

IST256: Introduction to Python for the Information Profession

IST 256-M001(15816): Mon, Wed 2:15PM - 3:35PM

IST 256-M002(15819): Mon, Wed 3:45PM - 5:05PM

Hinds Hall 021

Instructor: Dr. Preeti Jagadev **Cookies & Soda (office) Hours:**¹ Appointment

Email: pjagadev@syr.edu

Welcome statement:²

Welcome to IST 256: Python Programming, where you'll learn how to write instructions that computers can understand and follow.

At first, coding might feel like trying to text someone who only replies in error messages. Miss a comma? Error. Forget a colon? Error. Exist incorrectly? Also error. But don't worry, that's part of the process. By the end of this course, you'll go from "Why isn't this working?" to "Oh... I forgot the parentheses".

This class is hands-on, fast-paced, and very much a "learn by doing" experience. You'll be writing code every week, and yes, you'll need to keep up. Late work isn't accepted, not because I am mean, but because coding is a skill you build step by step (and skipping steps is how things break... badly).

The biggest takeaway from this course isn't just learning Python, it's learning how to think like a programmer: breaking problems into smaller pieces, testing ideas, failing, fixing, and trying again.

So yeah, this course might challenge you. You'll probably get stuck. You might even question your life choices at 2 AM debugging something that turns out to be a typo.

But stick with it.

Because one day soon, you'll write a program that works, and it'll feel awesome.

About Myself (Your course Instructor!):³

I'm your instructor, Dr. Preeti Jagadev (but you can just call me Dr. Jagadev or Preeti). I'm originally from Goa, India, which basically means I grew up somewhere way more tropical than Syracuse.

¹: I read the book "Keeping us Engaged by Christine Harrington", which I received during the CRI workshop. I liked the suggestion given in the book, of renaming office hours into something fun.

^{2, 3}: I liked the suggestion during the CRI workshop of giving a personal touch to the syllabus and warming it up. So, I added these sections.

I'm excited to be teaching this class because honestly, programming is one of those skills that feels confusing at first, and then suddenly clicks. Watching that moment happen is one of my favorite parts of teaching.

When I'm not at the university, I'm usually doing one of three things:

- Hanging out with my baby (who currently has zero interest in Python)
- Experimenting in the kitchen
- Or attempting to cook something that may or may not turn out... edible 🍪

A few things about how I run this class:

- I'm on your side. I want you to succeed, and I'll do everything I can to help you get there.
- This is a "you get out what you put in" kind of class. If you show up, try, ask questions, and stay consistent, you'll be more than fine.

By the end of the semester, my goal is that you don't just know some Python, you feel confident figuring things out on your own (which is a much bigger deal).

Let's make this a class where you learn a lot, stress a little (normal), and leave feeling like, "okay I can actually do this."

Credits: 3 credits

Course Description:

Due to the prevalence of technology in our lives, computational thinking and learning to program has become the critical skill of the 21st century. Students will learn practical applications of computer programming such as how to automate tasks, manipulate data and solve problems applicable to almost any academic discipline.

The technical backbone of this course is Python, one of the most powerful tools today. By developing proficiency in Python, you are not just completing coursework, you are acquiring a highly marketable skill set that is in high demand across tech, research, and corporate sectors.

Course Structure:

The course will consist of two classes per week (lecture and lab). Each class is 80 minutes.

- During the lectures, we will explore key concepts and examine the use of those concepts within Python. Prior to attending the lectures, it is expected that you've completed the reading for that week.
- The weekly lab sessions will review key concepts: let you practice Python coding and you will have a chance to practice and apply your knowledge.

Learning Outcomes: 4

At the end of the course, you will be able to:

1. Analyze complex problems by thinking computationally and systematically.

4: I created learning outcomes that were specific, measurable, and realistic.

2. Solve practical, real-world problems using a modern computer programming language.
3. Demonstrate the ability to read, write, discuss and code confidently.
4. Understand how to code in teams, collaborate with others and manage source code.
5. Acquire new programming knowledge independently.
6. Apply simple wellness strategies to manage stress, maintain productivity, and build habits that support success in both academic and workplace settings.

Grades:

Grades will be based on the quality and originality of your work, so bring your best ideas and curiosity. My judgment on submitted work is final. There are no extra credit assignments, and late submissions lose points fast:

- ❖ **1 day late → 20% off,**
- ❖ **2 days → 40% off,**
- ❖ **3 days → 60% off,**
- ❖ **4 days → 80% off,**
- ❖ **5+ days → zero (ouch!).**

Final grades won't be rounded, so every point counts!

