

## ACMS 690, Fall Semester 2012

August 22, 2012

Instructor: Andrew Sommesese  
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Phone: 631-6498  
email: sommesese@nd.edu  
Class Time/Place: MWF 10:40 to 11:30 in DeBartolo 117  
Class Website: [www.nd.edu/~sommese/ACMS12F690](http://www.nd.edu/~sommese/ACMS12F690)

*Office Hours:* Open Door: If you just come to my office you will likely find me in, but if you set up a time with me before hand, then you can be sure that I will be there.

*Examinations, homework, and grades:* There will be two examinations worth 100 points and a final examination worth 150 points. Both of the two nonfinal examinations will be take home. The final exam will be a two hour exam covering all the material of the course with emphasis on the material covered after the second exam.

Homework is an integral part of the course. Typically I will give assignments on Wednesday and collect them the following Wednesday. I strongly encourage you to see me if there is anything connected with the course or the mathematics in the course that you are unclear on or would like to know more about.

Both examinations and the homework are conducted under the honor code. Cooperation in doing homework is permitted (and in fact encouraged), copying is not.

For examinations, there is no discussion (electronic or otherwise) on the test before it is handed in except with me, but you may use any book, article, or website.

Homework will be worth 100 points. The total number of possible points for the semester is 450. The numerical break points for letter grades (A, A-, B+,...) will be based only on the test scores and the homework.

Implementation and comparison of algorithms solving the same problem are of basic importance in numerical analysis (and a lot of fun also). We will use Maple for this purpose. Maple is required: you can buy the student version (identical in content to the full version) for about \$100.

There are no required books, though there are a number of standard texts on reserve in the Math and engineering library. For the numerical linear algebra in the course, I will closely follow

L.N. Trefethen and D. Bau, *Numerical Linear Algebra*, Society of Industrial and Applied Mathematics, 1997.

Exam 1: Due Monday October 1.

Exam 2: Due Monday November 12.

Final: Time and place will be announced.

*The most recent version of this handout plus other useful materials can be found at [www.nd.edu/~sommese/ACMS12F690](http://www.nd.edu/~sommese/ACMS12F690).*