TIMETABLE: 39222 MWF 10:00–10:50AM in 1200 SEO from 08/22/2016 to 12/02/2016.

PREREQUISITES: MCS 471 or MCS 571 or consent of the instructor. Some familiarity with the programming language C (or willingness to acquire programming skills) is needed.

INSTRUCTOR: Jan Verschelde, Office: 1210 SEO, Phone: 312 996 4609.
E-mail: janv@uic.edu. URL: `http://www.math.uic.edu/~jan`.

OFFICE HOURS: On Mon 11AM, Wed noon, Fri 1PM, I am sure to be in my office; you are welcome at other times if you have any questions. We can also make an appointment.

TEXTBOOK: The recommended textbooks are (1) *Parallel Programming. Techniques and Applications Using Networked Workstations and Parallel Computers* by Barry Wilkinson and Michael Allen, Pearson Prentice Hall, second edition, 2005; and (2) *Programming Massively Parallel Processors. A Hands-on Approach* by David B. Kirk and Wen-mei W. Hwu, Elsevier/Morgan Kaufmann Publishers, 2010; second edition, 2013.

MCS 572 SITE: See `http://www.math.uic.edu/~jan/mcs572/index.html` for a copy of the syllabus, posting of slides, reference materials, and changes in the scheduling.

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

PROJECTS: Three projects will be assigned during the semester. In the first project we will use MPI to experiment with the concepts and algorithms in the book. The goal of the second project is a computational detailed study of a parallel algorithm. In the third project we consider application fields, still to be determined, and depending on personal interests and preferences. The third project would be developed into a final project, instead of a final exam.

EXAMS: During the semester, there is one midterm on the first half of the course. As a take-home exam, the midterm functions as an important homework collection. The midterm and the final exam are excellent preparations for the *Computational Science 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 as 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 Disability Resource Center (DRC). Please contact DRC at 312/413-2183.

SOME IMPORTANT DATES:

Friday 2 September : last day to add or drop the class.
Monday 5 September : Labor Day holiday. No classes.
Friday 28 October : last day for undergraduates to use optional late drop.
Friday 25 November : Thanksgiving holiday. No classes.
Friday 9 December : 10:30AM-12:30PM, final examination, room to be announced.