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CIS 2531 Sec NET02 SPRING SEMESTER 2024

**Location: Online** 

Course Name:

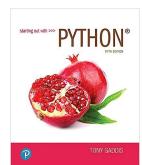
Credit and Contact Hours:

**Prerequisites:** 

4 semester credit hours (4 lecture hours)
CIS 1400 Programming Logic and Technique with a grade of "C" or better, or equivalent OR consent of instructor

CIS 2531 – Introduction to Python Programming

Textbook (Required):



<u>Starting Out with Python</u> by Tony Gaddis, Publisher: Pearson Education, 5th Edition, ISBN-13: 978-0135929032

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.) <u>MS</u> <u>Office 365</u> is available free to COD students to use.

# **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)

# Course Requirements:

# Academic Honesty

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

# COLLEGE OF DUPAGE

### CIS 2531 – Introduction to Python Programming – Course Syllabus

#### 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 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. This includes the use of generative AI resources.
- 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 <a href="mailto:access@cod.edu">access@cod.edu</a>.

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." 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 include the course and section number with your email so the proper accommodations can be made for the indicated course. Please DO NOT send any private health documentation or Doctor's notes to me.

#### 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.

### 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.** 

In the event that ANY student experiences an unforeseeable circumstance that causes them to miss an assignment due date (EXCEPT THE LAST ASSIGNMENT OF THE COURSE), 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 AND the student obtains an email confirmation from the instructor upon receipt of the late assignment. The assignment will be graded within 2 weeks (14 calendar days) of the late submission date and have a recorded grade of 0 until the last week of the semester. After all other assignments for the semester have been submitted on time in the proper format, the student's grade for the late assignment will be updated to reflect the earned points during the last week of the semester.

Programs unable to compile with the current Python 3.x interpreter *and <u>standard libraries</u>* will receive a maximum of 60% of the total possible points for the problem.

### Quizzes

There are several **timed** quizzes throughout the semester. **There are no make-ups for students missing a quiz**. 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. If you have not used myACCESS before, use the following link to get more information about myACCESS and Student Planning:

https://www.cod.edu/registration/myaccess-student-planning.aspx

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. Recommendations estimate that for each credit hour, students should expect to spend an additional 2-3 hours doing homework, readings, and discussions. For example, a 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 "Assist" tab menu option 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:

| Course Requirement | Possible Points |  |
|--------------------|-----------------|--|
| Lab Assignments    | 650             |  |
| Quizzes            | 350             |  |
| Total              | 1000            |  |

The total possible course points for students in each category (and reflected on Blackboard) **may be** greater than listed above. Each student's calculated grade will be evaluated using the above possible total points. Any additional (i.e. above the possible in each category) points earned by the student will count towards overall extra credit in the course.

Final Grades are earned using the following scale:

| Accumulated Points | Grade | Percentage |
|--------------------|-------|------------|
| 900 - 1000         | А     | >= 90      |
| 800 - 899.9        | В     | 80 - 89    |
| 700 – 799.9        | С     | 70 – 79    |
| 600 - 699.9        | D     | 60 - 69    |
| 599.9 or lower     | F     | < 60       |

### Finally

Most students sign up for courses with the best intentions; however, circumstances can arise that challenge even the best students. **Successful course completion is a combined effort between instructor and student.** It is **my** personal goal to assist **all** students in learning and practicing course objectives throughout the semester to achieve material comprehension beyond the end of the semester. This is only accomplished with **your** help. If you are having difficulty with the course, the above requirements, or the College, please inform me as soon as possible (**before** a crisis develops) so that we can resolve them in a timely manner beneficial to all persons involved. 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.

### **Course Schedule and Due Dates:**

To ensure successful course completion in a timely manner, various deadlines have been set. The deadlines set forth below are **firm deadlines**, which will not be extended *except in extraordinary circumstance*. (Please note that being busy with work, family, etc. does NOT constitute an extraordinary circumstance.) **The deadline time for each listed day is 11:30pm**.

Use the Blackboard "**Course Material**" menu item to access the individual units. All components of a unit are available on the first day of the semester; however, **Assignments and Assessments are available only until their listed Due Dates**. Once the due date/time has passed, the submission links are removed from Blackboard and the assignment/assessment can no longer be submitted through Blackboard for class credit.

The wise student will complete Discussion Board posts, submit Assignments, and complete Assessments earlier than their due dates. All grading for Discussion Board posts, Assignments, and Assessments will commence **after** the assigned due dates. **A minimum of two week turnaround for grading of Assignments and Quizzes can be expected.** 

| Week  | Textbook Readings  | Assignment Due Date<br>(11:30pm) | Quiz Due Date (11:30pm) |
|-------|--|----------------------------------|-------------------------|
| 1     | Course Administration and Policies<br>Ch 1 Introduction to Computers and<br>Programming<br>App A Installing Python<br>App B Introduction to IDLE | Fri, Jan 26, 2024                | Sat, Jan 27, 2024       |
| 2     | Ch 2 Input, Processing, and Output   | Fri, Feb 2, 2024                 | Sat, Feb 3, 2024        |
| 3     | Ch 3 Decision Structures and Boolean Logic   | Fri, Feb 9, 2024                 | Sat, Feb 10, 2024       |
| 4     | Ch 4 Repetition Structures   | Fri, Feb 16, 2024                | Sat, Feb 17, 2024       |
| 5     | Ch 5 Functions<br>Ch 12 Recursion ( <i>FYI</i> )   | Fri, Feb 23, 2024                | Sat, Feb 24, 2024       |
| 6-7   | Ch 6 Files and Exceptions (2 weeks)  | Fri, Mar 8, 2024                 | Sat, Mar 9, 2024        |
| 8     | Ch 7 Lists and Tuples  | Fri, Mar 15, 2024                | Sat, Mar 16, 2024       |
| 9     | Ch 8 More About Strings  | Fri, Mar 22, 2024                | Sat, Mar 23, 2024       |
| 10-11 | Ch 9 Dictionaries and Sets (2 weeks)   | Fri, Apr 5, 2024                 | Sat, Apr 6, 2024        |
|       | Last Day to Withdraw From Class  | Sunday, Apr 14, 2024             |                         |
| 12-13 | Ch 10 Classes and Object-Oriented Programming (2 weeks)  | Fri, Apr 19, 2024                | Sat, Apr 20, 2024       |

| Week  | Textbook Readings                 | Assignment Due Date<br>(11:30pm) | Quiz Due Date (11:30pm) |
|-------|-----------------------------------|----------------------------------|-------------------------|
| 14    | Ch 11 Inheritance                 | Fri, Apr 26, 2024                | Sat, Apr 27, 2024       |
| 15-16 | Ch 13 GUI Programming (2 weeks)   | Fri, May 10, 2024                | Sat, May 11, 2024       |
| 17    | Course Final Summary and Feedback | Fri, May 17, 2024                |                         |