MATH 2730 Sec. 002
Multivariable Calculus – Spring 2024
MWF 11:00am - 11:50am Room: GAB 112

Instructor: Steven Widmer
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Email is the best way to contact me. While I try to reply as soon as possible to all emails, please allow one (1) business days before expecting a response.

Office Hours: Mon & Wed 1:30pm - 3:30pm; Tue 11am - 1pm; and other times by appointment.

I should have availability at other times, so please send me an email to set up an appointment outside of office hour times. Office hours are for help with specific problems or for answering questions about the course or its content.

Final Exam: Monday, May 6, 2024, 10:30am - 12:30pm in GAB 112
  https://registrar.unt.edu/exams/final-exam-schedule/

Textbook and WebAssign: The textbook is Stewart, James, *Calculus*, 9th Edition. It is available online through the WebAssign platform.

A Webassign access code is also required. WebAssign is an online course delivery platform. Students will enroll in and access WebAssign through the link in Canvas on the Modules page of the course. WebAssign access includes all online homework assignments, the e-text of Calculus 9th Edition, by James Stewart, and additional learning resources. Use the link in Canvas to register immediately. You must register in WebAssign by the 2nd class day of the semester. See WebAssign Student Information.

You may use the no-cost temporary 14-day access, however you must purchase your access before the temporary access expires. If you do not purchase WebAssign by the end of the trial period, you may lose credit for all work previously completed. Again, see WebAssign Student Information.

Course Description : (3 hours) Vectors and analytic geometry in 3-space; partial and directional derivatives; extrema; double and triple integrals and applications; cylindrical and spherical coordinates.

Prerequisites: A grade of C or better in Math1720

Grade Policy:

> Exam Average 60%
> Online Homework (WebAssign) 15%
> Quiz Average 10%
> Final Exam 15%

The grade distributions will be 90% - 100% is an A, 80% - less than 90% is a B, 70% - less than 80% is a C, 60% - less than 70% is a D, less than 60% is an F. **There will be no curves.**

Sections Covered: Chapter 12: sections 12.1 - 12.6; Chapter 13: sections 13.1 - 13.4; Chapter 14: sections 14.1 - 14.8; Chapter 15: sections 15.1 - 15.3, 15.6 - 15.8; Chapter 16: Sections 16.1, 16.2.

Attendance: Attendance is mandatory and students are expected to attend class meetings regularly. Students are responsible for all information given in class, regardless of their attendance.

Calculator Policy: Calculators will be permitted for homework, quizzes, and exams. A TI 83, TI 83Plus, TI 84 or equivalent is recommended, but calculators with CAS capabilities (e.g., TI-89, TI-92, TI NSpire) are not permitted. There are several free online calculators you can use while working on homework assignments as well. Phones MAY NOT be used as a calculator on exams or quizzes.

WebAssign Online Homework: Your WebAssign homework is found on the WebAssign website (link provided on Canvas). NO LATE HOMEWORK will be accepted, regardless of reason. The online assignments will always be due at 11:59pm on the due date, not midnight. If the due times conflict with your other classes, work ahead. To give encouragement to work ahead, you will receive a 5% bonus for any work on the homework completed more than 48 hrs before the deadline. At the end of the term, your two (2) lowest WebAssign homework scores will be dropped.

Keep in mind you will have to check WebAssign frequently to keep up with the due dates, there will not be reminders in Canvas.

Quizzes: We will have frequent quizzes. Probably not weekly, but more often than every other week. Quiz dates and content will be announced in advance in class and through Canvas. There will be no make-up quizzes. For not allowing make up quizzes, the lowest two (2) quiz scores will be dropped.

Late Submission Policy: All work must be submitted by the due date and late work will not be accepted for any reason. This includes homework assignments, quizzes, and exams.

Exams: You will have four exams and a comprehensive final exam. Actual exams dates and content will be announced in class, usually at least two weeks before the exam date. The tentative exam dates are Feb. 5 (Ch 12), Mar. 4 (Ch 13, Sections 14.1 - 14.3), Apr. 1 (Sections 14.4 - 14.8), and Apr. 26 (Ch 15). Your lowest exam score will be replaced with your final exam score (if it's higher).

No make-up exams will be given for any reason. You may replace your lowest exam score with the final exam score if the latter is higher. If you miss an exam, you may use the final exam score for that exam. If you receive a zero for cheating on an exam, the final exam score will NOT replace that zero. Again, NO MAKE-UP EXAMS WILL BE GIVEN FOR ANY REASON.

Make-up Exam Policy: No make-up exams will be given for any reason. An exam may be taken prior to the scheduled date. You must request for this accommodation via email at least one week prior to day you wish to take the early exam. If you miss an exam then a score of 0 will be recorded, and you may use the final exam score for that exam.

