

MATH 495/573
HISTORY OF LINEAR ALGEBRA
Nicholls State University, Summer 2007

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My office hours are 10:30-12:00 M-Th. Please contact me (by phone, by email, or in person) during these times if you have any questions. If you need assistance at a different time, contact me and we'll work something out.

Text: None. I will upload class notes to Blackboard every few days.

Course Description: This course will be a humanities-style course that is approximately 75% history and 25% mathematics. We will cover the developments of the major topics of linear algebra in roughly their chronological order.

A few words need to be said about the online aspect of this course. All assignments, notes, announcements, and the like will be posted on Blackboard. All students enrolled in an Internet course should have basic computer skills (such word processing, e-mail, navigating the Internet, etc). Please see the web page <http://www.nicholls.edu/distance/> for further information on computer requirements. As an online student, you will be somewhat self-paced. This therefore requires self-discipline and self-motivation. All assignments need to be turned in on time. It is the responsibility of the student to notify the instructor of technical and/or personal problems that may interfere with online participation. All students must have an e-mail account that they check regularly. E-mail will be our primary means of communication. Just like a typical class, instances of academic dishonesty, such as plagiarism, will not be tolerated.

Course Objectives: At the completion of this course, a student will be able to:

- demonstrate an understanding of the development of linear algebra over the years
- effectively discuss the lives of significant mathematicians and their contributions to linear algebra

Grading Structure: All students will have two exams and several assignments. Students enrolled in Math 573 will additionally have a term paper assigned. These will be described fully below.

Exams: We will have two exams, a mid term exam and a final. Exam questions will be of the following types: true/false, multiple choice, short answer, matching, essay, and mathematical. You will be expected to know names, dates, and places (the “who”, “when”, and “where” of mathematics). But perhaps more importantly, you will need to understand the origins and context (the “how” and “why” of mathematics). Each exam counts for 30% of your semester grade.

Assignments: You will have an assignment every few days. These will range in style over the various types of problems appearing on the exams. In fact, let’s get it started. **Assignment #1** is to tell me *your* mathematical history. I will leave the format and length up to you, but I do not just want a list of courses you’ve taken. Be creative. Tell me about you. Get this to me via email (or in person) by this **Friday, June 15, 2007 at 12:00pm**. For students in Math 495, these assignments will count for 40% of your semester grade. For students in Math 573, they count for 30%.

Term Paper (For students in Math 573 only): This will be due to last week of classes (July 16-19). I have topics chosen already, so contact me as soon as possible to receive your topic. Your paper should be neither all history nor all mathematics. It should be self-contained mathematically (do not assume I know what you are talking about). If you have any doubts, let a friend read it. Your paper should be written using the normal college formatting (regarding spacing, bibliography, etc), as it will be graded for grammar and spelling as well as content. The length is up to you. Noted mathematical historian Fred Rickey once said,

...[a paper] has a natural length. You are telling a story which needs a certain background, exposition, and detail. When that is successfully done, stop.

Well put. You should turn in two copies so that I may keep one. This paper will count for 10% of the semester grade for students on Math 573.

Disability: If you have a documented disability that requires assistance, you will need to register with the Office of Disability Services for coordination of your academic accommodations. The Office of Disability Services is located in Peltier Hall, Room 100-A. The phone number is (985) 448-4430 (TDD 449-7002).