

CS182—Foundation of Computer Science

(<http://www.cs.purdue.edu/homes/spa/cs182.html>)

TH 1:30–2:45 in *Forney Hall of Chemical Eng., G140*

Professor: W. Szpankowski (and M. Atallah)
E-mail: spa@cs.purdue.edu (only in the case of an emergency)
Office: LWSN 1201, 49-46703
Office Hours: TH 12:00–1:00 or by appointment
HEAD TA: TBA
E-mail: TBA

Texts:

K. Rosen *Discrete Mathematics and Its Applications*, McGraw-Hill Science/Engineering/Math; 6 edition.

Recommended Text

E. Kinber and Carl Smith, *Theory of Computing – a Gentle Introduction* (Prentice Hall)

Approximate Course Outline (see the CS182 web page for details):

- Basic Logic
- The Language of Mathematics
- Proof Techniques including Mathematical Induction
- Algorithms
- Basic Number Theory (and Number Representation)
- Basic Counting
- Discrete Probability
- Trees
- Boolean algebra and combinatorial circuits
- Finite state machines
- Pushdown automata
- Complexity classes, computability, and undecidability

Course Work and Grading Policy

The course work consists of homeworks, quizzes, one midterm and the final. The final grade is based on **25%** homeworks and programming assignments, **10%** quizzes (no make-up but the worst score may be dropped), **30%** midterm , and **35%** final.

No late assignments will be accepted. (**Homeworks will be collected in class on the due date.**) If you want to re-grade your homework, you must contact your TA within 10 days of receiving your homework/quizzes/midterm back. No re-grading after this time. No incomplete. Missing a quiz or an exam implies a grade of zero in it, unless there is a proper reason (e.g., medical).