

Syllabus

CSC 242-801

Introduction to Computer Science II

Winter 2024

Lectures: Wednesday, 5:45 - 9pm, CDM00801

Brian O'Donnell

Labs: Thursday, 5:00 - 6:30pm, CDM00819

Lab instructor: Kavya Repalle

Discussion/Message via Discord

We will use Discord to communicate in between class meetings. It is very important that you sign in, introduce yourself in the #intros channel and participate in the discussion:

- <https://discord.gg/FMNttsbNtR>
- Post questions/responses in the appropriate channel
- Can also direct message (DM) the instructor and can attach .py files (drag your .py into the message)
- Do *not* email me .py files, I can't receive them
- Supports *markdown*, use single slant quotes for code or triple slant quotes (```) around multiline code. The slant quote is on the key with the tilde ~ (above Tab).
- For personal or grade issues, contact the instructor using *email*.

Office Hours

Office hours will be held

- Tuesday 4:30-5:15pm, Thursday 4:30-5:15PM
- On the Discord Server in the "Office Hours" voice channel

Communication

Outside of office hours the best way to contact me will be via email and through Discord. Please send email the bodonne3@depaul.edu and begin the subject with CSC 242. I will address emails as quickly as I am able but please allow 24 hours.

Course web sites

The web site used for this course is Desire2Learn (D2L). To log onto the D2L page visit <https://d2l.depaul.edu/>. Lecture notes, programming assignments, lab assignments, study guides for the midterm and final exam, and other course materials will be available through the D2L site. There will also be links to course recordings. While you are expected to attend all classes, the recordings can be useful for review.

Prerequisites

It is very important that students taking CSC 242 have CSC 241 or an equivalent class.

In particular, the following text is helpful for the syllabus:

You must have taken CSC 241: Introduction to Computer Science I or an equivalent course that introduces problem-solving techniques and programming Python and earned a passing grade (C- or better). I will also assume that:

- You know how to create, debug, compile, and run Python, and you use a reasonable coding style (i.e. your code is easy to read and relatively concise)
- You know Python's basic control structures and types
- You can solve basic algorithmic problems

The abilities of the students vary significantly quarter to quarter. This impacts the topics that can be covered (see the week-by-week topics section below). Winter quarter students tend to be the strongest and Fall quarter students the weakest.

Course topics and learning goals

This course is the second of a two-course sequence introducing computer science skills, including problem solving, algorithm development, recursion, and programming using Python. In this course, we will apply these skills in several application areas of computer science: graphical user interface (GUI) development, database development, and Internet and distributed computing. The concept of a class and object-oriented programming will be motivated and introduced.

After you have taken this class:

- You will strengthen your Python programming skills
- You will know how to design classes and understand the fundamental principles of object-oriented programming

- You will be able to design basic graphical user interfaces
- You will be able to apply recursion as a problem-solving and programming technique
- You will be able to write simple Internet client programs
- You will have a basic understanding of the database API

Course calendar

The following gives all the important dates for this course. The topics covered are subject to change.

Week	Topic	Chapter(s)
1 – January 5	Namespaces and scope; an introduction to object-oriented programming	7 and 8
2 – January 12	Object-oriented programming	8
3 – January 19	Object-oriented programming and an introduction to graphical-user interface development and event-driven programming	8 and 9
4 – January 26	Graphical-user interfaces	9
5 – February 2	Recursion and the midterm	10
6 – February 9	A discussion of the midterm; recursion, sorting, and searching	10
7 – February 16	More about recursion	10
8 – February 23	An introduction to HTML and WWW application development	11
9 – March 1	WWW application development	11
10 – March 8	The database API	12

Textbook

[*Introduction to Computing Using Python, 2nd edition*](#) (ebook) Ljubomir Perkovic, Wiley, 2015. ISBN (ebook): 978-1-118-89105-6. Please note that this is the ebook version of the 2nd edition. It contains some material that is not in the printed book.

Grading policy

Course assessments include lab attendance, programming assignments, and a midterm and final exam. The course grade will be computed as follows:

Assessment	Percentage
Lab attendance and exercises	10 %
Programming assignments	20 %
Midterm exam	30 %
Final exam	40 %

Programming is not a spectator sport! In order to do well in this class, you must attend the lectures and labs regularly, participate in class discussions, read the chapters in the book as indicated in the homework assignment, start work on the assignments early, and ask questions early and often. The answers to the programming assignment and the lab and exam questions should be written in a way that is rigorous, clear, and concise.

Lab attendance and exercises

Each week you will have a lab session conducted by our teaching assistant. Your attendance at the lab session and completion of lab exercises is required and will count for the portion of the grade indicated above. No late lab submissions are accepted for any reason. Your lowest lab score will be dropped in the calculation of your course grade.

Programming assignments

Each week you will have a programming assignment. You can consult with your classmates, the lab assistant, the instructor, and the CDM tutors on the programming assignments, but you may not under any circumstances submit code that you have not helped to write nor may you consult anyone beyond those specified when completing your assignments. Each programming assignment will have a posted deadline, specified on the assignment. No late assignments are accepted for any reason. Your lowest assignment score will be dropped in the calculation of your course grade.

Midterm and final exams

The midterm and final exams will be cumulative.

The midterm exam will take place **the 6th week of class**.

The final exam will take place on **the 11th week of class**.

Both exams will be conducted in a lab and will require you to write Python code. Make-up exams will not be given. If you wish to petition for a make-up exam, you must notify me in advance and provide documented evidence of the emergency that will cause you to miss the exam. Failure to contact me in advance of the exam date and time will disqualify you from being allowed to take a make-up exam. If a make-up exam is granted, it will be of a form of my choosing.

Academic integrity

The course adheres to the DePaul University's Academic Integrity Policy. For complete information about Academic Integrity at DePaul University, please see: <http://academicintegrity.depaul.edu/>.

Cheating is any action that violates university norms or instructor's guidelines for the preparation and submission of assignments. This includes, but is not limited to, unauthorized access to examination materials prior to the examination itself; use or possession of unauthorized materials during the examination or quiz; having someone take an examination in one's place; copying from another student; unauthorized assistance to another student; or acceptance of such assistance. Plagiarism involves the presentation of the work of another as one's own. Plagiarism includes, but is not limited to the following: the direct copying of any source, such as written and verbal material, computer files, audio disks, video programs or musical scores, whether published or unpublished, in whole or part, without proper acknowledgment that it is someone else's; copying of any source in whole or part with only minor changes in wording or syntax, even with acknowledgment; submitting as one's own work a report, examination paper, computer file, lab report or other assignment that has been prepared by someone else (including research papers purchased from any other person or agency); the paraphrasing of another's work or ideas without proper acknowledgment; working so closely with another person so as to produce identical code.

The use of others' web/publication content (text, graphics, code) is regarded as plagiarism if credit is not given (see the above description of plagiarism). When you directly quote someone's work, you must put it in quotation marks. Without such quotations and reference, it is regarded as an act of plagiarism (see the above description of plagiarism). Using materials that the student prepared for other purposes (e.g., for another course or for his/her work) needs the course instructor's prior permission.

A charge of cheating and/or plagiarism is always a serious matter. It can result in an automatic F in the course and possible expulsion.

Incomplete

An incomplete grade is given only for an exceptional reason such as a death in the family, a serious illness, etc. Any such reason must be documented. Any incomplete request must be made at least two weeks before the final, and approved by the Dean of the College of Computing and Digital Media. Any consequences resulting from a poor grade for the course will not be considered as valid reasons for such a request.