Schedule 125-101: MWF 1:25PM-2:15PM ILB 410, Tu 2:00PM-2:50PM ILB 370.


Instructor: Prof. Scott Carter, ILB 308, 460-6264, x66756, e-mail: carter@jaguar1.usouthal.edu

Office Hours: M-F 11AM-12:00PM; Th 2-3PM or by appointment. You are encouraged to come to office hours to ask about the course and to get acquainted.

Class Structure. Each Tuesday at the beginning of class we’ll have a short quiz that covers homework over which you have had a chance to go over. At least one other day per week will have a similar quiz. These will be unannounced, and will always begin promptly at the beginning of class. Do not be late to class; by doing so, you will deny yourself adequate time for quizzes. I will re-quiz material on which a significant number of students do poorly and which covers material that is essential to your understanding of the subsequent material.

Other than quizzes, we begin class with a review of homework. The attached syllabus contains all the assignments for the course. Following this review, I’ll cover new material. This coverage will sometimes be abstract. Other times it will be brief. Often I will choose to work a few sample problems that are similar to subsequent homework assignments. Material is also covered in the context of the text. Do not neglect to read the section! As needed, I will post videos of short topics on:

http://www.youtube.com/ProfessorElvisZap

Students are encouraged to help me video record these.

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

- **Quiz points** will range from 3 to 15 points each. Point determinations are dependent on the number of questions and the difficulty of the question. On a 3 point scale, 3 means you got the answer perfect or nearly so, 2 means you had technical difficulty, 1 means you wrote the problem down (maybe). If you see that on 9 point quizzes, you are consistently scoring 1 or 2 points, then you need to do something to master the material! Anticipate that the total possible quiz grade will be in the range of 100 to 150 points.

- **Tests:** There will be 2 tests, Monday Sept. 26, 2011 and Monday November 7, 2011. Each counts at least 100 points.
  - Make-up exams will be an extreme rarity and subject to my discretion.

- **Final Exams** Official Schedule posted at:
  
  http://www.southalabama.edu/registrar/dates.htm#final

  - 1:00 p.m. - 3:00 p.m. Wednesday, December 14
**Scoring:** There will be more than 450 points available. If you miss a quiz, you do not earn points. All your returned papers will contain a score for the assignment and a cumulative score expressed as an unreduced fraction.

You will always be informed of your cumulative points. You should pretend that your grade is on a standard, 60%, 70%, 80%, 90% scale even though I will show some lenience towards the end.

**Absences:** Absent students lose privileges, miss quizzes, do not hear me tell them which questions that I find important, miss the opportunity to ask questions, and do see how to work problems efficiently. The syllabus is subject to change and clarification. Therefore, class attendance is important. Also all quizzes are unannounced. **When you miss a quiz, you may not make it up.** If you do not understand an explanation on Monday, it may be the case that clarification is given on Tuesday.

**Goals for the Course:** The official departmental syllabus is found here:

http://www.southalabama.edu/mathstat/info/schedules/coursessyllabi/ma200level/MA227%20syllabus.pdf

The itemized list below is copied verbatim from that document. Upon successful completion of the course a student will:

- be fluent in the algebra and geometry of vectors in 2– and 3–dimensional space, and have an understanding of vector fields;
- understand the calculus of a single variable from a vector point of view, including an understanding the differential calculus of curves in 3-dimensional space and the calculus of path integrals, as well as applications of both of these;
- understand the notion of a conservative vector field and a potential function and be able to state and use the fundamental theorem of line integrals;
- be familiar with elementary functions of several variables, their graphs, and the standard quadric surfaces;
- be able to compute partial and directional derivatives of multivariable functions and use these to compute maxima and minima and tangent plane approximations;
- be able to compute double and triple integrals in various coordinate systems;
- be able to state and use Green’s theorem;
- have a conceptual and computational understanding of surface integrals and their applications;
- be able to 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.

**Blue books**: On or before September 12, supply me with 3 large blank blue books. Do not write your name on the blue books! Do not purchase your blue books at Ander’s bookstore; if you do, I will ask you to return them. 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).

**Departmental tutoring**: Free tutoring is available for elementary course 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 **4:59PM (16:59) CDT, 28 October 2011**. 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 e-mailed to you and posted at

http://www.southalabama.edu/mathstat/personal_pages/carter/classes.html

**Academic Policies.** See

http://www.southalabama.edu/lowdown/policies.shtml