



IT 2431 – Data Programming II Syllabus Spring 2025

Meenalosini Vimal Cruz
T/R 11:00AM – 12:15 PM
Science Center, Room 129,
Armstrong Campus, Savannah

Contact Information

Instructor: Dr. Meenalosini Vimal Cruz M.Sc., M.Phil., M.Tech., Ph.D
Office: Room#268, Science Center
Email: mvimalcruz@georgiasouthern.edu

Office Hours: M/W: 10:00 AM to 1PM
OR BY APPOINTMENT

Textbooks

- Zybook – Programming in Python 3 with Zylabs (**Required**)
- Python for Everybody: Exploring Data in Python 3 by Charles Severance. Available in HTML and PDF format for **free** at <http://www.py4e.com/book>

Software/ Tech Requirement

- Python 3.8 Version,
- Visual Studio code IDE (all software used in the course are free)
- **Portable storage device** (flash drive, external hard drive, etc).
 - You will need less than 1GB of storage space for this class.
 - If you prefer you can bring your own laptop

Course Description

The course provides students with an introduction to the main concepts in programming related to data. The course focuses on data storage and the use of regular expressions to search data. The course also includes an overview of object-oriented concepts.

Course Objectives

Students will learn advanced concepts in programming including the application and use of variables, expressions, statements, conditional execution, functions, iteration, strings, and files learned in Programming I as they pertain to the Python programming language at a more advanced level including object oriented concepts.

ABET Outcomes (for program accreditation)

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.

Course Prerequisites

A minimum grade of "C" in IT 2430 and prior or concurrent enrollment in MATH 1232 or MATH 1441.

Teaching Methodology

The sessions will consist of lectures/demonstrations, and supervised labs. The lectures are based on the assumption that students have completed the reading/homework assignments before coming to class. During lab hours students are expected to ask questions regarding lab exercises, not to ask the instructor to debug their programs.

Communication:

The instructor will use Folio in managing and delivery of the course. You are therefore required to **check it daily**. You should also check your Georgia Southern email account daily. When contacting the instructor use Gmail, not Folio mail

Course Schedule with Activity Due Dates

A detailed course schedule is located in the Course Schedule in Folio.

Grading Policies

- Your grade will depend on your performance in the following activities:

Class Activities	Grade weightage
Participation Activity	15%
Lab Assignments	20%
Weekly Quizzes	10%
Homework	25%
Attendance	10%
Exams	20%
Total	100%

- Letter grades will be determined by the total points earned from the activities listed in the previous bullet point and will be awarded based on the standard scale:

Total Points Earned	Letter Grade
90% or greater	A
80% or greater	B
70% or greater	C
60% or greater	D
less than 60%	F

Participation Activity: There is participation activity associated with each module of **Zybook**. Students have to complete the reading and participation activity as part of their Homework.

Challenging Activity: There is challenging activity associated with each module of Zybook. Few challenging activity exercises may be discussed in the class, if you miss the class it is your responsibility to complete the challenging activity by due date.

Lab Assignments: There will be several lab assignments given during the semester, few of them will be practiced in class and few of them will be given as home work assignments. These *assignments must be completed on your own. Any evidence that students have collaborated on assignments will be considered academic dishonesty (see bullet on Academic Dishonesty below).* They must be turned in via Folio by the due date and time.

Quizzes: These are entirely based on material from the readings. Each quiz may have maximum three attempts,

Attendance/Class Participation: There will be online/oral quizzes in the class from the in-class lecture and reading. To take that quiz, students must have completed reading activities. This quiz will be available only during the class meeting days and can be taken in the class.

In avoidable circumstances, if you need to miss the class, you should have sent an email notification. If you have sent prior notification regarding your absence, I can excuse maximum three missing quizzes.

Midterm and Final Exam: There are midterms and cumulative final exam. There are no exam make-ups without prior consent of the professor.

Late Work policies

Assignments turned in after the due date will be subject to a 25% to 50% late penalty. **No work will be accepted AFTER the dropbox/zybook activity closes.**

Once the drop box/Quiz closes, there will be no acceptance of quizzes, homework or lab submissions, or tests without prior notice given to the instructor or documentation of a University recognized excused absence. This means the instructor will not:

- Re-opening of any quiz, assignment, or exam
- Acceptance of submissions through email
- University-recognized excused absences include Medical (clinic visits do not count), military training, and athletic competition days. Make-up assignments, quizzes, and tests must be arranged with the instructor no later than the next week immediately after the absence.
- No makeup of any kind will be given beyond a week after an absence. It is the responsibility of a student to make arrangements with the instructor. Students are required to get confirmation from the Dean of students to verify excusable absences when appropriate.