Late by more than **5 minutes**? Time clearly moved faster for you! Your grade slows down by **10%**.

The work for this course will involve the following:

Assessment Items	Learning Outcomes	Total Grades
Formative Assessment: These are low-stake tasks that provide you with opportunities to develop skills and apply knowledge. • Weekly Quiz (each worth 1 point): 5 • Lab Assignment (each worth 1 point) • Homework Assignment (each worth 1 point) Note: Quizzes are administered during lectures and cannot be made up if missed.	1,2,3,5	12 12 11
Summative Assessment: This is a high stakes assessment to measure your progress toward the learning outcomes. ❖ Mid-term Exam (worth 25 points) The exam is designed to take 80 minutes to complete. It will be open-book and open notes, but you may not discuss the exam with other students. If you require special testing accommodation, you should schedule to take the exam in the CDS testing center as it will be difficult to accommodate exam time extensions in class. There are no make-up exams. Exam dates are posted on the syllabus, please plan accordingly.	1,2,3	25

5: Formative assessments are designed to provide ongoing feedback and support learning, while summative assessments have been designed to evaluate overall achievement of course outcomes, as discussed in the CRI.

Inquiry and Project-Based Learning (PBL): Focuses on real-world problems to put Python into action. It will engage you in using critical thinking skills, problem solving, and help develop your research skills. ❖ Final Project (Worth 20 points) ❖ Python in the Real-World Presentation (Worth 10 Points)	1, 2, 3, 4, 5	20 10
❖ Class Participation (Worth 6 Points): Participation in this class is an important component of your learning experience. Your participation grade will be based on a combination of factors, including: Class attendance, active participation, punctuality, and respectful communication. ❖ Wellness Activity (Worth 4 Points): This is a reminder that your well-being matters!	3, 4 6	6 4
Total		100

The **least two lab grades** for all the students will be dropped at the end of the semester. **8**

Grading Table:

Each assigned work will be graded on the scale as specified for the component. All individual grades are summed at the end of the semester, and the final letter grade is determined using the following scale.

Grade	Total Points	Expectation
A	100 - 93	Your work is outstanding, always complete, and submitted on time.
A-	92 - 90	
B+	89 - 87	Your work is what we expect from a serious, professional student, but may contain occasional errors, omissions, or inconsistencies.
B	86 - 83	
B-	82 - 80	
C+	79 - 77	Your work falls below what we expect but is adequate for completing the course.
C	76 - 73	
C-	72 - 70	
D	69 - 60	Your work falls notably below what we expect and contains one or more deficiencies.
F	59 - 0	Your work is insufficient to pass the course.

These letter grade ranges cannot be adjusted, curved, modified, or shifted.

Ground rules for the course: **9**

- ❖ **Attendance is required; to submit the lab assignment.** If you cannot attend due to a genuine reason, kindly let me know in advance through email. Exceptions will only be made under extreme circumstances with supporting University documentation of illness or personal reasons.

6: Wellness activities have been incorporated to support student well-being, enhance focus, and promote a positive learning environment.

7:Course mapping was conducted to ensure clear alignment between learning objectives, instructional activities, and assessments.

8: The lowest two lab grades for all students will be dropped at the end of the semester. As discussed in CRI, this policy encourages learning through practice and recognizes that making mistakes is a natural part of the learning process.

9:Ground rules are included to establish clear expectations, promote mutual respect, and support a structured and productive learning environment.

- ❖ We'll mainly use Google Collab, so make sure your Google Drive is ready to manage all your digital masterpieces.
- ❖ At the end of each lab, submit your work, no Blackboard submissions unless you attended.
- ❖ All assignments are individual, so your originality is the star of the show. A code block that contains someone else's code should contain a comment that names the author of the code (or the website where the code was obtained if the author is unknown). Similarly, if you use AI to generate a chunk of code, you must make note of that.
- ❖ Students who wish to dispute a grade may submit a one-page statement of explanation of why the assignment should be regraded. If the reasons are valid, the assignment will be regraded, which means the grade may go up, down, or stay the same. No appeal for an individual assignment or project will be considered later than one week after the assignment was graded.
- ❖ Be respectful to your classmates and me, that includes avoiding the classic 'Can you bump my grade?' conversations.
- ❖ You must bring your laptop to every class meeting, both lecture and lab.
- ❖ Emails addressed to the professor should have the subject line "IST 387: XYZ" where XYZ summarizes your question.
- ❖ **On-time arrival is expected.** Late arrival or early departures from class that are unexcused will be considered in calculating attendance and participation.
- ❖ The use of electronic devices other than your laptop is not required. Accommodation and modifications to utilize electronic devices should be discussed with your instructor. Smart phones need to be put on silent mode.

