Schedule: When and Where: ILB 360 MWF 2:30-3:20PM, ILB 350 Tu 2:25PM-3:15PM.


Instructor: Prof. Scott Carter, ILB 308, 460-6264, x66756, e-mail: carter@southalabama.edu
You may address me as Dr. Carter, Professor Carter, Professor Zap, or DC.

Relevant URLs: The urls that are listed below correspond respectively to (1) Course materials, (2) my youtube channel, (3) the official syllabus for the department (4) The University’s final exam schedule, (5) The University’s academic conduct and disruption policy. Keep these handy.

http://www.southalabama.edu/mathstat/personal_pages/carter/classes.html
http://www.youtube.com/ProfessorElvisZap
http://www.southalabama.edu/colleges/artsandsci/mathstat/syllabi/ma227.html
http://www.southalabama.edu/lowdown/

My webpage contains old exams, old quizzes, and other useful stuff.

Youtube, facebook, etc. We really do not have a lot of videos on Calc. III on youtube. So if you have specific questions, come by office hours, and want to record some problems or lectures, you’ll find this helpful. The last couple of semesters, I tried facebook pages for the courses, but these sort of fell flat. I am willing to try this again, but it’s up to you.

Office Hours: MTuWThF 11AM-11:59 AM, Th 1:30PM-3PM. Please feel free to make an appointment for another time if needed. If I am in the office and not involved in something with an urgent deadline, I am happy to talk with you about mathematics.

Grading Policies: All points earned are positive points. The total number of possible points will depend on the number of points on quizzes that are given, and the number of points on the tests.

If you are absent or late to a quiz, then you do not earn points.

Tests: There will be 2 tests: Monday Feb. 16 and Friday April 17. Each counts at least 100 points.

Make-up exams will be an extreme rarity and subject to my discretion. The final exam will be held, 3:30-5:30PM Monday May 4, 2015.

Scoring: Expect between 450 to 600 points per the semester. Attentive students who do their homework, who study before attending class, and who review carefully before the exam or the final will earn close to the maximum number of points available. *Students who do not attend class, do not earn points on quizzes.* Such students lose this opportunity for credit. You will always be informed of your cumulative points. You should pretend that your grade is on a standard, 60%, 70%, 80%, 90% scale. Since I am aware of personal contingencies, I will grade as if the cut-off is lower than the highest possible score. During the review of the first day handout, I will illustrate how I determine cut-off scores between each grade.

Absences: Do not miss class. Arrive to class on time. Virtually every class day will start with a 5 minute quiz. You gain experience and points from working quizzes. Come to class prepared: each night read the previous section and the current section. Attempt all homework problems.

Class pacing. Immediately after a quiz is turned in, I’ll show you how to work it. I’ll also post written solutions to quizzes on my webpage. The next event is a review of homework. Please don’t
make me ask more than once if there are any questions; otherwise we’ll waste class time. If there are no immediate questions, I’ll work selected problems from the previous assignment. After I feel that I have adequately answered homework problems, we’ll go onto new material. *I will leave time for new material in each class.*

**Learning Objectives for the Course:** Upon successful completion of the course a student will be able to:

1. Apply the algebra and geometry of vectors in 2- and 3-dimensional space;
2. Analyze vector fields;
3. Interpret the calculus of a single variable from a vector point of view;
4. Apply the differential calculus of curves in 3-dimensional space and the calculus of path integrals;
5. Check whether a vector field is conservative, and in the case it is, find a potential function;
6. State and use the fundamental theorem of line integrals;
7. Analyze elementary functions of several variables, their graphs, and the standard quadratic surfaces;
8. Compute and interpret partial and directional derivatives of multivariable functions and use these to compute local minima, local maxima, and tangent plane approximations;
9. Compute double and triple integrals in various coordinate systems;
10. State and use Greens theorem;
11. Compute and interpret line and surface integrals;
12. State and use Stokes theorem and the divergence theorem.

**Other Remarks:**

**Calculators:** You may use a calculator for your homework, but there are only a few quizzes for which the calculator is allowed. Sometimes it is an essential tool, more often it is a cumbersome burden. The correct use of a calculator is as a check to your arithmetic or your rough sketch.

**Blue books:** On or before Jan. 30, 2015, supply me with 3 large blank blue books. Do not write your name on the blue books! These will be used for tests and the final.

**Special Students:** If you have a specific disability that qualifies you for academic accommodations, please notify the instructor/professor and provide certification from Special Student Services. (OSSS is located in Room 270 of the Student Center (460-7212).

**Counseling and Testing Services** Counseling and Testing Services provides a variety of free and confidential services for students. For further information regarding this resource go to www.southalabama.edu/counseling or call the office at 460-7051.

**Departmental tutoring:** Free tutoring is available for elementary courses (ILB 235) from the Department of Mathematics and Statistics. Please check the bulletin board outside ILB 325 for details.

**Disclaimer:** The requirements and policies may be modified as circumstances dictate. Such changes will be provided to the students in class and in writing.

**Dropping** The final drop date is Friday, April 3, 2015 4:59 PM. Please speak to me if you are getting behind. Also talk to me before making a final decision to drop.

**Homework Schedule:** A homework schedule for the course is attached. An e-copy will be posted at my webpage.