Course Mechanics

Introduction to Programming in Python

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Topics Covered

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Website

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https://swamiiyer.net/cs110

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`https://swamiiyer.net/cs110`

The stuff on the site:

Website

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The stuff on the site:

- Announcements (landing page)

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The stuff on the site:

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- Course Info

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- Resources

Goal

Goal

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

Prerequisites

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

Prerequisites

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

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

Prerequisites

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

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Permission of the instructor

Staff

Staff

Instructor:

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Instructor:

- Name: Swami Iyer (Senior Lecturer I, Computer Science Department)

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- Name: Swami Iyer (Senior Lecturer I, Computer Science Department)
- Office: `M-3-201-14`

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- Email: `siyer@cs.umb.edu` (start subject line with `[CS110]`)

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  - `Tue Thu 8:00 AM - 9:00 AM` and `2:30 PM - 3:30 PM` (in-person)

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Teaching Assistants (TAs): Rishank Singh, SangHyuk Kim, Srikar Kodavati

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Course Assistants (CAs): Giorgi Karazanashvili, Khoi Le, Mahith Katlakanti

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Supplemental Instruction (SI) Leader: Serin Kitery

Sessions

Sessions

Class:

Section	When	Where
1 - 6	Tue Thu 11:00 AM - 12:15 PM	W-1-0088 (Snowden Auditorium)

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Section	When	Where
1 - 6	Tue Thu 11:00 AM - 12:15 PM	W-1-0088 (Snowden Auditorium)

Discussion:

Section	When	Where
1	Tue 9:30 AM - 10:45 AM	M-2-0214
2	Thu 9:30 AM - 10:45 AM	M-2-0214
3	Tue 12:30 PM - 1:45 PM	W-1-0061
4	Thu 12:30 PM - 1:45 PM	M-3-0732
5	Tue 12:30 PM - 1:45 PM	M-3-0732
6	Thu 12:30 PM - 1:45 PM	W-1-0041

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Supplemental Instruction (SI): details to be determined

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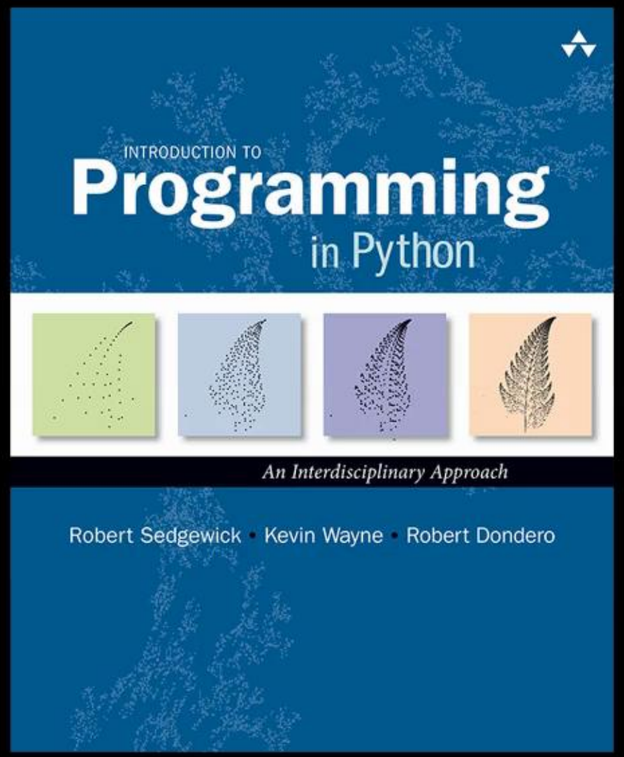
Supplemental Instruction (SI): details to be determined

Tutoring: available through the Subject Tutoring Program

Text

Text


INTRODUCTION TO
Programming
in Python
An Interdisciplinary Approach
Robert Sedgewick • Kevin Wayne • Robert Dondero

Grading Scheme

Grading Scheme

Assessment	% of Final Grade
Programming Assignments (best 5 out of 6)	20
Exams (2)	70
Participation	10

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Programming assignments: biweekly, on interesting computational problems

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Exams: programming (Oct 21/23 and Dec 2/4) and written (Oct 30 and Dec 11)

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

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If each exam score is at least 87 (B+), the higher score will be taken as the exam average

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Up to 2% extra points for attending the SI sessions

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

Software

Software

Piazza

Software

Piazza

Gradescope

Software

Piazza

Gradescope

Programming Environment

Software

Piazza

Gradescope

Programming Environment

Zoom

Policies

Policies

Classroom

Policies

Classroom

Piazza

Policies

Classroom

Piazza

Excused Absence from Discussion and Makeup Exam

Policies

Classroom

Piazza

Excused Absence from Discussion and Makeup Exam

Assignment Deadline

Policies

Classroom

Piazza

Excused Absence from Discussion and Makeup Exam

Assignment Deadline

Regrade Request

Policies

Classroom

Piazza

Excused Absence from Discussion and Makeup Exam

Assignment Deadline

Regrade Request

Collaboration

Policies

Classroom

Piazza

Excused Absence from Discussion and Makeup Exam

Assignment Deadline

Regrade Request

Collaboration

Accommodations for Students with Disabilities

Policies

Classroom

Piazza

Excused Absence from Discussion and Makeup Exam

Assignment Deadline

Regrade Request

Collaboration

Accommodations for Students with Disabilities

Campus Closure

Immediate Action Items

Immediate Action Items

Sign up for Piazza

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Sign up for Piazza

Sign up for Gradescope

Immediate Action Items

Sign up for Piazza

Sign up for Gradescope

Set up the programming environment

Immediate Action Items

Sign up for Piazza

Sign up for Gradescope

Set up the programming environment

Fill out the course agreement available on Gradescope

Immediate Action Items

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Complete the SI poll

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Sign up for CS account

Topics Covered

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Chapter 1 (Building a Computer):

Topics Covered

Chapter 1 (Building a Computer):

- Representing Information

Topics Covered

Chapter 1 (Building a Computer):

- Representing Information
- Logic Circuits

Topics Covered

Chapter 1 (Building a Computer):

- Representing Information
- Logic Circuits
- Von Neumann Architecture

Topics Covered

Topics Covered

Chapter 2 (Imperative Programming):

Topics Covered

Chapter 2 (Imperative Programming):

- Your First Programs

Topics Covered

Chapter 2 (Imperative Programming):

- Your First Programs
- Basic Data Types

Topics Covered

Chapter 2 (Imperative Programming):

- Your First Programs
- Basic Data Types
- Control Flow

Topics Covered

Chapter 2 (Imperative Programming):

- Your First Programs
- Basic Data Types
- Control Flow
- Collection Data Types

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):

Topics Covered

Chapter 3 (Procedural Programming):

- Defining Functions

Topics Covered

Chapter 3 (Procedural Programming):

- Defining Functions
- Libraries and Applications

Topics Covered

Chapter 3 (Procedural Programming):

- Defining Functions
- Libraries and Applications
- Recursion

Topics Covered

Topics Covered

Chapter 4 (Object-oriented Programming):

Topics Covered

Chapter 4 (Object-oriented Programming):

- Using Data Types

Topics Covered

Chapter 4 (Object-oriented Programming):

- Using Data Types
- Defining Data Types

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):

Topics Covered

Chapter 5 (Algorithms and Data Structures):

- Analysis of Algorithms

Topics Covered

Chapter 5 (Algorithms and Data Structures):

- Analysis of Algorithms
- Searching and Sorting

Topics Covered

Chapter 5 (Algorithms and Data Structures):

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