CSC 530: Graduate Programming Languages

Instructional Information

Professor: Aaron Keen
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Office hours: M: 3-4, T: 9-10, W: 3-4, F: 3-5
Course Webpage: `http://www.csc.calpoly.edu/~akeen/courses/csc530`

Lecture Time and Location

Lecture: MW 8:10 am – 10:00 am, 14-253

Learning Environment

I believe in a supportive learning environment wherein every person deserves respect, every question deserves an answer, and we all work together toward a goal of improved understanding and life-long learning. All members of this class are expected to contribute to a respectful, welcoming, and inclusive environment for every other member of the class.

There is an old adage that encourages those with questions to ask because others may have the same question; you do not need some imagined quorum in order to validate your question or your request for assistance. If you have a question or need assistance, that alone is sufficient. You belong here and your participation in the course is not only welcomed but encouraged.

Course Objectives

- Analyze the type theoretic properties of a program.
- Assess program design issues from a type theoretic perspective.
- Analyze and critique publications related to this field of study.
- Evaluate the appropriateness of using Rust for the development of programs of moderate size.

Prerequisites: CSC/CPE 430

Texts

The course textbook is *Types and Programming Languages* by Pierce. Supplemental materials will be linked from the course webpage.

Webpage

Clarifications, changes, etc. regarding the class and assignments will be posted to the course webpage (http://www.csc.calpoly.edu/~akeen/courses/csc530). Read it regularly, especially near when assignments are due. You are responsible for any announcements posted on the course website.

Q&A Forum

I will maintain and regularly monitor a Piazza forum for questions about the assignments and the course material. Questions with code specific to a solution should be made private, but general programming and concept questions should be public to benefit all students.

Activities

Reading

Reading the course textbook is highly recommended. Reading the assigned papers is expected in preparation for the in-class discussions.

Class Participation

Your active participation during lecture, especially during discussions of the assigned papers, is likely to improve the understanding of the material for everyone in the course.

Programming Assignments

There will be five to six (5–6) programming assignments to be completed individually. Over these assignments, you will implement various type systems. These are very similar to those presented in the course textbook; you *are allowed* to use the author's posted implementations as a reference.

Exams

There will be five (5) quizzes and a final exam. Each quiz will assess your understanding of the material presented in lecture and in supplemental (ungraded) problem sets.

Grading

The percentage breakdown for the course grade is as follows.

Activity	% total
Programming Assignments	50
Quizzes	20
Participation	10
Final	20
Total	**100**

Due Dates and Lateness

Programming assignments are to be turned in electronically. Assignments must be turned in ON TIME to receive credit. Except in the most extreme situations, **late assignments will not be accepted.**

Collaboration and Cheating

Policy on Collaboration

Each student is to do his or her own work on the assignments. It is fine to talk with others about general approaches used to solve the assignments, *but* each student is to develop his/her own solution; collaborative efforts are **not** allowed. Students are not to exchange program code in any form (hardcopy or electronically).

The Last Page

This page is so I can gather a little information about you at the beginning of the class. Please fill it out, tear it off and leave it with me on the way out.

Who are you?

Name: _____

Section: _____

Major: _____

Email: _____

Enrollment:
- ____ Enrolled
- ____ Enrolled, thinking about dropping
- ____ Trying to enroll
- ____ Thinking about enrolling

Programming Language(s) that you have used: _____

_____

Favorite Programming Language(s): _____

_____

Class Expectations?

Please take a minute to write out what your goals and expectations are for CSC 530. What do you want to learn? What do you expect to learn? Are these the same thing?