CS182—Foundation of Computer Science

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

TH 3:00–4:15 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 2:00–3:00 or by appointment
HEAD TA:	Fang-Yu Rao
E-mail:	`jaofyu@gmail.com`

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 will 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 exams imply a grade of zero in it, unless there is a proper reason (e.g., medical).