

Mathematics 237-102

When and Where: MWF 1:25 PM-2:15, ILB 430

Text: “Linear Algebra Ideas and Applications,” Third Edition John Wiley and Sons (Hoboken 2008) ISBN 978-0-470-17884-3.

Instructor: Prof. Scott Carter, ILB 304, 460-6264, x66756, e-mail: carter@jaguar1.usouthal.edu

Office Hours: Tuesday 10:00AM-12:00PM, Thursday 10AM -11:05 AM, or by appointment. You are encouraged to come to office hours to ask about the course and to get acquainted.

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.

There will be written quizzes that cover the homework assignments. These will be held every Monday and on un-announced days as I deem necessary. Quiz points will range from 3 to 10 points each. Anticipate that the total possible quiz grade will be in the range of 100 to 150 points.

Tests: There will be 2 tests, Friday February 20 and Thursday April 9. Each counts at least 100 points. According to my reading of

<http://www.southalabama.edu/registrar/dates.htm>

The final is scheduled from 1:00 p.m. - 3:00 p.m. Wednesday, May 6. The final counts at least 150 points.

If you have a *good excuse* for not making it to one of the exams, then your final exam will count as if it were 250 points. However, lenience in grading policy will only be granted if you ask, and the final determination, if it is warranted, is up to me. As a result there will be **no make up exams or quizzes.**

Scoring: There will be more than 450 points available. If you miss a quiz, you do not earn points. I will keep you informed on the total number of points that possibly can be earned as these points are earned. Thus your quiz papers will contain a score for the quiz and a cumulative score expressed as an unreduced fraction.

Once the semester is over, I graph the total points earned for each student, arrange the scores from highest to lowest, and insert break lines between *As* and *Bs* at the most convenient break that is less than or equal to 90% of the possible points earned. The *A/B*-line does not move very much below 90%. The *B/C* line will be the closest break line less than or equal to 80%. The *B/C*-line may move as far down as 70%. The process continues: I look for break lines that are at or below the 60-70-80-90 marks.

You will always be able to compute your cumulative points.

Absences: Habitually absent students lose privileges: *E.g.* office hours, sensitive answers to in class questions, and grading appeals. The syllabus is subject to change and clarification. Therefore, class attendance is important. Also there are un-announced quizzes. If you miss a day on which there is a quiz, you do not earn these points.

If you do not understand an explanation on Monday, it may be the case that clarification is given on Wednesday.

Goals for the Course: The goals of the course are to develop a good conceptual and computational understanding of linear algebra. You will be expected to be able to state definitions precisely, prove some small theorems, follow the proofs of bigger theorems, and apply these results in a variety of real world situations. You will be able to row reduce a matrix by hand, and describe the steps

used in row reduction as elementary row operations. You will be able to identify row space, column space, null space, domains and ranges associated with matrices and with linear maps. You will be able to identify eigenvalues and eigenvectors of self-adjoint matrices.

Other Remarks:

1. **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. Your calculator should be able to compute the reduced row echelon form of a matrix.
2. **Homework** will be assigned in class each day. Later, I may decide to give compendium of problems for the semester.
3. **Blue books** On or before January 30, 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.
4. **Special Students** If you have a specific disability that qualifies you for academic accommodations, please notify me and provide certification from the Office of Special Student Services.
5. **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.
6. **Disclaimer** I have the right and the duty to modify the requirements of the course as circumstances dictate. Such changes will be provided to the students in class and in writing. This is another reason that attendance is mandatory.
7. **Dropping** The final drop date is March 27 at 4:59 PM. Please speak to me if you are getting behind. Also talk to me before making a final decision to drop.