

Syllabus

CSC 241 Introduction to Computer Science I

COURSE MANAGEMENT SYSTEM

All material for this course will be available using D2L (<https://d2l.depaul.edu>) Information on course materials and the course is available via D2L on the course home page.

INSTRUCTOR LOCATION AND EMAIL INFORMATION

Jean D. Hop

Office: Daley Building (State Street), 200B

Email: csc241hop@gmail.com

COURSE DESCRIPTION

This course is an introduction to problem solving, algorithms and structured programming using a higher-level programming language. The course will focus on skills for developing algorithms, and for writing and debugging programs. Students will learn how and when to use loops, conditionals, and functional abstractions in the context of problems motivated by real world applications.

PREREQUISITES

MAT 130 or Mathematics Diagnostic Test placement into MAT 140.

Ordinarily the prerequisite for this class is MAT 130 or Mathematics Diagnostic Test placement into MAT140 or an equivalent high-school or college course covering algebra and pre-calculus. This will be waived for this section, but students without algebra and pre-calculus are responsible for working with the instructor, the course TA, and tutors in order to make up any material needed for the course assessment.

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 taking this class, students will be able to:

1. Define the main focus of computer science as developing applications for computer systems
2. Demonstrate problem solving skills
3. Solve basic computational problems using algorithms
4. Demonstrate an understanding of fundamental programming structures such as expressions, assignments, decision and iteration structures, functions and modules.
5. Apply basic Python programming to solve programming problems

6. Demonstrate the knowledge necessary to enroll in the second course in the sequence, CSC 242: Introduction to Computer Science II

COURSE MATERIALS (required)

Textbook (required)

[*Introduction to Computer Science with Python, 2nd edition*](#) (eBook version) Ljubomir Perkovic, Wiley, 2015. ISBN (eBook): 978-1-118-89105-6

The print version no longer has the case studies (some of which are used in the course). If a student buys a print copy and needs access to the case studies, they are available as an eBook supplement (currently for \$12.40) at <http://store.vitalsource.com/search?q=9781119185390&search.x=26&search.y=9&search=search>. The ISBN for the supplement is 9781119185390.

GRADING

Components

Grades are awarded as follows:

	Percent of final grade
Lab Attendance and Exercises	10%
Programming Assignments	25%
Exam: Midterm	30%
Exam: Final Exam	30%
Participation/Attendance	5%

Lab Attendance and Exercises

Lab sessions are weekly and attendance is required. Lab exercises must be completed in the lab session. Late lab submissions are not accepted under any circumstances. Your lowest lab score will be dropped in the calculation of your course grade. The rubric used for grading your lab work can be found in Appendix D of this syllabus.

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.

Programming and lab assignments will be graded with comments according to the programming rubric presented in Appendix B in this syllabus and returned within one week of the assignment due date. Solutions for each programming assignment will be made available within 24-hours of the drop box closure.

Exams: Midterm and Final

The midterm and final exams will be cumulative. Both exams will be conducted in a lab and will

require you to write Python code. Exams will be graded and returned with comments according to the rubric presented in Appendix B of this syllabus within one week of the exam. Solutions for the exams will be made available within 24-hours of the drop box closure.

Participation

Attendance is mandatory and is used to determine, in part, your participation grade. Students arriving after attendance has been taken will be marked absent for that session. Students are expected to have taken care of bathroom breaks, taken all necessary phone calls and consumed snacks prior to class time. Excessive coming and going during class time will be reflected in that day's attendance. Active participation in the class is expected. This takes the form of contributing to class discussions, answering questions and working with fellow students to solve problems presented in class. Participation evaluation will be judged, in part, on the self-evaluation form presented in Appendix C of this syllabus.

Letter Grades and Percentages

Grade	Percent	Grade	Percent	Grade	Percent	Grade	Percent
A	100-93	B+	89-87	C+	79-77	D+	69-67
A-	92-90	B	86-83	C	76-73	D	66-60
		B-	82-80	C-	72-70	F	59-0

COMMUNICATION WITH YOUR INSTRUCTOR

Office Hours

Office hours are posted on the course home page. Students are welcome to use those hours to ask questions, clarify concepts, or get homework help.

Email and Email Response Time

For questions during non-office hours, email can be sent to csc241hop@gmail.com. Questions and comments sent to this email will be answered within 24-hours except on weekends. On weekends questions will be answered the following Monday. If the questions are emailed up to 24 hours prior to class time, answers might be given in person. There are no guarantees for email questions/comments sent to any address except for the above.

NOTE: It is important to realize waiting until a few hours before an assignment due date to ask for help via email will probably not result in a timely response since I seldom read email in the evening.

COURSE POLICIES

Assignment and exam grading

Programs in the homework assignments and the exams will be based on the criteria described in Appendix B of this syllabus.

