

Syllabus

CSC 401- 501 Introduction to Programming

Winter 2022-2023

Course Management System: D2L (<https://d2l.depaul.edu>)

INSTRUCTOR INFORMATION

Dolores Kalayta

Office hours: Friday, 11:45 – 1:15 Jarvis CDM Building, Room TBD

Email: dkalayta@depaul.edu

The best way to reach me is through email. I check emails every day and try to check emails regularly throughout the day. If you want to collaborate/discuss a coding issue during my office hours, schedule an appointment in advance using **Blue Star** that is available in Campus Connect.

COURSE DESCRIPTION

An introduction to programming with a focus on problem solving, structured programming, and algorithm design. Concepts covered include data types, expressions, variables, assignments, conditional and iterative structures, functions, file input/output, exceptions, arrays and introduction to user-defined classes.

This is a first programming course for students who have never had a term of programming or its equivalent. It is assumed that students have no prior experience with a programming language.

PREREQUISITES

None

COURSE LEARNING OUTCOMES:

By the end of this course, students will be able to:

- Develop algorithmic solutions to basic computational problems
- Develop stronger problem-solving skills
- Understand fundamental Python programming structures such as expressions, assignments, conditionals, decision structures, iteration structures, built-in functions and user-defined functions.
- Develop and test Python programs
- Appreciate the necessity and importance of testing
- Design classes and understand the fundamental principles of object-oriented programming (OOP)

TEXTBOOK

Introduction to Computing Using Python, 2nd edition, Ljubomir Perkovic, Wiley 2015, ISBN (ebook): 978-1-118-89105-6; ISBN (paperback): 978-1-118-89094-3

REQUIRED SOFTWARE

Install on your laptop/desktop: Python, version 3.10 or higher. Python is available as a free download from <https://www.python.org/downloads/> and it comes with a simple development environment called **IDLE**. It is expected that you have the necessary skills to download the software and install on your computer.

SOME IMPORTANT DATES:

Classes begins on	Friday, Jan. 6, 2023
First assignment due date	Friday, Jan. 13, 2023
Last day to drop with no penalty	Sunday, Jan. 21, 2023
Midterm Exam	Friday Feb. 10, 2023**
Last day to withdraw* from class	Sunday, Feb. 21, 2021
Final Exam	Friday Mar. 17, 2023 **

*Students who withdraw from the course do so by using the Campus Connect system. (<http://campusconnect.depaul.edu>). Withdrawals processed via this system are effective the day on which they are made. Simply ceasing to attend, or notifying the instructor, or nonpayment of tuition, does not constitute an official withdrawal from class and will result in academic as well as financial penalty.

** Exam dates are tentative and subject to change.

A complete list of important dates is available at <https://academics.depaul.edu/calendar/Pages/default.aspx> be sure to select Winter Term

SCHEDULE AS OF 12/15/2023 (SUBJECT TO CHANGE)

Week	
1 Jan. 6	Course Overview Computer system and algorithmic solutions for computational problems (Chapter 1) Python interpreter, variables, expressions, assignments, basic data types: int, float, string (Chapter 2) First Python program (Chapter 3)
2 Jan. 13	List data type, operations and functions (Chapter 2) Object conversion, variable representation in memory, decision statements (Chapter 3)
3 Jan. 20	Iteration statements, user-defined functions, parameter passing (Chapter 3) Formatted output, file I/O, reading files (Chapter 4)
4 Jan. 27	More on reading and writing files (Chapter 4) More control flow: multi-way conditions, loop patterns (Chapter 5)
5 Feb. 3	Nested loops, two dimensional lists (Chapter 5)
6 Feb. 10	Midterm exam After midterm, while loops

7 Feb. 17	Dictionaries, tuples, sets, random modules, string and character encoding (Chapter 6)
8 Feb. 24	Scope and global and local namespaces, encapsulation in functions, exceptions modules (Chapter 7) Errors and exceptions (Chapter 4)
9 Mar. 3	Object-oriented programming: user-defined classes, overloaded operators, constructors, user-defined exceptions and testing classes (Chapter 8)
10 Mar. 10	Object-oriented programming: container classes and inheritance (Chapter 8)
11 Mar. 17	Final exam

ASSIGNMENTS

- There will be 8 assignments.
- All assignment descriptions and requirements will be posted in D2L only.
- Each assignment will have a specific due date and time
- All assignments must be submitted via D2L Submissions.
- Late submission of assignments will **not** be accepted. If you wish to receive partial credit for an assignment, you must submit the work completed (with no syntax errors and executable code) by the due date deadline.
- The lowest assignment grade will be dropped.

GRADING

Weights:

Assignments (Homework): 35%

Proctored Midterm Exam: 30%

Proctored Final Exam: 35%

Grading scale:

Grade	Percentage
A	100 – 93
A-	92 – 90
B+	89 – 87
B	86 – 83
B-	82 – 80

Grade	Percentage
C+	79 – 77
C	76 – 73
C-	72 – 70
D+	69 – 67
D	66 – 60
F	59 – 0

GRADING NOTE: A score of below 50% on the final exam cannot result in a course letter grade above C-.