Disruptive Behavior: On any day, if you disrupt the class you will be asked to leave the classroom and marked absent. You may also be reported for further disciplinary actions. Disruptive behaviors include –but are not limited to – talking, making inappropriate jokes, using phones in class, leaving class to answer phone, or performing other tasks that are not related to class work.

Extra Help: Do not hesitate to come to my office during office hours or by appointment to discuss a homework problem or any aspect of the course. You also may want to consider the UNT MathLab (SAGE 130). Information is available at: https://learningcenter.unt.edu/math-lab

Additional help can be found through the UNT Learning Center: http://learningcenter.unt.edu/, select the tutoring button located near the top of the page for different tutoring options.

Math is not a spectator sport. You will not learn mathematics from watching your instructor or friends or a screen display ideas and solve problems. You must try the problems, finish problems, ask questions, make mistakes, correct mistakes, put concepts into your own words, and practice, practice, practice.

Note: This syllabus is subject to change as the instructor deems necessary. Any/all changes will be announced during regular class time. It is the responsibility of the student to attend each scheduled class to be informed of these changes.

Academic Integrity Standards and Consequences: According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

Cooperation is encouraged in doing the homework assignments but not allowed on the quizzes/tests/exams. If you are caught cheating, you will be subject to any penalty the instructor deems appropriate, up to and including an automatic F for the course. Furthermore, a letter will be sent to the appropriate dean. Refer to the following university site for the official policy with regards to academic dishonesty. The website is: `https://facultysuccess.unt.edu/academic-integrity`.

Disability Accommodations: The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time, however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the Office of Disability Access website at `https://studentaffairs.unt.edu/office-disability-access`. You may also contact ODA by phone at (940) 565-4323.

Emergency Notification & Procedures: UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to the UNT Learning Management System (LMS) for contingency plans for covering course materials.

Course Calendar - Math 2730 - Spring 2024

This is a tentative calendar and may be changed at any time

Monday	Wednesday	Friday
1/15 University Closed	1/17　　　　Section: 12.1 3-Dimensional Coord. Systems	1/19　　　　Section: 12.2 Vectors
1/22　　　　Section: 12.3 Dot Product	1/24　　　　Section: 12.4 Cross Product	1/26　　　　Section: 12.4, 12.5 Cross prod. & equations of lines
1/29　　　　Section: 12.5, 12.6 Equations of lines & planes	1/31　　　　Section: 12.6 Cylinders & quadric surfaces	2/2 Exam 1 Review
2/5 　**Exam 1**	2/7　　　　Section: 13.1 Vector Functions	2/9　　　　Section: 13.2 Calculus on vector functions
2/12　　　　Section: 13.3 Arc Length and Curvature	2/14　　　　Section: 13.3, 13.4 Curvature	2/16　　　　Section: 13.4 Morion in space
2/19　　　　Section: 14.1 Functions of several variables	2/21　　　　Section: 14.1 Functions of several variables	2/23　　　　Section: 14.2 Limits & continuity
2/26　　　　Section: 14.2, 14.3 Partial derivatives	2/28　　　　Section: 14.3 Partial derivatives	3/1 Exam 2 Review
3/4 　**Exam 2**	3/6　　　　Section: 14.4 Tangent Planes	3/8　　　　Section: 14.5 Chain Rule
3/11 x--	3/13 **Spring Break**	3/15 --x
3/18　　　　Section: 14.5, 14.6 Chain Rule	3/20　　　　Section: 14.6 Directional derivatives, gradients	3/22　　　　Section: 14.7 Extrema
3/25　　　　Section: 14.7, 14.8 Extrema	3/27　　　　Section: 14.8 Lagrange multipliers	3/29 Exam 3 Review
4/1 　**Exam 3**	4/3　　　　Section: 15.1 Double integrals: rectangles	4/5　　　　Section: 15.2 Double integrals: general region
4/8　　　　Section: 15.2 Double integrals: general region	4/10　　　　Section: 15.2, 15.3 Double integrals: polar coord.	4/12　　　　Section: 15.3 Double integrals: polar coord.
4/15　　　　Section: 15.6 Triple integrals	4/17　　　　Section: 15.7 Triple integrals: cylindrical	4/19　　　　Section: 15.7, 15.8 Triple integrals: cylindrical
4/22　　　　Section: 15.8 Triple integrals: spherical	4/24 Exam 4 Review	4/26 　**Exam 4**
4/29 Final Exam Review	5/1 Final Exam Review	5/3 Reading Day, No classes
5/6 　　Final Exam Week	5/8 　　Final Exam Week	5/10 　　Final Exam Week