Instructor:	Joe Koebbe, Associate Professor
Office:	ANSC 209
Office Hours:	MTWThF 9:00am-10:20am
-	MWF 11:30am-12:20am
Phone:	1-435-797-2825
email:	joe.koebbe@usu.edu
webpage:	http://www.math.usu.edu/˜koebbe

If you cannot make office hours, you can also set up an appointment. This can be done before or after class meetings or by email.

Textbook Information:

The following textbook is required. This text is the primary source of content for the course. The rest of the references will be used to augment and fill in gaps in the course.

Title:	*A First Course in Numerical in Numerical Methods*
Authors:	Uri Ascher and Chen Greif
Edition:	First
Publisher:	SIAM

Additional References:

1. *Matrix Computations*, by Golub and Van Loan, Johns Hopkins, Fourth Edition, 2013.

2. *Numerical Analysis: Mathematics of Scientific Computing*, by David Kincaid and Ward Cheney, Third Edition, Brookes/Cole, 2002.

3. *LAPACK - Linear Algebra PACKage*, Jack Dongara,

   `http://performance.netlib.org/lapack/`

   The documentation is on-line and can be accessed using any browser.

The other books will be used and any information that is needed by students will be handed out in class and/or posted at the following web page link.

   `http://www.math.usu.edu/˜koebbe`

Look for the link to this course on this web site.

Instructor Course Comments:

Students in this course should keep the following in mind throughout the semester.

- Attendance is mandatory. Due to experience of the instructor over the past 3 decades it is clear that students who do not attend class will not do well. If you do not attend class meetings your grade will be adversely affected.

- Participation in the course helps a great deal. You will learn a lot more if you actively participate in class discussion. You are required to show up in my office regularly to discuss the course. This is done to help with participation during lectures.
- Take notes - it helps!
- If you are having trouble with assignments, homework, or programming, see me as soon as possible. Do not wait until you are behind in the class.

If you have any questions about the course material, course policies, or any other matters, please contact the instructor via email, before or after class, or during office hours.

Grading: Your grade in the course will be determined by the following:

1. Homework will account for a 40% of a student's grade. Homework must be turned in on time. **Late homework will not be accepted under any circumstances.** If you must be gone, any homework must be turned in on or before the due date. The only exception to this rule is for a family emergency. Also, homework must legible. Note that this applies to homework solutions posted to github.

2. Two midterms will be given. Each will cover about one half of the content of the course. Each of these midterms will account for 20% or 40% of the grade earned in the course.

3. The final project will account for 20% of your grade. The project will involve the completion of a shared library of routines that implements methods/routines for performing a variety of computational linear algebra algorithms. This will be discussed in more detail throughout the semester.

If students have questions about assignments and midterms, please contact your instructor. One of the assignments will be to meet with me at least once every two weeks to discuss progress in the course. This means that 2 times each month during the semester you will need to show up at office hours or make an appointment to see me. You will need to do this 8 times during the semester.

University Policies:

There are a number of Utah State University (USU) policies that apply to students, faculty, and administrators at USU. Students should realize that any policies stated in this syllabus are included for convenience. The official policies applied to this course can be found online at the following address.

`http://catalog.usu.edu/content.php?catoid=12&navoid=3587`

Any policies in this document are superseded by the online policies at the link given above.

Instructor/Department/University Policy Documents: There are a number of policies related to courses, student participation in courses, and responsibilities of students, facilitators, and instructors for all courses at USU. Links to the appropriate policy documents can be found on the instructor's webpage for this course.

The Honor Pledge — To enhance the learning environment at Utah State University and to develop student academic integrity, each student agrees to the following Honor Pledge: "I pledge, on my honor, to conduct myself with the foremost level of academic integrity."
Violations of the Academic Integrity Standard (academic violations) include, but are not limited to:

1. **Cheating:** (1) using or attempting to use or providing others with any unauthorized assistance in taking quizzes, tests, examinations, or in any other academic exercise or activity, including working in a group when the instructor has designated that the quiz, test, examination, or any other academic exercise or activity be done "individually"; (2) depending on the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; (3) substituting

for another student, or permitting another student to substitute for oneself, in taking an examination or preparing academic work; (4) acquiring tests or other academic material belonging to a faculty member, staff member, or another student without express permission; (5) continuing to write after time has been called on a quiz, test, examination, or any other academic exercise or activity; (6) submitting substantially the same work for credit in more than one class, except with prior approval of the instructor; or (7) engaging in any form of research fraud.

2. **Falsification:** altering or fabricating any information or citation in an academic exercise or activity.

3. **Plagiarism:** representing, by paraphrase or direct quotation, the published or unpublished work of another person as one's own in any academic exercise or activity without full and clear acknowledgment. It also includes using materials prepared by another person or by an agency engaged in the sale of term papers or other academic materials.