Mathematics 617, Fall Semester 2004
August 27, 2004

Instructor: Andrew Sommese
291 Hurley
Phone: 631-6498
email: sommese@nd.edu
Class Time/Place: 11:45 to 12:35 in Hurley 276
Class Website: `www.nd.edu/~sommese/math617`

Office Hours: Open Door: I am in my office almost all of every weekday, and encourage you to visit any time. If you just come to my office you will probably find me, 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. One or 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 will be assigned regularly, and 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. You are allowed and encouraged to use your notes and any library books while doing the homework.

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

Homework will be worth 100 points. Thus 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.

We will follow the books

Stoer and R. Bulirsch, *Introduction to Numerical Analysis*, 3rd edition, Springer, 2002;

and

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

which are available at the Notre Dame Bookstore. (On most topics, this classic has more material than we will cover.)

Implementation of algorithms and comparison of different 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.

Exam 1:	Monday, September 27 in class	(or possibly take home).
Exam 2:	Wednesday, November 3 in class	(or possibly take home).
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/math617.