CSC 241-405: Introduction to Computer Science I

Syllabus (Fall 2019/2020)

Updated: 9/11/2019 (v2)

Class: Tue/Thursday, 1:30pm – 3pm, 14 E. Jackson, room 512

Instructor: Anthony Zoko

Lab: Wednesday, 8:30am – 10am, 14 E. Jackson, room 512

Lab instructor: Michelle Wei Wu

Contact information

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Office hours

Tuesday 4 pm – 5:30pm Loop
By Appointment (1 day notice)

My office hours are held in room 612 of the CDM building. I am available during office hours in person or by phone. I am available via email at any time.

Please make use of my office hours! Asking questions about the assessments, class notes, labs, or the readings can improve your understanding enormously. It will also let me know if I need to review a topic with the class. If you want to talk to me during my office hours but are unable to do so for any reasons, please contact me to make an appointment outside those 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/. Class 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.

We also use CodeLab for this course, which can be found at http://www.turingscraft.com/. There is a page that provides information about logging into CodeLab and using the site for assignments that can be found on the D2L site. Please make sure that you review it.

Prerequisites

Ordinarily the prerequisite for this class is MAT 130: Precalculus or an equivalent high-school or college course covering algebra and precalculus. This will be waived for this section, but students without algebra and precalculus are responsible for working with the instructor, the course TA, and tutors in order to make up any material needed for the course assessments.

Course topics and learning goals

This course is the first of a two-course sequence introducing computer science. The focus of the course is on problem solving, algorithm development, and structured and object-oriented programming using Python and the Python API (application programming interface), all in the context of building computer applications.

In the first course we will focus on structured programming and learn how and when to use conditionals, loops, and functional and modular abstractions.

After you have taken this class:

1. You will understand that a main focus of computer science is developing applications for computer systems.
2. You will have stronger problem solving skills.
3. You will know how to develop algorithmic solutions for basic computational problems.
4. You will understand fundamental programming structures such as expressions, assignments, decision and iteration structures, functions and modules.
5. You will have basic Python programming skills.
6. You will be prepared for the second course in the sequence, CSC 242: Introduction to Computer Science II

Course calendar

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

Week	Date	Topic/Deadline
1	Thursday, September 12th, 2019	Introduction to the course
2	Week of Tuesday, September 17th	Python Input structures, type operators, and numeric types, Decision structures, strings, and lists Iteration structures *The last day to add classes*

3	Week of Tuesday, September 24th	Functions and strings Modules and objects, formatted output *Last day to drop with no penalty*
4	Week of Tuesday, October 1st	File processing Exceptions and error handling
5	Week of Tuesday October 8th	More about decision structures and loop patterns (iterated loops) Loop patterns (counter and accumulator loops) and review for the midterm
6	Week of Tuesday, October 15th	**Midterm exam: 1:30 - 3 pm**
7	Week of Tuesday, October 22nd	Discussion of the midterm More loop patterns (nested loops, multidimensional lists while loops, infinite and interactive loops) specialized statements (break, continue, pass)
8	Week of Tuesday, October 29th	Dictionaries *Last day to withdraw from classes*
9	Week of Tuesday, November 5th,	Other collection types (tuples and sets) and character encodings More functions, modules, and module namespaces
10	Week of Tuesday, November 12th	More about module namespaces and the random module **Final exam review session**
11	Thursday, November 211st	**Final exam: 11:30am - 1:45 pm**

Textbook

The required textbook for the course is **Introduction to Computing using Python: An Application Development Focus, Second Edition**, Ljubomir Perković, John Wiley & Sons, 2015. Please buy the electronic version of the text since it contains case studies that we will be using. The electronic text has ISBN 978-1-118-89105-6.

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	25 %
Midterm exam	32 %
Final exam	33 %

All students will be required to read and adhere to the Academic Integrity pledge. The Academic Integrity pledge will be posted on the D2L site. Students that violate this agreement are violating the Academic Integrity policy of DePaul University. See the section on Academic Integrity below for more information about that policy and penalties for violating it.

In order to do well in this class, you must attend the class sessions 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.

You may decide to not come physically for up to two lab sessions but must have the lab submitted by the time the lab is due. After two missed lab sessions it is an automatic 0 for that lab.

Programming assignments

Each week you will have a programming assignment. You can consult with your homework partners, 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. 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.

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. Students complete the evaluation online in Campus Connect: http://campusconnect.depaul.edu/

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.