

Course: MATH 2415-46963-002, NRG 2245, TTh 6-7:45pm

Instructor: Lori Rosenthal, 512-223-4762, NRG 2140, lrosen@austincc.edu, <http://www.austincc.edu/lrosen>

Office Hours: MW 2-2:45pm, 5-6:15pm; TTh 4:30-5:45pm

MATH 2415 CALCULUS III (4-4-0). A standard third course in calculus. Topics include polar coordinates and polar curves; vectors and analytical geometry in three dimensions; vector-valued functions and curvature; components of acceleration; functions of several variables; limits and continuity in three-space; partial and directional derivatives; gradients, tangent planes, and extreme of functions of two variables; multiple integrals in rectangular, polar, spherical, and cylindrical coordinates; applications of multiple integrals to area, volume, moments, centroids, and surface area. **Prerequisites:** MATH 2414 or its equivalent with a grade of C or better.

Instructional Methodology: This course is taught in the classroom primarily as a lecture/discussion course.

Required Materials: For text, you may choose either *Calculus: Concepts and Contexts*, 4th ed., by James Stewart, Brooks/Cole 2010 ISBN-10: 0495557420 **OR** *Single Variable Calculus, Concepts and Contexts*, 4th ed, James Stewart, ISBN-10: 0495559725, depending on which better fits your academic plans. They are both available in hard copy and electronic format. You must also have access to technology which enables you to graph a function and find the zeroes of a function. Either a basic graphing calculator or Winplot will suffice, however, you may not use TI-89, TI-92, TI-INSPIRE CAS, HP-48G, or any other device capable of symbolic manipulation on exams. Ask me if you are unsure about whether your particular calculator is acceptable.

Optional Materials: *Student Solutions Manual*, Jeffrey A. Cole, *Study Guide* by Dan Clegg

Quizzes: Each day there will be a quiz over homework assigned the day before. There are no makeups or retakes but your lowest 2 scores will be automatically dropped before calculating your semester average. Quizzes constitute 10% of your course grade.

Tests: There will be five exams and an optional comprehensive final (to replace missing or one low test score). There are no makeups or retests on any exam. All exams are given in class unless stated otherwise. Exams constitute 90% of your course grade.

Grading: All test scores will be posted in Blackboard. The scale used for letter grades is
90-100% = A, 80-89% = B, 70-79% = C, 60-69% = D, below 60% = F (Decimals are rounded up.)

At anytime before the final exam, you can *approximate* your grade using this formula:

$$0.1(\text{Quiz Average}) + 0.9(\text{Test Average})$$

Incomplete grades (I) will be given only in very rare circumstances. Generally, to receive a grade of "I", you must have taken all examinations, be passing, and after the last date to withdraw, have a personal tragedy occur which prevents course completion. Documentation may be required.

Attendance Policy: Attendance is required. You may be withdrawn for excessive absence (4 missed quizzes and/or tests) but I make no commitment to do so.

Withdrawal Policy: You may withdraw yourself from the course at any time before the college withdrawal deadline, **April 23**. I may withdraw you for excessive absence or lack of prerequisites up until the last day to withdraw.

Learning Labs: ACC main campuses have Learning Labs that offer free tutoring (first-come first-served) in mathematics courses. The locations, contact information, and hours of availability of the Learning Labs are available from <http://www2.austincc.edu/tutor>. At NRG, the Learning Lab is in NRG 4119.

Other Student Services: Here are some potentially useful links.

