

Research Project As a portion of your work in this topics course you will carefully research a topic or application in linear algebra, to present in writing and to the class.

Subject Any topic that extends our understanding of linear algebra, or makes heavy use of linear algebra in an application, is a legitimate subject. However, you must have your topic approved to avoid duplication with course material or other students' presentations.

Proposal A one-page proposal is due before class on March 9. This should provide evidence that you have a viable subject and are not duplicating course material or another student's subject. A preliminary bibliography of primary sources will provide the best evidence that you have given your subject adequate consideration. These will be returned quickly, and once approved you may schedule your presentation for a time slot during the final weeks of the semester.

Written Report Your full written report will be due April 12 at 5 PM. As a rough guideline, I will be expecting 5 to 10 pages (assuming normal margins and spacing). I will circulate this report to your classmates prior to your oral presentation.

Oral Report You will give a 25-minute presentation to the class, accompanied with slides created with \TeX and Beamer.

Tools Your proposal and written report will be in PDF format, created with \TeX . Your presentation will be accompanied with slides created in \TeX with the Beamer package. See the course web page for extensive links to these tools and comprehensive information on their use.

Publication Your final written report, and your presentation, will be posted publicly on the course web page. You may decide what license you wish to put on your work — traditional copyright, Creative Commons, GNU Free Documentation (GFDL). See the course web page for links to further information on these licenses. Note in particular that the GFDL will require you to include an extensive notice of the license, and to post the \TeX source for both your report and presentation.

Grading This project represents 25% of your course grade, partitioned as follows: Proposal approved on-time – 3%, Written Report – 12%, Oral Report – 10%. Attendance at your peers' presentations is an integral part of this course. Therefore you will be allowed one absence for any reason, and any additional absences will result in a 2% grade penalty on your own project score. Portions submitted electronically can be emailed to beezer@ups.edu.

| Date | Component | Format |
|---------------|----------------|---------------------------------|
| Mar 9 (1 PM) | Proposal | 1-page \TeX PDF, email |
| Apr 12 (5 PM) | Written Report | \TeX PDF, email |
| Apr 16–May 2 | Oral Report | Beamer PDF, email in advance |