

## CS 476 – Automata Theory and Formal Languages Spring 2012

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Office hour: Wednesday 10:40-11:30 or by appointment

### ASSISTANTS:

- Murat Ak  
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- Emre Yılmaz  
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Office hour: Thursday 9:40-10:30 or by appointment

TEXTBOOK: *Introduction to the Theory of Computation, 2nd Edition*, Michael Sipser, Course Technology, 2005. (The first edition from PWS Publishing Company, 1996, is also acceptable.)

### GRADING:

Attendance: 3%  
Quiz: 20%  
Homework: 20%<sup>1</sup>  
Midterm: 27%  
Final: 30%

### SYLLABUS:

- Finite automata
- Regular expressions and languages
- Context-free grammars and languages
- Pushdown automata
- Turing machines
- Decidability
- Complexity theory and NP-completeness
- Selected topics

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<sup>1</sup>For pass/fail decision, the grade without homeworks must be sufficient as well as the grade with homeworks.