 693
Course Requirements: A general rule for any college course is that you are expected to put at least 2 hours of work outside of class for every hour in class. For Math 222, the expectation is at least 8 hours per week outside of class.

Homework: Homework assignments will be posted on MyMathLab at the end of every class. It is strongly recommended that the homework assigned on a given week be completed by Monday of the following week. However, the deadline to do all the assignments for this course is the day of the final exam.

Resources Available:

1. If you have difficulties in solving the problems, you are strongly encouraged to make an appointment with me to address your questions. Do not wait until just before the first test to do so.
2. Free tutoring is available in The Learning Center which is located in Diloretto D-316. A schedule for hours the Center is open will be posted soon after the beginning of the summer session.
3. Form a study group with other students in your section. Explaining solutions to homework problems to each other is a good way to learn.
4. A list of private tutors for hire is available in the math department office, Room 128 Marcus White, (860) 832-2835.

University Policies:
1. You must take the final examination at the time specified in the course selection book: Monday, May 10, 2021 from 8:00 AM to 10:00 PM.

2. 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 this 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 in Davidson Hall, Room 102.

3. Please contact me privately to discuss your specific needs if you believe you need course accommodations based on the impact of a disability, medical condition, or if you have emergency medical information to share. I will need a copy of the accommodation letter from Student Disability Services in order to arrange your class accommodations. Contact Stephanie Scapeccia in Student Disability Services at: (860) 832-1952, Willard W-201, if you are not already registered with them. Student Disability Services maintains the confidential documentation of your disability and assists you in coordinating reasonable accommodations with faculty.

4. 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.

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 (Diloretto D-305) at 860-832-3795 to speak with Joanna Flanagan mailto: (jflanagan@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).

5. All students are expected to demonstrate integrity in the completion of their coursework. Academic integrity means doing one’s own work and giving proper credit to the work and ideas of others. It is the responsibility of each student to become familiar with what constitutes academic dishonesty and plagiarism and to avoid all forms of cheating and plagiarism. Students who engage in plagiarism and other forms of academic misconduct will face academic and possibly disciplinary consequences. Academic sanctions can range from a reduced grade for the assignment to a failing grade for the course. From a disciplinary standpoint, an Academic Misconduct Report may be filed and a Faculty Hearing Board may impose sanctions such as probation, suspension or expulsion.

For further information on academic misconduct and its consequences, please consult the Student Code of Conduct (http://www.ccsu.edu/StudentConduct/codeofconduct.asp) and the Academic Misconduct Policy (http://www.ccsu.edu/AcademicIntegrity/).

6. 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.”
7. The last day to withdraw from a course without instructor approval is Monday, April 19th. It is strongly recommended that students consult with their academic advisors prior to deciding to withdraw. Cessation of attendance, notice to the instructor, or telephone calls to the Registrar’s Office are not considered official notice of a student’s intention to drop the course. After April 19th, withdrawals are allowed only under extenuating circumstances and require approval of the course instructor and department chair (in that order).

**Exams:** There will be three non-cumulative tests and a final cumulative test given on Monday, March 1, 2021; Monday, March 29, 2021; Monday, May 3, 2021; Monday, May 10, 2021 respectively. The final exam will be from 8:00 am-10:00 pm.

**Quizzes:** There will be three online quizzes on the following tentative days: Wednesday, February 17, 2021; Monday, March 29, 2021; Friday, April 16, 2021.

**Grading:** Your grade for the course will be computed as follows: Three partial exams 55%, final exam 20%, quizzes 15%, Homework 10%.

Minimum averages for your final grade are indicated below.

A 93%, A- 90%, B+ 87%, B 83%, B- 80%, C+ 77%, C 73%, C- 70%, D+ 67%, D 63%, D- 60%.
Online tutoring:

For online peer tutoring instructions, please visit this video link: https://www.youtube.com/watch?v=RhAlPUNdUq4

On campus tutoring:

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Spring 2021 TLC Peer Tutoring Drop-In Hours
(For the most current hours please visit our webpage at https://web.ccsu.edu/tlc/tutoring/default.asp)
Student Registration Instructions

To register for **Math 222-02 Spring 2021**:

2. Under Register, select **Student**.
3. Confirm you have the information needed, then select **OK! Register now**.
4. Enter your instructor’s course ID: *recoder45881*, and **Continue**.
5. Enter your existing Pearson account **username** and **password** to **Sign In**.
   
   You have an account if you have ever used a MyLab or Mastering product.
   
   » If you don’t have an account, select **Create** and complete the required fields.
6. Select an access option.
   
   » Enter the access code that came with your textbook or that you purchased separately from the bookstore.
   
   » If available for your course,
     
     • Buy access using a credit card or PayPal.
     
     • Get temporary access.

   If you’re taking another semester of a course, you skip this step.
7. From the You’re Done! page, select **Go To My Courses**.
8. On the My Courses page, select the course name **Math 222-02 Spring 2021** to start your work.

**To sign in later:**

2. Select **Sign In**.
3. Enter your Pearson account **username** and **password**, and **Sign In**.
4. Select the course name **Math 222-02 Spring 2021** to start your work.

**To upgrade temporary access to full access:**

2. Select **Sign In**.
3. Enter your Pearson account **username** and **password**, and **Sign In**.
4. Select **Upgrade access** for **Math 222-02 Spring 2021**.
5. Enter an access code or buy access with a credit card or PayPal.