CS403 / CS503: Programming Languages

Home Page

Class Description
CS403/CS503 is an undergraduate/graduate level course in computer programming languages. Topics include, but are not limited to, the design of programming languages, syntax and semantics, information binding, strings, arithmetic expressions, input/output, recursion, and extensibility.

Class Language and Environment
This class requires the use of the Scam programming language under Linux, Windows 10 Bash, or Mac OS. Scam may work under Windows using Cygwin.

Office Hours
Please sign up for office hours; if I don’t see anybody signed up, I may go off and do something like save orphaned baby sloths rather than sit at my desk.

Appointments are pretty much constrained to Wednesday. There is a sign-up list on my door. Say hi to me when you sign up. If you can’t do Wednesday, I have an open door policy. If my door is open, I’ll probably be available to answer a quick question. You can call my office first to see if I’m in (don’t leave a message).

Helpful Links
Here are some useful links...

- this semester’s inspirational song!
- this semester’s de-inspirational song!
- programming languages’ anthem!
- syllabus
- schedule
- your designer programming language, assignment 1, assignment 2, and assignment 3
- the class forum
- the Scam Reference Manual
- getting and using Scam
- notes
- notes from MIT
- the SICP home page
- an interactive version of SICP
- the Scheme Programming Language

Sample Questions
Here are some sample questions that will be similar to the ones on the scheduled exams:

- Prerequisite Material (Data Structures)
- SICP Section 1.1
- SICP Section 1.2
- SICP Section 1.3
- SICP Section 2.1
- SICP Section 2.2
- SICP Section 2.3
- SICP Section 2.4
Previous Exams

- First Content Exam (Fall 2016)
- Second Content Exam (Fall 2016)
- Final Content Exam (Fall 2016)

The Programming Languages Forum

A forum for this class can be found at The Beastie Forums. You are required to sign up for this forum using your crimson email address. Attempts to use some other email address will be rejected. If you have a question about this class, you should ask it there. If someone asks a reasonable question and you know the answer, please respond. Always remember to be polite and respectful when you post. Please check this page daily, as we will use this forum for any emergency communications.

You may not post more than 1 line of Scam code on this webpage. If you want help on figuring out an error, you may post the error trace and the line of code that caused the error (if it doesn’t give the answer away). Failure to follow this rule, whether intentional or not, may result in immediate suspension from the forum. Other infractions that will result in suspension include, but are not limited to:

- Being unprofessional.
- Asking for the submit password.
- Asking a question that cannot be answered. An example: posting messages of the sort “My code is not working. What is wrong?” WITHOUT giving the actual error in your post.
- Posting non-programming-languages-related information.
- Carrying on a personal conversation that has no benefit to the majority of programming languages students.

You need to sign up for the forum during the first week of class. You must use your crimson email address or have some other information in your profile that identifies you as an Alabama student. Otherwise, your request to join the forum will be rejected. Registrations will not be allowed after that time period. If you don’t register, you will be allowed to read the forum but you will not be able to post.