

# CS4713: Compiler Writing Fall 2007

**Class homepage:** [www.cs.utsa.edu/~qingyi/cs4713](http://www.cs.utsa.edu/~qingyi/cs4713)

**Class hours:** MWF, 11:00-11:50pm

**Room:** SB3.02.02

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

**Office:** SB 4.01.30 **Phone:** x5671

**Office Hours:** MWF, 10:00-10:50am

<b>Textbook</b>	<u>Compilers: Principles, Techniques, and Tools</u> by Alfred V. Aho, Monica S. Lam, Ravi Sethi, and Jeffrey D. Ullman, Addison-Wesley.
<b>Overview</b>	This class is an introduction to the implementation of compilers. Topics include formal grammars, scanners and parsers, syntax-directed translation, symbol table management, code generation, and code optimization.
<b>Class Objective</b>	Understanding compilers as a means to implement modern programming languages. Learn some of the fundamental theories and algorithms behind compiler construction. Learn what components are inside every compiler, and know how to build small, simple compilers.
<b>Prerequisites</b>	CS 2733, and CS 3343.
<b>Requirements</b>	By the end of the class, you should have sufficient knowledge about the fundamental theories and basic implementation techniques in compilers. You will also be required to implement several class projects that fill the missing parts of a compiler whose source code is given otherwise.
<b>Grading</b>	50%: projects and homeworks; 30%: exams; 20%: quizzes and class participation
<b>Attendance</b>	<p>You are responsible for all presented materials and assigned readings in class. Quizzes will be given in classes (and will count toward your grade) to ensure your understanding of the materials. Active class participation, including raising both questions and feedback/suggestions to the instructor, is encouraged.</p> <p>Please refrain from distractive behavior in class, such as side conversations and cell phones/pagers/etc. Please turn off your cell phones/pagers before the beginning of each class.</p>
<b>Collaboration Policy</b>	You are expected to finish projects for this course individually. It is acceptable to ask others (the instructor or other students) for help, and encouraged to discuss general problem-solving strategies. However, <b>you must not copy code from or share code with others.</b>
<b>Email Policy</b>	You are encouraged to use the class newsgroup to post questions about lectures, homeworks and course organization. The instructor and TA will

monitor the newsgroup and post answers and announcements that the entire class can see. If your message fails to receive a response in the newsgroup, you may also redirect the message via email to the instructor or the TA. Always leave a reasonable time period for your question to get answered. Last minute questions (those sent the night before homeworks/projects are due) may not be answered in time, so be sure to send in questions early!

newsgroup server: ringer.cs.utsa.edu

newsgroup name: utsa.cs.4713

The easiest way to access the newsgroup is to log into pandora.cs.utsa.edu, type command “tin”, and then choose the newsgroup utsa.cs.4713 from the list of available ones.

### **Extra Credit**

Over the course of the semester, extra-credit assignments may be given. These extra-credit projects may count toward credits of homeworks and projects, i.e., the “extra points” you may get for making up your lost points in homeworks or projects.

If you are interested in undertaking additional projects or papers (aside from the ones already given) to receive extra credit, consult with Prof. Yi during office hours.