EECS 358 – Introduction to Parallel Computing Syllabus

Instructor

Gokhan Memik

Room: L475 Technological Institute

Phone: (847) 467-1168

E-mail: memik@eecs.northwestern.edu

URL: http://www.eecs.northwestern.edu/~memik

Office Hours: Thursday 3:30 – 4:30 pm at Tech L475 or by appointment

Teaching Assistant

Majed Beigi

Room: Tech L458

Email: majed.beigi@northwestern.edu

Office Hours: TBD

Wenting Zhou (Grader)

Room: Tech L458

Email: wentingzhou2017@u.northwestern.edu

Location and Time

Searle 1421, Tu/Th 2:00 – 3:20pm

Prerequisites

1. EECS 361

If you haven't taken this class, discuss it with the instructor before enrolling in the class.

Recommended Textbook

A. Grama, A. Gupta, G. Karypis, and Vipin Kumar, *Introduction to Parallel Computing*, Addison Wesley, 2nd edition, 2003. Although this book is recommended, the course will follow the class notes that will include some material not covered in the textbook.

Homeworks

There will be 3 or 4 homework/programming assignments.

Exams

There will be two exams: a midterm exam late April/early May and an end-term exam on the last day of classes. There is no final exam.

Grading

Homework assignments and Lab - 50 % Midterm Exam - 25% End-Term Exam - 25%

Late Policy

For each *calendar* day after the due date for the homework or the lab project, there is a 10% penalty. For example, after 1 day, the maximum score is 90%, after 2 days it is 80%, etc. No homeworks will be accepted after the solutions are posted.

Schedule

- Introduction to Parallel Programming (2 lectures)
- Shared Memory Parallel Programming (4 lectures)
- Distributed memory message-passing parallel programming (5 lectures)
- Data parallel and SIMD parallel programming (3 lectures)
- Parallel programming tools (1 lectures)
- Parallel algorithms and applications (3 lectures)