Instructions for activating an ACCmail account	www.austincc.edu/accmail/
Student Services	www.austincc.edu/support/advising/
ACC student handbook	www.austincc.edu/handbook/
Links to many student services and other information	www.austincc.edu/current/
Information on ACC support services and systems	www.austincc.edu/s4/

Student Discipline Policy: Classroom behavior should support and enhance learning. Behavior that disrupts the learning process will be dealt with appropriately, which may include having the student leave class for the rest of that day. In serious cases, disruptive behavior may lead to a student being withdrawn from the class. ACC's policy on student discipline can be found in the Student Handbook under Policy and Procedures
<http://www.austincc.edu/handbook>

Statement on Scholastic Dishonesty: A student attending ACC assumes responsibility for conduct compatible with the mission of the college as an educational institution. Students have the responsibility to submit coursework that is the result of their own thought, research, or self-expression. Students must follow all instructions given by faculty or designated college representatives when taking examinations, placement assessments, tests, quizzes, and evaluations. Actions constituting scholastic dishonesty include, but are not limited to, plagiarism, cheating, fabrication, collusion, and falsifying documents. Penalties for scholastic dishonesty will depend upon the nature of the violation and may range from lowering a grade on one assignment to an "F" in the course and/or expulsion from the college. See the Student Standards of Conduct and Disciplinary Process and other policies at <http://www.austincc.edu/current/needtoknow>

Student Rights and Responsibilities: Students at the college have the rights accorded by the U.S. Constitution to freedom of speech, peaceful assembly, petition, and association. These rights carry with them the responsibility to accord the same rights to others in the college community and not to interfere with or disrupt the educational process. Opportunity for students to examine and question pertinent data and assumptions of a given discipline, guided by the evidence of scholarly research, is appropriate in a learning environment. This concept is accompanied by an equally demanding concept of responsibility on the part of the student. As willing partners in learning, students must comply with college rules and procedures.

Statement on Students with Disabilities: Each ACC campus offers support services for students with documented disabilities. Students with disabilities who need classroom, academic or other accommodations must request them through the Office for Students with Disabilities (OSD). Students are encouraged to request accommodations when they register for courses or at least three weeks before the start of the semester, otherwise the provision of accommodations may be delayed. Students who have received approval for accommodations from OSD for this course must provide the instructor with the 'Notice of Approved Accommodations' from OSD before accommodations will be provided. Arrangements for academic accommodations can only be made after the instructor receives the 'Notice of Approved Accommodations' from the student. Students with approved accommodations are encouraged to submit the 'Notice of Approved Accommodations' to the instructor at the beginning of the semester because a reasonable amount of time may be needed to prepare and arrange for the accommodations. You are also encouraged to schedule your tests early. Additional information about the Office for Students with Disabilities is available at <http://www.austincc.edu/support/osd/>

Safety Statement: Austin Community College is committed to providing a safe and healthy environment for study and work. You are expected to learn and comply with ACC environmental, health and safety procedures and agree to follow ACC safety policies. Additional information on these can be found at <http://www.austincc.edu/ehs>. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the Emergency Procedures poster and Campus Safety Plan map in each classroom. Additional information about emergency procedures and how to sign up for ACC Emergency Alerts to be notified in the event of a serious emergency can be found at <http://www.austincc.edu/emergency/>. Please note,

you are expected to conduct yourself professionally with respect and courtesy to all. Anyone who thoughtlessly or intentionally jeopardizes the health or safety of another individual will be dismissed from the day's activity, may be withdrawn from the class, and/or barred from attending future activities.

Use of ACC email: All College e-mail communication to students will be sent solely to the student's ACCmail account, with the expectation that such communications will be read in a timely fashion. ACC will send important information and will notify you of any college related emergencies using this account. Students should only expect to receive email communication from their instructor using this account. Likewise, students should use their ACCmail account when communicating with instructors and staff.

Testing Center Policy: Under certain circumstances, an instructor may have students take an examination in a testing center. Students using the Academic Testing Center must govern themselves according to the Student Guide for Use of ACC Testing Centers and should read the entire guide before going to take the exam. To request an exam, one must have:

ACC Photo ID

Course Abbreviation (e.g., ENGL)

Course Number (e.g., 1301)

Course Synonym (e.g., 10123)

Course Section (e.g., 005)

Instructor's Name

Do NOT bring cell phones to the Testing Center. Having your cell phone in the testing room, regardless of whether it is on or off, will revoke your testing privileges for the remainder of the semester. ACC Testing Center policies can be found at <http://www.austincc.edu/testctr/>