EXAMS

Exams will be taken in D2L and will take place in the classroom or a CDM computer lab. Make-up exams will not be given. If exceptional circumstances arise, please contact your instructor as soon as possible before the exam to discuss alternative scheduling arrangements.

School Policies

CHANGES TO SYLLABUS

This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be thoroughly addressed during class, posted under Announcements in D2L and sent via email.

COVID-19 HEALTH AND SAFETY PRECAUTIONS

The health and safety of everyone at DePaul depend on the cooperation of all who come to campus. By taking care of yourself, you protect the entire community. DePaul's COVID-19 response plans are based on the latest guidance from the Centers for Disease Control and Prevention, the Chicago Department of Public Health and the university's medical advisor from AMITA Health.

Mandatory protocols must be followed by DePaul students, faculty and staff at all times on both campuses <https://resources.depaul.edu/coronavirus/guidance/health-safety-practices/Pages/default.aspx>.

RESPECT FOR DIVERSITY AND INCLUSION AT DEPAUL UNIVERSITY AS ALIGNED WITH OUR VINCENTIAN VALUES

At DePaul, our mission calls us to explore "what must be done" in order to respect the inherent dignity and identity of each human person. We value diversity because it is part of our history, our traditions and our future. We see diversity as an asset and a strength that adds to the richness of classroom learning. In my course, I strive to include diverse authors, perspectives and teaching pedagogies. I also encourage open dialogue and spaces for students to express their unique identities and perspectives. I am open to having difficult conversations and I will strive to create an inclusive classroom that values all perspectives. If at any time, the classroom experience does not live up to this expectation, please feel free to contact me via email or during office hours.

ONLINE COURSE EVALUATIONS

Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation. Please see <https://resources.depaul.edu/teaching-commons/teaching/Pages/online-teaching-evaluations.aspx> for additional information.

ACADEMIC INTEGRITY AND PLAGIARISM

This course will be subject to the university's academic integrity policy. All students are expected to abide by the University's Academic Integrity Policy which prohibits cheating and other misconduct in student coursework. Publicly sharing or posting online any prior or current materials from this course (including exam questions or answers), is considered to be providing unauthorized assistance prohibited by the policy. Both students who share/post and students who access or use such materials are

considered to be cheating under the Policy and will be subject to sanctions for violations of Academic Integrity.

More information can be found at <https://resources.depaul.edu/teaching-commons/teaching/academic-integrity/Pages/default.aspx>

POSTING WORK ON ONLINE SITES, SUCH AS HERO

All students are expected to abide by the University's Academic Integrity Policy which prohibits cheating and other misconduct in student coursework. Publicly sharing or posting online any prior or current materials from this course (including exam questions or answers), is considered to be providing unauthorized assistance prohibited by the policy. Both students who share/post and students who access or use such materials are considered to be cheating under the Policy and will be subject to sanctions for violations of Academic Integrity.

ACADEMIC POLICIES

All students are required to manage their class schedules each term in accordance with the deadlines for enrolling and withdrawing as indicated in the University Academic Calendar. Information on enrollment, withdrawal, grading and incompletes can be found at:

<http://www.cdm.depaul.edu/Current%20Students/Pages/PoliciesandProcedures.aspx>

INCOMPLETE GRADES

An incomplete grade is a special, temporary grade that may be assigned by an instructor when unforeseeable circumstances prevent a student from completing course requirements by the end of the term and when otherwise the student had a record of satisfactory progress in the course. All incomplete requests must be approved by the instructor of the course and a CDM Associate Dean. Only exceptions cases will receive such approval. Information about the Incomplete Grades policy can be found at

<http://www.cdm.depaul.edu/Current%20Students/Pages/Grading-Policies.aspx>

PREFERRED NAME & GENDER PRONOUNS

Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the quarter so that I may make appropriate changes to my records. Please also note that students may choose to identify within the University community with a preferred first name that differs from their legal name and may also update their gender. The preferred first name will appear in University related systems and documents except where the use of the legal name is necessitated or required by University business or legal need. For more information and instructions on how to do so, please see the Student Preferred Name and Gender Policy at <http://policies.depaul.edu/policy/policy.aspx?pid=332>

STUDENTS WITH DISABILITIES

Students seeking disability-related accommodations are required to register with DePaul's Center for Students with Disabilities (CSD) enabling them to access accommodations and support services to assist with their success. There are two office locations:

- Loop Campus (312) 362-8002
- Lincoln Park Campus (773) 325-1677
- Email: csd@depaul.edu

Students who register with the Center for Students with Disabilities are also invited to contact Dr. Gregory Moorhead, Director of the Center, privately to discuss how he may assist in facilitating the

accommodations to be used in a course. This is best done early in the term. The conversation will remain confidential to the extent possible.

Please see <https://offices.depaul.edu/student-affairs/about/departments/Pages/csd.aspx> for Services and Contact Information.