

# CS 3723 Programming Languages Spring 2010

**Class homepage:** [www.cs.utsa.edu/~qingyi/cs3723](http://www.cs.utsa.edu/~qingyi/cs3723)

**Class schedule:** MWF, 10:00-10:50am BB 3.04.08

**Recitation schedule:** M 11:00-11:50am SB 3.02.10A

**Final Exam Schedule:** TBA

**Instructor:** Qing Yi ([qingyi@cs.utsa.edu](mailto:qingyi@cs.utsa.edu))

**Office:** SB 4.01.30

**Office Hours:** WF:9:00-9:50am by appointment

**Office Phone:** 458-5671

<b>Textbook</b>	<u>Concepts in Programming Languages</u> , by John Mitchell, Cambridge University Press
<b>Reference books</b>	<u>The Little Schemer</u> , by Daniel P. Friedman and Matthias Felleisen, the MIT Press. <u>Elements of ML Programming, 2nd Edition (ML97)</u> by Jeffrey D. Ullman, Prentice-Hall. <u>The C++ Programming Language</u> , by Bjarne Stroustrup, Addison Wesley.
<b>Overview</b>	We will study the basic concepts and design principles of general-purpose programming languages. Topics include foundations of computation theory, syntax and semantics of languages, and the functional, imperative and object-oriented programming paradigms. We will study why languages are designed the way they are and how to effectively use different language features to implement various algorithms and data structures.
<b>Class Objective</b>	Understand the programming techniques associated with various language features and how to use them in problem solving and software development.
<b>Prerequisites</b>	CS 2213 (advanced programming) and CS 3233 (discrete mathematics). You need to be familiar with both Java and C to be ready to study new languages such as Scheme, ML, and C++.
<b>Grading</b>	Exams (two midterms and one final): 50%; Homeworks and projects: 30%; Recitations and class participation: 20%.  Homeworks or projects will be assigned on a weekly basis. Late homework submission will be subjected to penalty points at the instructor's discretion. No late homework will be accepted after the solution is given.
<b>Attendance</b>	You are responsible for all presented materials and assigned readings in class. Class attendance will be taken and will count towards your final grade.
<b>Collaboration Policy</b>	You are expected to work on homeworks and projects individually. It is acceptable to ask others (TA, the instructor, or your classmates) for hints and

debugging help, and encouraged to discuss general problem-solving strategies. However, you must work on your assignments independently and must indicate in your assignments any assistance you have received. Any assistance received that is not given proper citation may be considered cheating. In any event, you are responsible for understanding and being able to explain all statements in your homework and exam solutions.

**Email Policy**

You may redirect class-related questions via email to the instructor or the TA. Always expect a response period (1-24 hours on workdays) before your question gets answered. Last minute questions may not get answered in time before the homework/project is due.

**Extra Credit**

Over the course of the semester, extra-credit assignments may be given to help you improve your grade. /\*(e.g., write a survey about five different programming languages).\*/ These extra-credit assignments will count towards your final grade in various ways as indicated in the assignments.

If you are interested in undertaking additional projects or papers (aside from the ones already given), consult with the instructor during office hours.