Classroom Etiquette:

Classroom conduct

In order to create a positive teaching and learning environment, students should be RESPECTFUL (attentive, not talking while instructor is speaking, cell phones off, limited laptop use unless required due to a disability or for class work) and SUPPORTIVE. No one should behave in a way that is distracting to other students or the instructor. Students failing to meet these minimum standards will be asked to leave for the rest of the class period. Repeat offenses will result in the student being removed from the class.

- ✓ Turn off or silent all cell phones.
- ✓ Remove earbuds and earphones.
- ✓ Refrain from text messaging during class.
- ✓ **Do not use laptops during the lecture, except for doing work for the class.**
- ✓ Refrain from arriving to class late, departing class early and exiting/entering class without prior notice to the instructor as these actions are considered poor classroom etiquette.

Attendance

Attendance is mandatory. If you have to miss any class, you are expected to send an email to the instructor. Multiple missed days of class may result in a final grade reduction.

Participation

Students must prepare for each day of class by reading the assigned material in the textbook before coming to class on the day the material is discussed. Each student is expected to actively participate in class by answering questions during lecture, reading the assigned material before class, listening to lectures and discussions, contributing to the material being discussed, completing labs.

Reading/Taking Notes

PowerPoint slides will be posted on Folio. Students can use them as a starting point for their notes. The PowerPoint slides are not sufficient for students to use as notes. Thus, students are expected to read the book and implement all the exercises and watch all the provided videos.

I strongly suggest all the students to take notes physically (not digitally) during lecture, reading or self-learning from other materials and resources. You are allowed to refer these notes during exams.

Learning Commitment Expectations

Students must be self-motivated and responsible for keeping up with due dates for readings, assignments, and other activities. Students should log into the course on a daily basis to check for messages and other important information. Do not wait until the last minute to do work. Students will not be successful in this course if they do not manage and regulate the time they spend on the course.

Academic Dishonesty:

Academic dishonesty is not acceptable. A list of violations of the academic dishonesty policy is provided in the Georgia Southern Student Conduct Code (located at http://students.georgiasouthern.edu/judicial/SCC_08-09.pdf) in Section VI Part 1. The process for adjudication of academic dishonesty cases is in Section XIX. The **minimum** penalty for academic dishonesty on an assignment/quiz/exam is a grade of *zero* on the work for which the infraction occurred. ***In all cases, the incident will be reported to the Office of Judicial Affairs.***

Feel free to help each other by providing guidance and answering each other's technical questions; *but you **may not share files** or copy any part of the work of others.* Evidence of sharing files or copying code will be considered Academic Dishonesty and will be reported to the Dean of Students. Completion of all the individual projects is required to demonstrate adequate knowledge of the material. For the most part, individual assignments are to be completed on your own time.

- *Plagiarism* is the use of someone else's words, ideas, or data without giving credit to the original author. Plagiarism is a form of cheating.
If you are confused as to the difference between helping each other (which is encouraged) and cheating (which will not be tolerated), ask your instructor.
- If you assist someone else in cheating, you can also be charged with cheating yourself. This can include giving another student access to your computer account, negligently permitting another student to access your account, or posting answer keys where others can access them. Protect your account as if your academic career depends on it!

Acceptable	Cheating
Including a brief quote from a web page with the source cited.	Copying entire pages or paragraphs and republishing it as your own.
Using graphics from a free clip art or graphic site.	Using someone else's graphics without permission.
Discussing an assignment with another student.	Copying another student's work or file.
Looking at online sources or asking for a classmate's help to figure out what to do.	Duplicating a classmate's assignment answers as your own, without performing the assignment activity yourself.

University Guidelines

First day Attendance

University policy requires all students to attend the first class meeting of all classes for which they are registered. Students who do not attend the first class meeting of a course for which they are registered will be dropped from the course if the faculty member verifies you as not attending.

