COLLEGE OF DUPAGE
CIS 2531 – Introduction to Python Programming – Course Syllabus

Robert Burrows
Email: burrows@cod.edu
https://www.cod.edu/faculty/websites/burrows/index.aspx

CIS 2531 Sec 001
SPRING SEMESTER 2024
01/22/2024 - 05/17/2024
Mon and Wed 1:00PM – 2:50PM
SCC113

Course Name: CIS 2531 – Introduction to Python Programming

Credit and Contact Hours: 4 semester credit hours *(4 lecture hours)*

Prerequisites: CIS 1400 Programming Logic and Technique with a grade of "C" or better, or equivalent OR consent of instructor

Textbook (Required):
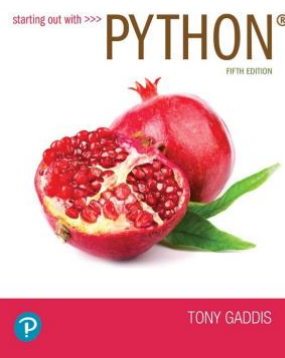
Starting Out with Python by Tony Gaddis,
Publisher: Pearson Education, 5th Ed,
ISBN-13: 978-0-13-592903-2

Other Course Materials: Adobe Acrobat Reader, Python 3.x interpreter, note and test taking material (hardcopy, digital files, etc.), storage device (USB drive or cloud storage), assignment submission material (hardcopies, file upload, etc.)

Course Description:

Introduces the object-oriented programming language of Python. Course focuses on features of Python and develops skills for creating object oriented applications. Repeatable for credit: No

Course Objectives:

Upon successful completion of this course, the student should be able to:

1. Create executable programs
2. Describe flow control structures
3. Demonstrate use of functions
4. Demonstrate use of strings
5. Demonstrate use of lists
6. Demonstrate use of classes
7. Explain object-oriented design techniques
8. Demonstrate ability to develop interactive procedural and object-oriented applications
9. Demonstrate use of tuples

10. Demonstrate use of sets
11. Demonstrate use of dictionaries
12. Describe file input/output (I/O)
13. Explain inheritance
14. Explain polymorphism
15. Explain dynamic binding
16. Compare sorting and searching techniques
17. Demonstrate use of Graphical User Interface (GUI)

Topical Outline:

1. Software development environment
2. Arithmetic operations
3. Logical operations
4. Decision making constructs
5. Loops
6. Functions
7. Characters
8. Strings
9. String class
10. Lists
11. Multi-Dimensional Lists
12. Tuples
13. Sets
14. Dictionaries
15. File operations
16. Classes
17. Inheritance
18. Polymorphism
19. Sorting and Searching
20. Graphical User Interface (GUI)

College Mask Policy and COVID Protocol:

Please check https://cod.edu/coronavirus/index.aspx for the colleges latest Covid protocol. Currently masks are optional but being vaccinated and boosted using hand sanitizer in class is recommended

If you have COVID, do not come to class and fill out the self-reporting form:
https://cm.maxient.com/reportingform.php?CollegeofDuPage&layout_id=9

After you have submitted the form, you will receive further instruction from the college.

Course Requirements:

Academic Honesty

Course related academic integrity is an important component of college policies and the Computer Information Science curriculum. **Submitted program code will be run through a plagiarism checker** such as codequiry (https://codequiry.com/) to ensure original work is submitted. Only if you

work on a team project should your programs look identical. If you get help from another student at least change variable names

Student academic dishonesty includes but is not limited to:
- Dishonest use of course materials, such as student papers, examinations, reports and material posted on the Internet.
- Knowingly posting or using course materials of any kind on Internet sites such as (*but not limited to*) Course Hero and Chegg without the consent of the instructor.
- Knowingly assisting others in the dishonest use of course materials such as student papers, examinations, and reports.
- Knowingly providing course materials such as papers, lab data, reports and/or electronic files to be used by another student as that student's own work.
- Plagiarizing, i.e., using language or ideas from materials without acknowledgement and/or copying work from other sources and submitting it as one's own.
- Examples of plagiarism include but are not limited to:
  - Copying a phrase, a sentence, or a longer passage from a source (*including an Internet source*) and submitting it as one's own.
  - Summarizing or paraphrasing someone else's ideas without acknowledging the source.
  - Submitting group assignments individually as one's own independent work.
  - Copying or taking pictures of course materials such as videos, exams, quizzes, or assignments and posting the copied items and/or pictures on the Internet **or** sharing these copied items and/or pictures with other students who have not yet completed the assignments.
  - Taking pictures or copying course materials that are considered confidential by the instructor such as exams or quizzes.

