

Calculus III

Math 227-101

MWF 11:15–12:05, ILB 465

T 11:00–11:50, ILB 410

Instructor: Prof. Josh Barnard

Office: 426 ILB

Office Hours: MW 3:30–4:30; TR 2:00–3:00

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Course Webpage: www.southalabama.edu/mathstat/personal_pages/jbarnard/S08-227/

Prerequisite: MA 126

Textbook: *Calculus: Early Transcendentals (5th ed.)*, by James Stewart (Brooks/Cole 2003)

Course Description: Vectors; functions of several variables; partial derivatives; local linearity; directional derivatives; the gradient; differential of a function; the chain rule; higher order partial derivatives; quadratic approximations; optimization of functions of several variables; multiple integrals and their applications; parametric curves and surfaces; vector fields; line and surface integrals; vector calculus.

Announcements and Handouts: The course webpage has an announcement section and a handout section. Both of these should be checked regularly, and you are responsible for any information found there. In particular, the requirements and policies for this course may be modified as circumstances dictate; such changes will be provided to students in class and noted on the webpage.

Homework: Homework problems will be assigned regularly in class, and also posted online. These are not to be turned in. The homework assignments are there to provide you with a **minimum** level of exposure to the materials outside of class. You will need to do many more problems before you feel comfortable with the concepts involved. The way to succeed in a math course is to work (and understand) a large number of problems.

Grading: Grades will be determined according to the following:

Quizzes — 15% total
Three Tests — 20% each
Final Exam — 25%

Quizzes: Quizzes will be given in class every Tuesday on which there is no test. There will thus be a total of twelve quizzes, of which the lowest two will be dropped.

Tests: There will be a total of three in-class tests, tentatively scheduled as follows:

Test I — Tuesday, January 29
Test II — Tuesday, February 26
Test III — Tuesday, April 1

Final Exam: There will be a two-hour cumulative final exam. It is scheduled for Wednesday, April 30, 8:30–10:30 a.m. in the usual classroom.

Attendance: Routine attendance in class is essential and expected. As in any course, you should read the relevant section of the textbook **before** attending lectures. The homework webpage has a schedule listing the sections to go over. Routine participation in class is also expected. Attendance and participation will be considered in determining borderline grades.

Calculators: Calculators will be neither allowed nor necessary on the tests or quizzes.

Office Hours: If you have questions or problems, you are encouraged to come by my office during office hours, or make an appointment to come by some other time. Email is the best way to contact me. If you plan on coming during office hours, you need not notify me ahead of time.

Student Disabilities: If you have a specific disability that qualifies you for academic accommodations, please notify me *as soon as possible* and provide certification from the Office of Special Student Services. This office is directed by Ms. Bernita Pulmas and is located in the Student Center, Room 270, phone 460-7212.

Academic Misconduct: Students are assumed to be familiar with the current Academic Misconduct Code.