Illnesses

"We want you to take appropriate precautions for your health as well as the well-being of your classmates. If you become ill during the term, please contact me immediately. We will work through what you will need to do, to either continue working in class or make up work that might have been missed during your absence. If you have an illness that would result in an extended absence, you will need to contact the Dean of Students office. In the event of serious illness, injury, or extenuating circumstances, the DOS office will notify professors at your request. If you need to self-report either a confirmed or suspected positive COVID-19 diagnosis, have received self-quarantine requirements, or have symptoms with pending test results, please complete the CARES Center COVID-19 self-reporting form (through the MyGeorgiaSouthern portal under "COVID-19 Information & Resources"). You may also reach the CARES Center by using the MyGS mobile app, calling 912-478-CARE (M-F 8am-5pm), or emailing covidsupport@georgiasouthern.edu. The CARES Center should not be used for medical advice. If you need medical advice, you need to call your health provider or 911.

Disability-Related Accommodations

Georgia Southern University is committed to providing reasonable accommodations to students with documented disabilities as required under federal law. Disabilities may include ADD or AD/HD, autism spectrum disorder, brain injury, chronic medical conditions, communication disorders, hearing loss, learning disabilities, mobility impairment, psychological disorders, visual impairment or temporary injuries. The purpose of disability accommodation is to provide equal access to the academic material and equal access to demonstrate mastery of the material. If you have a disability and need accommodations, please contact the Student Accessibility Resource Center (SARC). You will need to meet with a SARC staff member who can help you gather documentation of your disability or refer you to an appropriate resource for assessment. Once documentation of the disability is approved, SARC staff will provide you with an accommodation letter detailing the approved accommodations which you should present to me so we can discuss and implement your accommodations. Disability accommodations work best starting at the beginning of the semester, but can be approved and started at any point in the semester. Accommodations start at the time the accommodation letter is presented to faculty within reasonable timelines; accommodations are not given retroactively. SARC on the Statesboro campus is located on the second floor of Cone Hall and the phone number is (912) 478-1566. SARC for Savannah and Liberty campuses is located on the second floor of Memorial College Center and the phone number is (912) 344-2572.

Special Needs: In accordance with the 1990 Americans with Disabilities Act, if you need special accommodations, please contact me during the first week of class.

Georgia Southern University Campus Honor Pledge

"On my honor, I pledge to be academically honest in all my coursework and will not tolerate the academic dishonesty of others. I also pledge to engage in ethical behavior on-campus and off-campus, to live an honorable lifestyle, and to create a campus environment that is characterized by individual responsibility, civility, and integrity."

Tentative Schedule

Please note that this schedule is subject to change.

Date	Topic and Readings	Items Due *
Week 1 Jan 14 - Jan 16	Introduction	PA 1 LA 1
Week 2 Jan 21-Jan 23	Lists from zybook	PA2, LA 2. HW 2 Quiz 2
Week 3 Jan 28 - Jan 30	Dictionary from zybook	PA 3, LA 3, HW 3 Quiz 3
Week 4 Feb 4– Feb 6	Tuples	LA 4, HW 4 Quiz 4
Week 5 Feb 11– Feb 13	Exam 1 Exam 1 review	
Week 6 Feb 18– Feb 20	Day 1 – Class Lecture Day 2 – Class Tutorial Classes from zybook	
Week 7 Feb 25– Feb 27	Day 1 – Class Lab Day 2 – Class Lab	PA 5, CA 5, LA 5 HW 5, Quiz 5
Week 8 Mar 4- Mar 6	Inheritance Tutorial Inheritance from zybook	PA 6, CA 6, LA 6 HW 6, Quiz 6
Week 9 Mar 11 – Mar 13	Modules from zybook	PA 7, CA 7, LA 7 HW 7, Quiz 7
Week 10 Mar 18- Mar 20	SPRING BREAK	
Week 11 Mar 25- Mar 27	Regular expression	LA 8, HW 8 Quiz 8
Week 12 April 1 – April 3	Data Bases	
Week 13 April 8 – April 10	Exam 2	
Week 14 April 15 – April 17	Data Visualization	LA 9, HW 9 Quiz 9
Week 15 April 22 -April 24	Data Visualization	PA 10, CA 10, LA 10, HW 10, and Quiz 10
Week 16 April 29 -May 1	Review	
May 6-10	FINAL EXAM	

The last day for class withdrawal is March 10