

Course Syllabus for CSE 397/497: Programming Language Design & Analysis, Fall 09

Gang Tan

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Instructor. Gang Tan, PL 329, 610-7583737, gtan@cse.lehigh.edu. Office hours: Thursdays 10:30-12 or by appointment.

Course Website. A public website at <http://www.cse.lehigh.edu/~gtan/teaching/cse397497f9/>.

Course category “Compilers/Languages/Software Systems”.

Textbook. The textbook is *Types and Programming Languages* by Benjamin Pierce, The MIT Press, 2002. A copy has been put on reserve at the Fairchild-Martindale Library.

Major topics covered.

- Lambda calculus
- Type systems
- Semantics
- Type soundness
- Advanced types (e.g., OO types and dependent types)
- Interactive theorem proving
- Java security
- Low-level code security
- Static analysis
- Concurrency

Attendance. Attendance is expected. Students who have legitimate reasons for absence have to inform the instructor before the fact. You are responsible for all material presented in class whether present or not.

Homework. You will periodically receive homework assignments that are to be turned in and will be graded. You may discuss the homework with other students in the class, but you must do your own work; you may not copy someone else's solution. Homework will be of two types, written assignments and programming assignments.

Assignments and their due dates will be announced on the course website.

Late Homework. If you submit your homework within three days of the due date, we will deduct 25% of your score. Within a week, we will deduct 50%. We will not accept homework submissions after a week.

Exams. There will be a midterm exam and a final project. No final exam!

Missed Exams. Make-up for missed exams will only be granted on a case-by-case basis.

Paper presentation. Each student will also select one research paper and present it in class (for about half an hour).

Programming competency If your final project has a substantial programming part, this course can count toward your programming competency requirement. This will be determined by the instructor and you need to obtain a B+ or better grade in the course.

Grading. Homework 40%; Paper presentation 15%; Midterm 15%; Final project 25%; Class participation 5%.

Feedback. The success of this course need a mutual communication between course staff and students. We welcome your feedback on anything related to the course, such as course material we covered, teaching techniques, and difficulties in finishing the homework and project. We need your input!

Academic Integrity. Academic integrity is crucial for the pursuit of knowledge. Please refer to Lehigh's policy of [academic integrity](#).

Accommodations for Students with Disabilities. If you have a disability for which you are or may be requesting accommodations, please contact both your instructor and the Office of Academic Support Services, University Center C212 (610-758-4152) as early as possible in the semester. You must have documentation from the Academic Support Services office before accommodations can be granted.