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

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CIS 2531 Sec 001
Fall Semester 2025
08/25/2025 – 12/19/2025
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 (Optional):	Free OpenStax Python text - link: https://openstax.org/details/books/introduction-python-programming/
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 - variables
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:

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 on your program, at least change variable names and insure you thoroughly understand the program for the exam.**

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.
  - Using AI not as a tool to learn or debug, but for generating lab solution (more on this in class)

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 message 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 1st and 2nd 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 Lab assignments**. **There will be 4 Wednesdays with an exam as on the schedule below for half the class (1 hour exam)**. This is so I can work with students who are having trouble on Lab assignments or understanding course content and those students who are not having any trouble may work from home and miss Wednesday's class. **If you are a student who is doing well but like to help other students if you come to at least 10 lab sessions and help other students I will give you 15 extra credit points. Also, if we need to have some lecture on Wednesday other than the 1st 2 weeks, the lecture will be recorded for your viewing. If you get an A or a B on the first two exams you have the option to do a final project in place of taking the last two exams**. Students are expected to attend class Monday Class sessions and check their BB messages 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 BB messages as soon as possible to ensure resolution in a timely manner. **If you can't attend class for any reason please contact me by BB messages and we can plan for your learning the material you missed. If do not turn in assignments for two weeks without contacting me, I will contact you.**

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.

Communicating with me. In this class we will be using Blackboard Collaborate Ultra (BB for short). See https://bb.cod.edu/ultra/organizations/_282721_1/outline for information on how to use BB Collaborate Ultra . To get help from me on a lab where you are stuck or any other question you should use the messages feature of BB collaborative ultra instead of email. This is because messages allows you to attach your programs while COD email does not allow program attachments due to security issues.

Every attempt will be made to answer your messages on a 24 hour turnaround basis during the Monday through Friday week; weekend messages may be responded to during the weekend but if not they will be on Monday usually in the morning.

For frustrating program errors that you can't figure out after at least after a half hour of debugging please send me a message attaching your program code and **pasting in the exact error message** you are getting. NOTE: AI (chatGPT) can also help find your error.

Note also that I will use BB messages to communicate with you. You are responsible to check BB for messages to you as well as look at general class announcements

Lab Assignments

For full credit Lab assignment submission must be by the due date. **Once the due date/time has passed, the assignment submission starts at half credit, unless you have messaged me with a**

problem, and I have okayed a late submission. The Lab assignments on Monday will be due the following Wed – giving you a week and half and two Wednesday help sessions to complete.

Exams: There will be four one hour exams given on lab days that are worth 50 points each. The exam will allow use of your class handwritten notes and print outs of homework Labs but no computers or phones. The problems will be based on the Lab assignments. The last two exams are optional if you have permission to do the project assigned below

Project (optional by my permission)

A final project of your choice will be optional for those students who get an A or a B grade on the first two exams or I ok worth 100 points The Project can be a program you or your family want for personal use or perhaps for another class or interest/hobby you have. Students will individually complete a project demonstrating their cumulative knowledge of course concepts. I will give help with project if you ask/need some. Your project proposal needs to be submitted by Wed Dec 8th at the latest and will approved by Thurs Dec 9th at the latest before you can begin work on your project which is due by EOD Wed Dec 17th
NO LATE PROJECTS will be accepted.

Quizzes

There are several **timed** quizzes done in Blackboard throughout the semester. Make sure you have a good Internet connection and review lecture notes before taking the quiz. **If the Quiz is not completed by the due date you get a deduction unless I have given you permission to turn the quiz in late.**

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 Responsibilities

This course involves lecture, online research and lessons, discussions, lab assignments, and quizzes. All courses require a **regular weekly** time commitment from the student in order to be successful. Recommendations estimate that for each credit hour, students should expect to spend an additional 2 to 3 hours reviewing lecture notes and doing homework and optional reading. 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:

- 1) Request instructor assistance through messages or arrange for instructor assistance before or after class or at the break.
- 2) Utilize tutoring resources available through the Institution page - tutoring services in Blackboard

Withdrawal Policy

The last day to withdraw from this class is **11/16/2025**. 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
Exams/Final Project	200
Total	**1100**

Final Grades are earned using the following scale:

Accumulated Points	Grade	Percentage
990 – 1100	A	>= 90%
880 – 989	B	80 – 89
770 – 879	C	70 – 79
660 – 769	D	60 – 69
659 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/or the tutoring center 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 a message through BB. 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, and insure you thoroughly understand the program you are submitting for the in class exams without any computer use.

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 assignments are listed below. This class progresses at a quick pace and falling behind in one's course preparation may affect one's comprehension of subsequent topics. Students experiencing difficulty with any topics should contact the instructor ASAP for additional assistance. Any revisions to the following schedule will be announced in class and on Blackboard. **Please Note: Active reading** of the chapter should be done **prior to attending class on that chapter.** Dates for labs and quizzes below are assignment dates. **Due dates** for these labs and quiz assignments can be seen on the **Course Calendar in Blackboard.**

Week	Topic/Activities	Labs/Quizzes Assigned
Week 1 08/25/2025	**Introduction to programming - Variables** Installing Python - Introduction to IDLE Class Both Monday and Wednesday	Lab #1/Quiz #1
Week 2 09/01/2025	**NOTE**: **NO CLASS 9/1 Labor Day** **Input, Processing, and Output** Class Wednesday	Lab #2/Quiz #2
Week 3 9/08/2025	**Decision (If)Structures & Boolean Logic** Labs On Wednesday going forward	Quiz #3 Lab #4
Week 4 09/15/2025	**Repetition(Loop) Structures**	Lab #5/Quiz #4
Week 5 09/22/2025	**Review Variables,IPO,if & loop logic** **Functions**	Lab #6/Quiz #5
Week 6 09/29/2025	**Functions**	Lab #7 **10/1 Exam 1** Variables,IPO,if & loop logic 2nd hr of class
Week 7 10/06/2025	**Recursion**	Lab #8
Week 8 10/13/2025	**Files and Exceptions**	Lab #9/Quiz #6
Week 9 10/20/2025	**Review Functions, recursion, files** **Lists and tuples**	Lab #10/Quiz #7 **10/22 Exam 2** functions&files

Week	Textbook Readings	Labs/Quizzes
Week 10 10/27/2025	Review and finish Lists and Tuples	**Last day to withdraw 11/16**
Week 11 11/03/2025	More About Strings **Wed Help on Lab #10 – please come if not done**	Lab #11/Quiz #8
Week 12 11/10/2025	**I will not in class this week – in Guatemala** 11/10 Dictionaries and Sets- Online lecture 11/12 Lab - help by tutoring center for Lab 11 on finite state machines & Lab 12 playing cards	Lab #12/Quiz #9
Week 13 11/17/2025	Finish and review Dictionaries and Sets Start OOP - Object Oriented Programming **CLASS BOTH MONDAY & WED**	Lab #13 /Quiz #10 **11/19 Exam 3 (if not doing project)** on lists, tuples, dictionaries, sets
Week 14 11/24/2025	Finish OOP & OOP inheritance **NOTE: NO CLASS Wed 11/26 Thanksgiving Break Monday I will be at Class early and stay late for homework help on Lab #13**	Lab #14/Quiz #11
Week 15 12/01/2025	GUI - Graphical User Interface	Lab #15
Week 16 12/08/2025	Finish GUI Review OOP and GUI	Lab #16/Quiz 12 Lab #17 Final Project proposal due 12/08/25
Week 17 12/15/2025	Review OOP and GUI Homework help **CLASS BOTH MONDAY AND WED** unless did project	Lab #18 **12/17 Exam 4** on OOP & GUI or **Final Project Due** **12/18 Total points EOD** **12/19 11:59 pm all work due**