Tutoring

The University offers free group tutoring for this course through the **Center for Learning and Student Success (CLASS)**.

Sign up for tutoring at: <http://myt.syr.edu>.

For more information on individual and group tutoring sessions, please visit: <https://class.syr.edu/academic-support/>

Course Material:

Course material will be provided by the instructor every week.

Textbook (Optional):

- Python for Everybody: Exploring Data In Python 3 by Charles Severance. <https://www.py4e.com/book>. The book is free and available in several formats from the URL provided.

Course Schedule: 10

Date of Lecture	Lecture Topic	Date of Lab	Focus of Lab	Assignments
Week 1/ 24 th August	Introduction to Python Programming Weekly Quiz: 1	Week 1/ 26 th August	Lab 1	HW 1 Assigned
Week 2/ 31 st August	Input, Output, Variables and Data Types Weekly Quiz: 2	Week 2/ 2 nd September	Lab 2	HW 2 Assigned
Week 3/ 7 th September	Labor Day: No lecture	Week 3/ 9 th September	Lab 3 (Conditionals)	HW 3 Assigned
Week 4/ 14 th September	Iterations Weekly Quiz: 3	Week 4/ 16 th September	Lab 4	HW 4 Assigned
Week 5/ 21 st September	User-defined Functions, Modules Weekly Quiz: 4	Week 5/ 23 rd September	Lab 5	No HW Assigned Wellness Activity Assigned
Week 6/ 28 th September	Strings and Text Processing Weekly Quiz: 5	Week 6/ 30 th September	Lab 6	HW 5 Assigned
Week 7/ 5 th October	File I/O and Persistence Weekly Quiz: 6	Week 7/ 7 th October	Lab 7	HW 6 Assigned
Week 8/ 12 th October	No Lecture: Fall Break	Week 8/ 14 th October	Guest Speaker: Niranjan Pandeshwar (Senior Software Engineer) Topics: Computational Thinking Debugging Basics Intro to Git/GitHub	

10: A detailed schedule with all dates is included to provide clarity, support planning, and help students stay on track throughout the course.

Date of Lecture	Lecture Topic	Date of Lab	Focus of Lab	Assignments
			Using AI Tools for Coding (Ethically) Weekly Quiz: 7	
Week 9/19th October	Lists Weekly Quiz: 8	Week 9/21st October	Lab 8	HW 7 Assigned
Week 10/ 26th October	Dictionaries and JSON Weekly Quiz: 9	Week 10/ 28th October	Lab 9	HW 8 Assigned
Week 11/ 2nd November	No Lecture Study for Exam	Week 11/ 4th November	Exam	
Week 12/9th November	Pandas I Weekly Quiz: 10	Week 12/11th November	Lab 10	HW9 Assigned Python in the Real-World Presentation Assigned
Week 13/16th November	Pandas II Weekly Quiz: 11	Week 13/18th November	Lab 11	HW10 Assigned
Week 14/ 23rd November	Thanksgiving Break	Week 14/ 25th November	Thanksgiving Break	
Week 15/30th November	Data Visualization Weekly Quiz: 12	Week 15/2nd December	Lab 12	HW11 Assigned
Week 16/7th December	No Lecture: Work on Project			

* You must submit all assignments to Blackboard prior to the deadline

Syracuse University Policies:

SYRACUSE UNIVERSITY STUDENT POLICIES & SERVICES

Syllabi Appendix for the iSchool - Effective August 2025

Syracuse University has a variety of policies designed to guarantee that students live and study in a community respectful of their needs and those of fellow students. These statements are an official part of this course syllabus.

University Attendance Policy (including Absence Notification)

Attendance in classes is expected in all courses at Syracuse University. Students are expected to arrive on campus in time to attend the first meeting of all classes for which they are registered. Students who do not attend classes starting with the first scheduled meeting may be academically withdrawn as not making progress toward degree by failure to attend. Students: [Information for Students: Non-attendance or Stopped Attending](#)

If a student is unable to participate in-person or virtually for an extended period (48 hours or more), the student may request an absence notification from their home school/college Dean's Office or through Student Outreach and Support office. Instructors will be notified via the "Absence Notification" flag in Orange SUccess.