Late submissions

Each assignment and lab has a posted deadline upon which the drop box will close. Under no circumstances will assignments be accepted once the drop box has closed. Missing assignments are given a score of 0. The lowest grade assignment and lab is dropped from the grading calculations.

Assignment Submissions

All assignments, without exception, are to be submitted to the drop box. Assignments sent by email will not be accepted.

Make-up Exams

Make-up exams will not be given. If you wish to petition for a make-up exam, you must notify the instructor 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 determined by the instructor.

Multiple submissions to the drop box

In the case of multiple submissions to the drop box, only the most recent submission will be graded. Under no circumstances will partial solutions to the problems be accepted in multiple files.

Attendance

Attendance is mandatory and is taken at the start of class. If you arrive after your name has been called, you will be considered as absent for that class.

Participation

Participation cannot take place unless students are to be focused on the material at hand and keep Internet use limited to the subject and phone use to a bare minimum. Under no circumstances should the student have social media running during the class. This includes automatic updates to their laptops. Phones should be silenced and not brought out during class. Students who use their phones or demonstrate inappropriate Internet use during class time will lose participation points.

Missing grades or contested scores

Students are responsible for the accurate recording of their grades. Any missing grades or contested scores must be addressed within one week of the grade being posted. This includes the homework and lab assignments as well as the exams. After a week, the missing grade or contested score stands as posted.

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.

Online Course Evaluations

Instructor and course evaluations provide valuable feedback that can improve teaching and learning. The greater the level of participation, the more useful the results. As students, you are in the unique position to view the instructor over time. Your comments about what works and what doesn't can help faculty build on the elements of the course that are strong and improve those that are weak. Isolated comments from

students and instructors' peers may also be helpful, but evaluation results based on high response rates⁵ may be statistically reliable (believable). As you experience this course and material, think about how your learning is impacted. Your honest opinions about your experience in and commitment to the course and your learning may help improve some components of the course for the next group of students. Positive comments also show the department chairs and college deans the commitment of instructors to the university and teaching evaluation results are one component used in annual performance reviews (including salary raises and promotion/tenure). The evaluation of the instructor and course provides you an opportunity to make your voice heard on an important issue –the quality of teaching at DePaul. Don't miss this opportunity to provide feedback!

Academic Integrity and Plagiarism

This course will be subject to the academic integrity policy passed by faculty. More information can be found at <http://academicintegrity.depaul.edu/>.

The university and school policy on plagiarism can be summarized as follows: Students in this course should be aware of the strong sanctions that can be imposed against someone guilty of plagiarism. If proven, a charge of plagiarism could result in an automatic F in the course and possible expulsion. The strongest of sanctions will be imposed on anyone who submits as his/her own work any assignment which has been prepared by someone else. If you have any questions or doubts about what plagiarism entails or how to properly acknowledge source materials be sure to consult the instructor.

Withdrawal

Students who withdraw from the course do so by using the Campus Connection 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.

Retroactive Withdrawal

This policy exists to assist students for whom extenuating circumstances prevented them from meeting the withdrawal deadline. During their college career students may be allowed one medical/personal administrative withdrawal and one college office administrative withdrawal, each for one or more courses in a single term. Repeated requests will not be considered. Submitting an appeal for retroactive withdrawal does not guarantee approval.

Grade Appeals

College office appeals for CDM students must be submitted online via MyCDM.

The deadlines for submitting appeals are as follows:

Autumn Quarter: Last day of the last final exam of the subsequent winter quarter

Winter Quarter: Last day of the last final exam of the subsequent spring quarter

Spring Quarter: Last day of the last final exam of the subsequent autumn quarter

Summer Terms: Last day of the last final exam of the subsequent autumn quarter

Excused Absence

In order to petition for an excused absence, students who miss class due to illness or significant personal circumstances should complete the Absence Notification process through the Dean of Students office. The form can be accessed at <http://studentaffairs.depaul.edu/dos/forms.html>. Students must submit supporting documentation alongside the form. The professor reserves the sole right whether to offer an excused absence and/or academic accommodations for an excused absence.

Incomplete

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.

CDM policy **requires the student to initiate the request for incomplete grade before the end of the term in which the course is taken.** Prior to submitting the incomplete request, the student must discuss the circumstances with the instructor. Students may initiate the incomplete request process in [MyCDM](#). All incomplete requests **MUST BE** approved by the instructor of the course and a CDM Associate Dean.

Only exceptional cases will receive such approval. If approved, students are required to complete all remaining course requirement independently in consultation with the instructor by the deadline indicated on the incomplete request form. By default, an incomplete grade will automatically change to a grade of F after two quarters have elapsed (excluding summer) unless another grade is recorded by the instructor. An incomplete grade does NOT grant the student permission to attend the same course in a future quarter.