Coursework submitted by the student that is either found online, significantly similar to other submitted work, or violates any of the above conditions, is subject to one or more of the following:

- Grade of 0 for the assignment
- Failing grade for the course
- Completion of Academic Dishonesty Form for recording in the Judicial Database

The College policy on academic integrity can be found in the College catalog under Student Services and General Student Information, Student Rights and Responsibilities, Code of Academic Conduct:

https://catalog.cod.edu/student-services-general-student-information/

Access and Accommodations

The College of DuPage is committed to the equitable access of educational opportunities for students with disabilities in accordance with The Americans with Disabilities Act, As Amended and Section 504 of the Rehabilitation Act of 1973. Any student who feels they may need an accommodation on the basis of an illness, injury, medical condition, or disability should contact the Center for Access and Accommodations to determine eligibility for accommodations and to obtain an official Letter of Accommodation.

Connecting with the Center for Access and Accommodations is an important way to make sure that any student who has a need based on a disability, illness, injury, or medical condition is provided with appropriate accommodations. The Center for Access and Accommodations can be reached via email at access@cod.edu.

Students may also initiate a request for services by going to www.cod.edu/access and clicking on the green box labeled "complete form to request accommodations." Student's requesting

accommodations for COVID-19 or COVID-19 protocols should also use the above-mentioned process to connect with the Center for Access and Accommodations. If you are already registered with the Center for Access and Accommodations, please email me your Letter of Accommodation within **two weeks (14 calendar days) of the start of the semester** or within **one week (7 calendar days) of receipt of an official Letter of Accommodation** to ensure proper course accommodations are in place. Please DO NOT send any private health documentation or Doctor's notes to me.

Attendance

Class attendance and active participation are essential if a student wishes to receive maximum benefit from this class. That said attendance will not be taken and is not part of your grade. **Except for the first week where we will meet Monday and Wednesday, the usual format for this class is Monday's class is lecture and Wednesday's class you will be given time to work on assignments**. This is so I can work with students who are having trouble on assignments or understanding course content and those students who are not having any trouble may work from home and miss Wednesday's class. **If we need to have some lecture on Wednesday it will be recorded for your viewing later.** Students are expected to attend class Monday Class sessions, check their COD email and Blackboard courses regularly for course announcements, due dates, and updated course material. Any student questions or concerns about course material and requirements should be directed to the instructor via email as soon as possible to ensure resolution in a timely manner.

Religious Observance

The College will reasonably accommodate the religious observances of individual students with respect to class attendance, and the scheduling of examinations and class requirements. The student should notify the instructor well in advance of any anticipated absence or a pending conflict between a scheduled class and the religious observance.

e-mail

Every attempt will be made to answer e-mail on a 24 hour turnaround basis (during the Monday through Friday week; weekend messages will be responded to during the next scheduled office hour). When sending an e-mail please indicate your name, in which course you are currently enrolled, the problem you are having, and how best to contact you with a resolution.

For frustrating program errors that you can't figure out after at least after a half hour of debugging, I have set up an alert set up so that if you enter "**2531-help**" in the subject line of your email I will get paged and get back to you as soon as possible. Please only use this feature between 9:00 AM and 11:00 PM and **ONLY** in cases where you get stuck on a program. In Your email you should **paste in your code or zip file** and the **exact error message** you are getting.

Lab Assignments

Lab assignments will be made available on Blackboard **at least** a week (7 calendar days) prior to their scheduled due dates. Assignment submission links on Blackboard are visible only until their due dates. **Once the due date/time has passed, the assignment submission link is removed from Blackboard and the assignment can no longer be submitted through Blackboard for class**

credit. The Lab assignments on Monday will be due the following Wed – giving you a week and half and 2 Wednesday help sessions to complete.