Barnes Center at the Arch (Health, Counseling, etc.) staff will not provide medical excuse notes for students. When Barnes Center staff determine it is medically necessary to remove a student from classes, they will coordinate with Student Outreach and Support case management staff to provide appropriate notification to faculty through Orange Success. For absences lasting less than 48 hours, students are encouraged to discuss academic arrangements directly with their faculty.

Additional information may be found at [Student Outreach and Support: Absence Notifications](#).

Academic Integrity Policy

As a pre-eminent and inclusive student-focused research institution, Syracuse University considers academic integrity at the forefront of learning, serving as a core value and guiding pillar of education. Syracuse University's Academic Integrity Policy provides students with the necessary guidelines to complete academic work with integrity throughout their studies. Students are required to uphold both course-specific and university-wide academic integrity expectations such as crediting your sources, doing your own work, communicating honestly, and supporting academic integrity. The full [Syracuse University Academic Integrity Policy](#) can be viewed by visiting the [Syracuse University Policies website](#).

Upholding Academic Integrity includes the protection of faculty's intellectual property. Students should not upload, distribute, or share instructors' course materials, including presentations, assignments, exams, or other evaluative materials without permission. Using websites that charge fees or require uploading of course material (e.g., Chegg, Course Hero) to obtain exam solutions or assignments completed by others, which are then presented as your own violates academic integrity expectations in this course and may be classified as a Level 3 violation. All academic integrity expectations that apply to in-person assignments, quizzes, and exams also apply online.

Students found in violation of the policy are subject to grade sanctions determined by the course instructor and non-grade sanctions determined by the School or College where the course is offered. Students may not drop or withdraw from courses in which they face suspected violation. Any established violation in this course may result in course failure regardless of violation level.

Artificial Intelligence Language

See each assignment, quiz, or exam instructions for more information about what artificial intelligence tools are permitted and to what extent, as well as citation requirements. If no instructions are provided for a specific assignment, then no use of any artificial intelligence tool is permitted. Any AI use beyond that which is detailed in course assignments is explicitly prohibited except when documented permission is granted.

Academic Integrity Online: Conduct of Online Assessments

All academic integrity expectations that apply to in-person quizzes and exams also apply to online quizzes and exams. In this course, all work submitted for quizzes and exams must be yours alone. Discussing quiz or exam questions with anyone during the quiz or exam period violates academic integrity expectations for this course.

Using websites that charge fees or require uploading of course material (e.g., Chegg, Course Hero) to obtain exam solutions or assignments completed by others and present the work as your own violates academic integrity expectations in this course and may be classified as a Level 3 violation, resulting in suspension or expulsion from Syracuse University

Faith Tradition Observances

[Syracuse University's Religious Observances Policy](#) recognizes the diversity of faiths represented in the campus community and protects the rights of students, faculty, and staff to observe religious holy days according to their traditions. Under the policy, students are given an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance, provided they notify their instructors no later than the academic drop deadline. For observances occurring before the drop deadline, notification is required at least two academic days in advance. Students may enter their observances in MySlice under Student Services/Enrollment/My Religious Observances/Add a Notification.

Disability-Related Accommodations

Syracuse University values diversity and inclusion; we are committed to a climate of mutual respect and full participation. There may be aspects of the instruction or design of this course that result in barriers to your inclusion and full participation in this course. I invite any student to contact me to discuss strategies and/or accommodations (academic adjustments) that may be essential to your success and to collaborate with the Center for Disability Resources (CDR) in this process.

If you would like to discuss disability-accommodations or register with CDR, please visit [Center for Disability Resources](#). Please call (315) 443-4498 or email disabilityresources@syr.edu for more detailed information.

The CDR is responsible for coordinating disability-related academic accommodation and will work with the students to develop an access plan. Since academic accommodation may require early planning and generally is not provided retroactively, please contact CDR as soon as possible to begin this process.

Discrimination or Harassment

The University does not discriminate and prohibits harassment or discrimination related to any protected category including creed, ethnicity, citizenship, sexual orientation, national origin, sex, gender, pregnancy, reproductive health decisions, disability, marital status, political or social affiliation, age, race, color, veteran status, military status, religion, sexual orientation, domestic violence status, genetic information, gender identity, gender expression or perceived gender.

