

EE551-Engineering Programming:Python

School of Engineering and Science Spring 2020

Instructor: Rensheng Wang

Contact Info: <u>RWANG1@stevens.edu</u>

Office Hours: Thursdays at 10~12AM or by Appointment URL for EE551A: https://sit.instructure.com/courses/36307 URL for EE551B: https://sit.instructure.com/courses/36312

Prerequisite(s): None Cross-listed with: CpE551

TA: Liyan Chen (lchen39@stevens.edu)

COURSE DESCRIPTION

This course presents fundamentals of Python programming language for data intensive applications and decision making. The course formally introduces industry level tools for the best practices of software engineering using Python. Such tools find applicability in many engineering application areas, including data science, machine learning, communications systems, embedded systems, smart grids, robotics, Internet, and enterprise networks, or any network where information flows and alters decision making.

STUDENT LEARNING OUTCOMES

This course presents fundamentals of Python programming language for data intensive applications and decision making. The course formally introduces industry level tools for the best practices of software engineering using Python. Such tools find applicability in many engineering application areas, including data science, machine learning, communications systems, embedded systems, smart grids, robotics, Internet, and enterprise networks, or any network where information flows and alters decision making.

COURSE MATERIALS

Textbook(s): Learning Python (5E) by Mark Lutz

Materials: Canvas will be used for sharing assignments links and grades.

Other Readings: How to think like a computer scientist by Downey, Elkner, Eyers.

GRADING PROCEDURES

Grades will be based on:

Homework (30 %)
Midterm (30 %)
Project (20 %)
Final (20 %)

TENTATIVE COURSE SCHEDULE

https://github.com/sergulaydore/EE-551-Fall-2019

IMPORTANT DATES

March 19th (Thursday): NO Class (Spring Break)
May 7th (Thursday): Final Test in Class

May 11th (Monday): Project Due

ACADEMIC INTEGRITY

Graduate Student Code of Academic Integrity

All Stevens graduate students promise to be fully truthful and avoid dishonesty, fraud, misrepresentation, and deceit of any type in relation to their academic work. A student's submission of work for academic credit indicates that the work is the student's own. All outside assistance must be acknowledged. Any student who violates this code or who knowingly assists another student in violating this code shall be subject to discipline.

All graduate students are bound to the Graduate Student Code of Academic Integrity by enrollment in graduate coursework at Stevens. It is the responsibility of each graduate student to understand and adhere to the Graduate Student Code of Academic Integrity. More information including types of violations, the process for handling perceived violations, and types of sanctions can be found at www.stevens.edu/provost/graduate-academics.

EXAM ROOM CONDITIONS

The following procedures apply to quizzes and exams for this course. As the instructor, I reserve the right to modify any conditions set forth below by printing revised Exam Room Conditions on the quiz or exam.

1. Students may use the following devices during quizzes and/or exams. Any electronic devices that are not mentioned in the list below are not permitted.

Device	Permitted?	
	Yes	No
Laptops		X
Cell Phones		X
Tablets		X
Smart Watches		X
Google Glass		X
Other (calculator)	X	

2. Students are not allowed to work with or talk to other students during quizzes and/or exams.

LEARNING ACCOMODATIONS

Stevens Institute of Technology is dedicated to providing appropriate accommodations to students with documented disabilities. Student Counseling and Disability Services works with undergraduate and graduate students with learning disabilities, attention deficit-hyperactivity disorders, physical disabilities, sensory impairments, and psychiatric disorders in order to help students achieve their academic and

personal potential. They facilitate equal access to the educational programs and opportunities offered at Stevens and coordinate reasonable accommodations for eligible students. These services are designed to encourage independence and self-advocacy with support from SCDS staff. The SCDS staff will facilitate the provision of accommodations on a case-by-case basis. These academic accommodations are provided at no cost to the student.

Disability Services Confidentiality Policy

Student Disability Files are kept separate from academic files and are stored in a secure location within the office of Student Counseling, Psychological & Disability Services. The Family Educational Rights Privacy Act (FERPA, 20 U.S.C. 1232g; 34CFR, Part 99) regulates disclosure of disability documentation and records maintained by Stevens Disability Services. According to this act, prior written consent by the student is required before our Disability Services office may release disability documentation or records to anyone. An exception is made in unusual circumstances, such as the case of health and safety emergencies.

For more information about Disability Services and the process to receive accommodations, visit https://www.stevens.edu/sit/counseling/disability-services. If you have any questions please contact: Lauren Poleyeff, Psy.M., LCSW - Diability Services Coordinator and Staff Clinician in Student Counseling and Disability Services at Stevens Institute of Technology at lpoleyef@stevens.edu or by phone (201) 216-8728.

INCLUSIVITY STATEMENT

Stevens Institute of Technology believes that diversity and inclusiveness are essential to excellence in education and innovation. Our community represents a rich variety of backgrounds, experiences, demographics and perspectives and Stevens is committed to fostering a learning environment where every individual is respected and engaged. To facilitate a dynamic and inclusive educational experience, we ask all members of the community to:

- be open to the perspectives of others
- appreciate the uniqueness their colleagues
- take advantage of the opportunity to learn from each other
- exchange experiences, values and beliefs
- communicate in a respectful manner
- be aware of individuals who are marginalized and involve them
- keep confidential discussions private