Schedule  MWF 10:10-11:00 ILB 465.


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. In this course, you will learn how to discover and to write proofs. If you don’t, then you will not pass. Routinely, class time will begin with a review of homework. At least once a week, we’ll have an in class quiz over the homework about which you have had a chance to ask. I’ll also ask you to turn in homework problems once a week (Friday). Written homework that is not complete, or that does not comply with my ideals of good mathematical writing will be returned to you. You may re-attempt any assignment until it passes. But you don’t want to continually be re-working assignments. Within class, you’ll have the opportunity to go to the board and demonstrate your ideas. Your peers and I will critique your presentation according to the criteria: (a) is it a convincing proof? (b) is it written correctly? there are slight differences between proofs on the board and proofs on paper. We’ll discuss this. I’ll give short lectures about the book’s presentation, but you are responsible to have read the section of book before arriving to class. There are some proofs available at

http://www.youtube.com/ProfessorElvisZap

I am happy to add to that repository, and 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, the number of points on the tests, and how I weigh the written homework.

- Quiz points will range from 3 to 15 points each. Anticipate that the total possible quiz/homework grade will be in the range of 100 to 150 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
  
  - 10:30 a.m. - 12:30 p.m. Monday, December 12

The final will count 150 points.
**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 Wednesday. People who are registered for the class, but are absent, are not students.

**Goals for the Course:** The official departmental syllabus is found here: The itemized list of goals for the course is copied verbatim from a document that should appear here:

http://www.southalabama.edu/mathstat/info/schedules/coursesyllabi/ma300level/

Upon successful completion of the course a student will:

- Be able to write mathematics and proofs in a clear, concise, logical and correct way.

- Understand the rules of formal logic and be able to use these rules to read and write mathematical arguments.

- Understand the rudiments of set theory and the role of set theory in mathematics. Have a working knowledge of operations on sets and be able to prove set theoretic identities. Have an understanding of various countable and uncountable sets.

- Obtain a good understanding of relations, especially equivalence relations and their applications to partitions of sets. Have a working knowledge of many of the types of relation that are fundamental to mathematics

- Have a thorough understanding of functions. Be able to prove and disprove the injectivity and surjectivity of a function. Have a thorough grasp of the relations between injectivity and surjectivity and the existence of left- and right-inverses.

**Other Remarks:**

**Blue books:** On or before September 12, supply me with 3 large blank blue books. Do not write you 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).

**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