

TIMETABLE: 24855 MWF 9:00–9:50 in 303 Addams Hall from 01/16/2007 to 05/04/2007.

PREREQUISITES: Timetable lists “Grade of C or better in MCS 460 or the equivalent, and MATH 480 or consent of the instructor,” but this is outdated. The MCS 460 has in the mean time become MCS 320 (introduction to symbolic computation) and instead of Math 480, MCS 471 (numerical analysis) works even better as the second prerequisite.

INSTRUCTOR: Jan Verschelde, Office: 1210 SEO, Phone: 312 996 4609.

E-mail: jan@math.uic.edu. URL: <http://www.math.uic.edu/~jan>.

OFFICE HOURS At 11AM on Monday, at noon on Wednesday, and at 1PM on Friday, I am sure to be in my office; but feel free to stop by if you have any math questions. We can also make an appointment.

TEXT BOOK: The former textbook for the course was “Numerical Polynomial Algebra” by Hans J. Stetter, SIAM 2004. This year we will cover similar materials, but lecture notes will be distributed.

MCS 563 SITE: See <http://www.math.uic.edu/~jan/mcs563/index.html> for a copy of the syllabus, posting of lecture notes, reference materials, and changes in the scheduling.

HOMEWORK: At every lecture, several exercises are listed. Some exercises provide inspiration for an interesting project. At the end of every lecture, interesting homework problems will be recommended. The collection of homework will be announced at least one week ahead of the deadline.

PROJECTS: Three projects will be assigned during the semester. In the first project we will use Maple to experiment with the concepts and algorithms we have seen. The goal of the second project is a computational detailed study of a novel algorithm. In the third project we consider application fields, still to be determined, and depending on personal interests and preferences.

EXAMS: During the semester, there is one midterm on the first half of the course. The midterm and the final exam are excellent preparations for the Symbolic Computation branch of the *Symbolic and Numerical Computing (SNC) Prelim*. Students not interested in this Prelim may opt out of the exams, and focus on research projects instead.

CLASS ATTENDANCE: Students are expected to attend all class meetings. While the lectures cover the same materials in the text book, usually other examples will be presented and discussed.

STUDENTS WITH DISABILITIES who require accommodations for access and participation in this course must be registered with the Office of Disability Services (ODS). Please contact ODS at 312/413-2183 (voice) or 312/413-0123 (TTY).

SOME IMPORTANT DATES:

Friday 26 January : last day to complete registration, add, or drop the class.

Friday 23 February : last day to withdraw with college permission.

Monday 26 – Friday 30 March : Spring Vacation. No Classes.

Monday 7 – Friday 11 May : Final exam.