Any complaint of discrimination or harassment related to any of these protected bases should be reported to Sheila Johnson-Willis, the University's Chief Equal Opportunity & Title IX Officer for Faculty and Staff. She is responsible for coordinating compliance efforts under the various laws including Titles VI, VII, IX and Section 504 of the Rehabilitation Act. She can be contacted at

Equal Opportunity, Inclusion, and Resolution Services, 621 Skytop Road, Suite 1001, Syracuse University, Syracuse, NY 13244-1120; or by email: equalopp@syr.edu; or by telephone: 315-443-4018.

TITLE IX

Federal and state law, and University policy prohibit discrimination and harassment based on sex or gender (including sexual harassment, sexual assault, domestic/dating violence, stalking, and sexual exploitation). If a student has been impacted by any prohibited behavior based on sex or gender, they can obtain confidential counseling support, 24-hours a day, 7 days a week, from the [Sexual and Relationship Violence Response Team](#) at the Counseling Center (315-443-8000, Barnes Center at The Arch, 150 Sims Drive, Syracuse, New York 13244). Incidents of sexual or relationship violence or harassment can be reported to the University's Title IX Coordinators (Sheila Johnson Willis, Chief Equal Opportunity Officer and Title IX Officer for Faculty and Staff, 315-443-4018, equalopp@syr.edu or Pamela Peter, Director/Coordinator of Student Title IX Case Management, 315-443-0211, titleix@syr.edu). Reports to law enforcement can be made to the University's Department of Public Safety (315-443-2224, 005 Sims Hall), the Syracuse Police Department (511 South State Street, Syracuse, New York, 911 in case of emergency or 315-435-3016 to speak with the Abused Persons Unit), or the State Police (Campus Sexual Assault Victims Unit, 844-845-7269). I will seek to keep information you share with me private to the greatest extent possible, but as a professor I have mandatory reporting responsibilities to share information regarding sexual misconduct, relationship violence, stalking, harassment, and crimes I learn about with the University's Title IX Officer to help make our campus a safer place for all and to ensure you have access to available resources.

Health and Wellness Considerations

Well-being and mental health are significant predictors of academic success. It is critical to take care of yourself physically and emotionally and to effectively navigate stress, anxiety, and depression. Please familiarize yourself with the range of resources the Barnes Center provides (<https://ese.syr.edu/bewell/>) and seek out support for mental health concerns as needed. Counseling services are available 24/7, 365 days, at 315-443-8000.

Course Evaluations

At the end of the term, the iSchool will ask you to share course feedback through [EvaluationKIT](#) [<https://coursefeedback.syr.edu>]. Log in to [EvaluationKIT](#) using your NetID and password. Please take the time to share your feedback about this course and your experience in it; all ratings and comments are completely anonymous. The iSchool carefully reviews your feedback. Our instructors use this feedback to fine tune course delivery and instruction; our professors of record use this feedback to fine tune course content and assignments. All feedback is factored into iSchool decisions about course, program, and instructor development.

Blackboard Learning Management System

This class will use Blackboard Learning Management to house the syllabus, course content, links to external course materials, assignments, quizzes, exams, feedback, and grades. Due dates and times in Blackboard are stored in Coordinated Universal Time (UTC) and displayed for each user based on the time zone setting of their computer and data from their internet browser. The system will always display the time zone being used. If an instructor sets a due date of 11pm Eastern time, a student in the Pacific time zone will see a due date of 8pm.

Information about Blackboard is available on [Answers Blackboard](#); alternatively, you can contact Information Technology Services by sending an email to help@syr.edu, calling 315.443.2677, or in-person at the ITS Service Center, located at 1-227 CST in the Life Sciences Complex. Business hours for the Service Center can be found on the [ITS website](#).

Orange Alert

ORANGE ALERT, Syracuse University's crisis notification system, uses text messages, phone, and email alerts to provide rapid notification and instructions to members of the University community in the event of a crisis in progress. Crises could include an individual who is considered armed and dangerous, a hazardous materials incident, an explosion, or any other event in which there is an immediate threat of physical harm or death to campus community members. We recognize that faculty may consider activated cell phones as an interruption to their class. However, the Department of Public Safety recommends that faculty members leave their own cell phones on vibrate to receive text messages about a potential emergency situation. It is also recommended that faculty designate several class members to leave their cell phones on vibrate to receive notifications in the event of a critical incident. ORANGE ALERT contact information for students, faculty, and staff is drawn from the MySlice online information system; please keep your contact information current.