Math 544H, Linear Algebra
Section 001, Spring 2023

Instructor: Matthew Boylan
Office: LeConte 409
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Office hours: Tues. 10:00 - 12:00, Thurs. 3:00 - 4:00, and by appointment;
During the LeConte renovation, office hours will be via blackboard

Basic Information

- **Learning Outcomes.** Upon completion of the course, successful students will understand basics concepts and solve problems on the following topics:

   Linear systems of equations
   Matrix computations (e.g., multiplication, finding inverses)
   Vector spaces (subspaces, linear independence, basis, and dimension)
   Linear transformations
   Determinants
   Orthogonality
   Eigenvalues and eigenvectors

- **Text.** Blyth and Robertson, <u>Basic Linear Algebra</u>, Springer Undergraduate Mathematics Series

- **Weekly Meeting Times**

   Lecture TR 1:15 - 2:30 Gambrell 123

   You are expected to attend all class meetings. **I take attendance every day.**

- **Webpage:** https://blackboard.sc.edu/. I will use blackboard to post:

   Course syllabus
   Course notes
   Homework assignments and selected solutions
   Exams from previous semesters, with solutions
   Supplemental material, as necessary

   Information posted on blackboard is for the students enrolled in this class, and should not be disseminated without my permission.

Assessment

- **Homework.** I will assign homework frequently, and it will be collected and graded roughly weekly. Some, but perhaps not all, problems will come from the assigned text. A minimum requirement for success in the class is **doing** and **understanding** all homework. You should do whatever it takes to meet this requirement.

  You may work in groups if you would like to, but **you must write up your assignments on your own using your own words**. Sharing solutions or copying answers from other sources is a breach of academic integrity (see below for more information on academic integrity). I also advise you to seriously attempt the problems on your own first. Remember that you will be doing exams in-class on your own without any outside resources.

- **Quizzes.** Quizzes may be given to supplement homework, as needed. I will announce quiz dates and topics in advance.

- **Exams.** There will be two in-class exams and a cumulative final exam.

Exam 1	Thursday,	February 16	1:15 - 2:30	Gambrell 123
Exam 2	Thursday,	April 4	1:15 - 2:30	Gambrell 123
Final Exam	Thursday,	April 27	12:30 - 3:00	Gambrell 123

- **Absences**

  Legally excusable absences. The University allows for students to petition for an excused absence due to any of the following circumstances: medical conditions or illness or injury, death or severe illness of an immediate/dependent family member, military duty, legal obligation, religious holiday, or participation in an authorized university activity.

  Obtaining an excused absence.

  (1) In order for an absence to be recognized as "excused", the student must submit the appropriate form on the website of the office of the Undergraduate Ombuds. (Click on the link or search for "University of South Carolina Undergraduate Student Ombuds Services".)

  (2) In the case of a religious holiday or participation in a university-authorized activity, notification of the absence is required in advance. In particular, students missing classes due to religious observances must notify me in writing by January 21.

- **Policy on Missed Assessments.** If a student misses an assessment due to an excused absence (as described above, via documentation from the Undergraduate Ombuds), then the student will be allowed to make up the missed assessment within one week of the date that the assessment took place.

- **Further Assessment Policies**

  (1) **Calculators** may not be used to do quizzes or exams. (They will not be needed!)

  (2) Exams and quizzes are **closed book, closed note**.

  (3) Exam, homework, and quiz grades may be discussed only up to one week after being returned.

  (4) In-class exam dates are subject to change depending on University class cancellations and on the rate at which we cover course material.

- **Grades**

Two in − class exams :	100 pts. x 2	$\approx 22\%$ x 2
Final exam :	150 pts.	$\approx 33\%$
HomeworkandQuizzes :	100 pts.	$\approx 22\%$
Total :	450 pts.	100%

  Letter grades will be given according to the following approximate scale:

A	**B+**	**B**	**C+**	**C**	**D**	**F**
$90 - 100$	$88 - 89$	$80 - 87$	$78 - 79$	$70 - 77$	$60 - 69$	$0 - 59$

  Note: The deadline to drop a course without a WF is Monday, March 27.

- **Academic Integrity.** Cheating will not be tolerated. Honor code violations will be addressed according to University guidelines.

- **Disability Services**

  The Student Disability Resource Center (SDRC) empowers students to manage challenges and limitations imposed by disabilities. Students with disabilities are encouraged to contact me to discuss the logistics of any accommodations needed to fulfill course requirements (within the first week of the semester). In order to receive reasonable accommodations from me, you must be registered with the Student Disability Resource Center located in Close-Hipp, Suite 102.