In the event that ANY student experiences an unforeseeable circumstance that causes them to miss an assignment due date (**Except for the final course Project**), the student is given a **1 time option to complete** their assignment within **one week** (7 calendar days) of the original due date if the **instructor is notified within 72 hours** (3 calendar days) via email of the original due date to activate this option. The assignment will be graded within 2 weeks (14 calendar days) of the late submission date.

Project

A final project of your choice is required and worth 10% of grade. Project objectives will be made available after the middle of the semester. Students will individually complete a project demonstrating their cumulative knowledge of course concepts. Your project proposal needs to be submitted by 5/7/2024 and will approved by 5/9/2024 before you can begin work on your project.
NO LATE PROJECTS will be accepted.

Quizzes

There are several **timed** quizzes throughout the semester. Make sure you have a good Internet connection and have actively read the chapter before taking the quiz. **There are no make-ups for students missing a quiz**. There will be extra credit assignments/programs for those students who miss **one or more quizzes. Quiz submission links on Blackboard are visible only until their due dates. Once the due date/time has passed, the quiz submission link is removed from Blackboard and the quiz can no longer be submitted through Blackboard for class credit.**

Satisfactory/Fail/Incomplete

No Satisfactory/Fail/Incompletes are given in this course.

The College policy on Satisfactory/Fail (S/F) Grade Option can be found in the College catalog under Academic Policies and Procedures, Earning College Credit:

https://catalog.cod.edu/academic-policies-procedures/

Student E-mail Accounts

Much of the correspondence for this course will occur via discussion boards, announcements, and file uploads. However, all COD students are issued a myACCESS user id that gives access to a variety of college information services. One of these services is access to student e-mail. If you have not used myACCESS before, use the following link to get the myACCESS home page:
https://myaccess.cod.edu
The following site provides access to a variety of resources on how to get started using myACCESS and Student e-mail.

https://www.cod.edu/student_life/resources/information_technology/email/email_guide.aspx
The student is responsible for periodically monitoring their COD student e-mail account for any course related and/or official communication from the instructor.

Student Responsibilities

This course involves lecture, reading, online research, discussions, assignments, and quizzes. All courses require a **regular weekly** time commitment from the student in order to be successful.

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Recommendations estimate that for each credit hour, students should expect to spend an additional 2 to 3 hours doing homework, readings, and discussions. So, this 4-credit hour class would require 4 hours of class/lecture time, plus 8-12 hours of study, resulting in 12-16 hours total weekly investment.

Students experiencing difficulty with course material have the following available options for extra assistance:

- request instructor assistance through email or an appointment during scheduled office hours. Every attempt will be made to answer e-mail on a 24 hour turnaround basis (during the Monday through Friday week; weekend messages will be responded to during the next scheduled office hour). When sending an e-mail please indicate your name, in which course you are currently enrolled, the problem you are having, and how best to contact you with a resolution.

- utilize tutoring resources available through "**Student Support**" tab in Blackboard

Withdrawal Policy

The last day to withdraw from this class is **04/14/2024**. After that date, students may file a Petition for Late Withdrawal through the Registration Office. Petitions for Late Withdrawal will be granted for extenuating circumstances only, including student illness, death in the immediate family, family emergencies, call to active duty, or other appropriate extenuating circumstances. The student will be required to provide appropriate documentation for all requests for Late Withdrawal. Prior to withdrawing from this class, students are encouraged to speak with the instructor.

The College policy on Withdrawals can be found in the College catalog under Academic Policies and Procedures, Course Withdrawals and Specialized Registration:

https://catalog.cod.edu/academic-policies-procedures/

Method of Student Assessment

Points are distributed in the following manner:

Lab Assignments	650
Quizzes	250
Final Project	100
Total	**1000**

Final Grades are earned using the following scale:

Accumulated Points	Grade	Percentage
900 – 1000	A	>= 90
800 – 899.9	B	80 – 89
700 – 799.9	C	70 – 79
600 – 699.9	D	60 – 69
599.9 or lower	F	< 60

Your Efforts and learning

My goal is to help you reach your programming goals in any way I can; and since retired from my day job I have lots of time to help. If you have difficulties with labs or class concepts reach out to me and we can schedule one on one help sessions if helpful.

