Introduction to Programming in Python

Course Mechanics

Outline

Website

Website

`https://www.swamiiyer.net/cs110`

What's on the site?

- Announcements (landing page)
- Course Info
- Calendar
- Lecture Material
- Assignments
- Resources

Goal

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Proficiency in the design and implementation of Python programs of significant size and complexity

Prerequisites

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Math 140 (Calculus I) credits or placement *or*

Math 130 (Precalculus) with a B or higher in the previous semester *or*

Permission of the instructor

Course Staff

Course Staff

Instructor

- Name: Swami Iyer (Senior Lecturer I, Computer Science Department)
- Academic Interests: evolutionary dynamics on complex networks, coding, pedagogy
- Contact Information
  - Office: M-3-201-14
  - Email: `siyer@cs.umb.edu` (please start subject line with `[CS110]`)
- Office Hours
  - Tue Thu 10:00 AM – 12:00 PM (in-person)
  - Wed 10:00 AM – 12:00 PM (remote)

Teaching Assistants (TAs): Haowen Guan, JieHyun (Jenna) Kim, Rishank Singh

Course Assistants (CAs): Avraham Felzenstein, Rafaela Lopes, Serin Kitery

Supplemental Instruction (SI) Leader: Azealia Khaled

Sessions

Sessions

Class

Section	When	Where
1 -- 4, 8, 9	Tue Thu 12:30 PM -- 1:45 PM	W-1-0088 (Snowden Auditorium)

Discussion

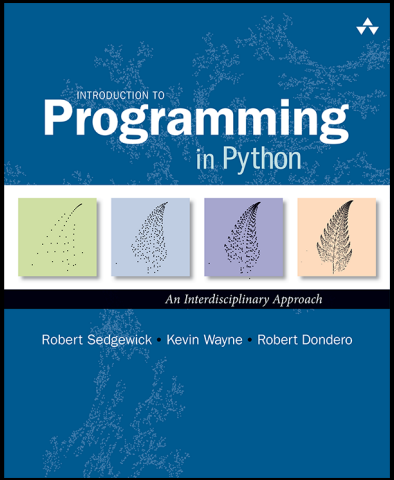
Section	When	Where
1	Tue 11:00 AM -- 12:15 PM	W-1-0044
2	Thu 11:00 AM -- 12:15 PM	M-2-0211
3	Tue 2:00 PM -- 3:15 PM	W-1-0055
4	Thu 2:00 PM -- 3:15 PM	W-1-0044
8	Tue 9:30 AM -- 10:45 AM	H-L-3507
9	Thu 9:30 AM -- 10:45 AM	M-2-0214

Supplemental Instruction (SI): details to be determined

Tutoring: available through Subject Tutoring Program

Recommended Text

Recommended Text



Grading Scheme

Grading Scheme

Assessment	% of Final Grade
Programming Assignments (6)	30
Exams (2)	60
Participation	10

Programming assignments: biweekly, on interesting computational problems

Exams: programming (Mar 25/27 and May 6/8) and written (Apr 1 and May 13)

Participation: best 10 in-class quizzes (7%) and discussion attendance (3%)

Up to 2% extra points for attending the SI sessions

Up to $0.01x\%$ extra points if $x\%$ of the class completes the end-of-semester course evaluation

If overall score is within 0.5% of a higher grade, it will be elevated to that grade

Software

Software

- Piazza
- Gradescope
- Programming environment
- Zoom

Policies

Policies

- Classroom
- Piazza
- Makeup Exam
- Regrade Request
- Collaboration
- Accommodations for Students with Disabilities
- Campus Closure

Immediate Action Items

Immediate Action Items

- Sign up for Piazza
- Sign up for Gradescope
- Setup the programming environment
- Fill out the questionnaire available on Gradescope
- Complete the SI poll
- Sign up for CS account

Topics Covered

Topics Covered

Chapter 1: Building a Computer

- Representing Information
- Logic Circuits
- Von Neumann Architecture

Topics Covered

Topics Covered

Chapter 2: Imperative Programming

- Your First Programs
- Basic Data Types
- Control Flow
- Collection Data Types
- Input and Output

Topics Covered

Topics Covered

Chapter 3: Procedural Programming

- Defining Functions
- Libraries and Applications
- Recursion

Topics Covered

Topics Covered

Chapter 4: Object-oriented Programming
- Using Data Types
- Defining Data Types
- Design Principles

Topics Covered

Topics Covered

Chapter 5: Algorithms and Data Structures

- Analysis of Algorithms
- Searching and Sorting
- Basic Data Structures