CSCI 360
Programming Languages

Fall 2016
Lecture: TR 1:15-2:30, MC Reynolds 315
Website: http://ozark.hendrix.edu/~yorgey/360/

Instructor: Brent Yorgey, MC Reynolds 310
Office hours: any time my door is open, or make an appointment at
http://byorgey.youcanbook.me
Email: yorgey@hendrix.edu

Course Description

An introduction to the design and implementation of modern programming languages, from small domain-specific languages to large-scale general purpose languages. Topics include abstraction, interpreters, compilers, type checking, embedded domain-specific languages, language design as problem-solving strategy and social aspects of language design, adoption, and use. As a final project, each student will create and implement a language of their own design.

Evaluation

Evaluation will be based on

- Attendance and participation: 20%
- In-class/homework modules: 30%
- Projects: 50%

Class modules

Class will be a mix of lecture and working in teams of 2 or 3 on "modules". Each module will guide you through a learning process on a particular topic. Modules should be completed as a team and turned in electronically before the start of the next class.

Projects

There will be 3–4 larger projects assigned over the course of the semester, including a final project, which unlike the modules you must complete *individually*. More details about the projects will be made available when the time comes.[1]

[1] Read: once I finish writing them.

Attendance policy

Due to the small size of the class and the collaborative nature of the learning process, class attendance is required. If you must be absent for some reason, you should let both me *and your partner(s)* know ahead of time. Unexcused absence will affect your participation grade.

If you are absent from class it is **your responsibility** to obtain notes from other student(s). You are also responsible to complete *on your own* any module(s) missed. Do not come to me and ask "what did I miss?". On the other hand, if after obtaining notes and/or attempting to work through a module you have specific questions, I would be happy to meet with you.

Disabilities

It is the policy of Hendrix College to accommodate students with disabilities, pursuant to federal and state law. Students should contact Julie Brown in the Office of Academic Success (505.2954; `brownj@hendrix.edu`) to begin the accommodation process. Any student seeking accommodation in relation to a recognized disability should inform the instructor at the beginning of the course.

Academic integrity and generosity

All Hendrix students must abide by the College's Academic Integrity Policy as well as the College's Computer Policy, both outlined in the Student Handbook.

For specific ways the Academic Integrity policy applies in this course, please refer to the Computer Science Academic Integrity Policy.

The short version is that academic integrity violations such as copying code from another student or the Internet are **easy to detect**, will be **taken very seriously**, and carry a default recommended sanction of **failure in the course**. If you have any questions about how the Academic Integrity policy applies in a particular situation, please contact me.

More importantly, however, I don't just want you to learn how to *not cheat*; I want you to learn how to *be thankful and generous*. To give thanks and credit to others for their hard work and good ideas, and to share your own ideas with others, is to practice academic thankfulness and generosity. The problem with plagiarism is not that copying is inherently bad; the problem is that it is selfish, that is, it promotes the plagiarizer at the expense of others.

To help you practice this academic generosity, **every assignment must cite** or give credit to **at least two sources**, along with an explanation of what you got from each. You should not limit yourself to two, however; cite as many sources as you can think of. Sources you might cite include websites you found helpful; classmates who gave you good ideas; a book or paper you read. If you think you truly did an assignment on your own, with help from no one, think harder: can you thank a former professor, parent, or friend who taught you a particular skill or concept you used on the assignment? A class you took or

assignment you did which gave you an idea you needed? If you still can't think of anything to cite, then think of a follow-up question you have related to the assignment, go find the answer to your question, and cite the source you used.