Also, while most students sign up for courses with the best intentions, circumstances can arise that challenge even the best students. Especially in these strange times of pandemics, climate change, and racial injustice to name a few, statistics have shown a growing number of students experiencing mental health challenges to varying degrees. Doing what you can to stay ahead and on top of depression or anxiety by wisely taking care of yourself will be a key to succeeding academically. But even then, sometimes these challenges can affect your ability to complete the required work. Or a particular assignment might trigger anxiety for you in ways I have not anticipated. Or maybe you reach a point where you just can't get yourself to class at all.

In any of these cases, please come and talk with me or at least send me an e-mail. I'll listen and do what I can to help. The sooner you share your challenges with me, the more I can help you plan to succeed in this course. To learn the material and pass the course or earn an A, you'll still need to do every bit as much work as other students, but we may be able to find some creative ways to help you do that—especially if you approach me when your problems arise, instead of at the end of the semester.

While it may be 'tempting' to acquire problem solutions from an alternate source and submit them as one's own in order to meet assigned due dates, it is not in a student's best interests to do so; as in the real world, each programmer's assignments are unique.

That said many students use the buddy system and you may find a friend(buddy) to work with in class which in my experience has helped many students. If you work with a buddy on a program, it is always good for your learning to make your program unique - perhaps by simply changing the variable names.

Your learning will be mainly based on your efforts, but me and your classmates are there to help too. We are all connected for your success.

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Tentative Course Schedule

Important course dates, readings, and the lab/quiz schedule are listed below. To maximize one's mastery of the course material, textbook readings, video viewings, and online research should be done PRIOR to scheduled virtual sessions and lab/quiz completion.   This class progresses at a quick pace in order to cover all the objectives; falling behind in one's course preparation may affect one's comprehension of subsequent topics. For the purpose of maintaining this timely schedule, students experiencing difficulty with any topics should contact the instructor for additional assistance. Any revisions to the following schedule will be announced in class and on Blackboard.

Week	Textbook Readings		Labs/Quizzes
Week 1 01/22/2023	Ch1 App A	Introduction to Computers and Programming Installing Python & App B Introduction to IDLE	Lab #1/Quiz #1
Week 2 01/292023	Ch 2	Input, Processing, and Output	Lab #2/Quiz #2
Week 3 02/05/2023	Ch 3	Decision Structures and Boolean Logic	Lab #3/Quiz #3
Week 4 02/12/2023	Ch 4	Repetition Structures	Lab #4/Quiz #4
Week 5 02/192023	Ch 5	Functions	
Week 6 02/26/2023	Ch 5	Functions	Lab #5/Quiz #5
Week 7 03/04/2023	Ch 12	Recursion	
Week 8 03/11/2023	Ch 6	Files and Exceptions	Lab #6/Quiz #6
Week 9 03/18/2023	Ch 7	Lists and Tuples	Lab #7/Quiz #7
Week 10 03/25/2023		**Spring Break (No Classes)**	**NO Class**
Week 11 04/01/2023	Ch 8	More About Strings	Lab #8
Week 12 04/08/2023	**NOTE** CH 9	**NO CLASS 4/8 TOTAL ECLIPSE** **Dictionary and Sets Lecture Wed 4/10**	**Last day to withdraw 4/14**

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Week	Textbook Readings	Labs/Quizzes
Week 13 04/15/2023	Ch 9 Dictionaries and Sets	Lab #9/Quiz #8
Week 14 04/22/2023	Ch 10 Classes and Object-Oriented Programming	Lab #10/Quiz #9
Week 15 04/29/2023	Ch 11 Inheritance	Lab #11/Quiz #10
Week 16 05/06/2023	Ch 13 GUI Programming	Quiz #11 ** Final Project Proposal Due 5/07/24**
Week 17 05/13/2023	**COD Scheduled Final Activity – Final Project**	****Final Projects** Due EOD 5/17/24**