Students with Disabilities

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential. To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter (preferably within the first week of class), and make sure that you have contacted the Center for Students with Disabilities (CSD) at: Student Center, LPC, Suite #370 Phone number: (773)325.1677 Fax: (773)325.3720 TTY:(773)325.7296

Week	Topic	Detail	Book
1	Introduction to computer science and programming Data in Python	<ul style="list-style-type: none"> • Intro to CS • Expressions • Basic Data Types (Integers, strings, lists, Booleans) 	Chapters 1, 2
2	Input and Output Control Flow	<ul style="list-style-type: none"> • Basic input/output • Basic control flow: <ul style="list-style-type: none"> ○ one-sided if ○ simple for loop • Function calls/used-defined functions 	Chapter 3
3	Data Types	<ul style="list-style-type: none"> • More on lists • More on strings • Types, conversion • Modules 	Chapter 3 Sections 4.1, 4.2
4	File Input/Output	<ul style="list-style-type: none"> • Writing, reading, appending to file • Errors • Debugging 	Chapter 4
5	Midterm	<ul style="list-style-type: none"> • Review 	
6	Exceptions	<ul style="list-style-type: none"> • Catching exceptions, raising exceptions, using exceptions 	Section 4.4
7-8	Programming Patterns	<ul style="list-style-type: none"> • Systematic summary of programming patterns, introducing nested loops and multi-dimensional lists • while loop 	Chapter 5
9	More types	<ul style="list-style-type: none"> • Dictionaries, sets, tuples 	Chapter 6
10	Functions and Namespaces Review for final	<ul style="list-style-type: none"> • Program stack • Scope • Global/local variables 	Chapter 7

Appendix A: Academic Integrity Statement

CSC 241 Introduction to Computer Science I

Marcus Schaefer

Academic Integrity

Our course adheres to the university [Academic Integrity Policy](#), the following is an excerpt from the policy:

Cheating: 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: Plagiarism is a major form of academic dishonesty involving 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 acknowledgement that it is someone else's.
- Copying of any source in whole or part without proper acknowledgement.
- Submitting as one's own work a report, examination paper, computer file, lab report or other assignment that has been prepared by someone else. This includes research papers purchased from any other person or agency.
- The paraphrasing of another's work or ideas without proper acknowledgement.

Complicity: Complicity is any intentional attempt to facilitate any of the violations described above. This includes but is not limited to allowing another student to copy from a paper or test document; providing any kind of material—including one's research, data, or writing—to another student if one believes it might be misrepresented to a teacher or university official; providing information about or answers to test questions.

A charge of cheating and/or plagiarism is always a serious matter. If proven, it can result in an automatic F in the course and, in case of a repeated violation, possible suspension or expulsion.

For **homework** this means that while you can talk to other students about the class material in general, you *may not* talk about your homework solutions; you *may not* share your homework solutions, either in written or electronic form. Any work you submit with your name on it needs to have been prepared solely by yourself. The only people you should talk to about your homework are the instructor, the lab tutor, and CDM tutors. The only resources you should be using are the textbook, and the materials linked off the class web-page.

For **lab exercises**, you are encouraged to talk to other students and solve problems in collaboration. In that case, you should still write up your own solutions (no copy/paste), and mention on your submission who you collaborated with.

For **exams** only the materials explicitly allowed by the instructor may be used.

Using materials prepared for other purposes (e.g., another course or work) needs the course instructor's prior permission. 9

In case of questions, please contact me.

I, _____ (print name), acknowledge that I have familiarized myself with the academic integrity policy and understand what the requirements of academic honesty.

Signature: _____

Date: _____

Appendix B: Programming Rubric

Homework assignments submitted in formats other than .py receive a score of 0. The following rubric will be used to determine the score for each program in the homework assignment with the total of these scores being the score for the assignment.

Criteria	Excellent 2 points	Satisfactory 1 point	Poor 0 points
LABELING	N/A	File correctly named, student name in file, any collaborators listed in file, functions named according to assignment description	File incorrectly named or student name not in file or collaborators not identified or programs misnamed
FUNCTION 1: COMMENTS	Docstring appropriate, short description given	Poorly written docstring or function description	Missing docstring or description for function
FUNCTION 1: CORRECTNESS	100% correct or minor errors	Runs with many minor or a major error	Runs but all output incorrect or does not run due to syntax errors
FUNCTION 1: EFFICIENCY	No unnecessary variables or code, variables well-named	One or more extra variables, one or more lines of extra code to execute logic, poorly named variables	Many extra variables or all variables poorly named, or many lines of extraneous code to execute logic of function

Appendix C: Participation Self-Evaluation Form

Class Participation Self-Evaluation Form

Your Name: _____

Note: This form does not independently determine your self-participation grade, but what you write here will be considered when determining this grade.

Attendance -Physical	Attended (or was officially excused) for every class Arrived on-time. Did not leave early.	---	Missed a class or two unnecessarily OR Arrived late more than once; OR Left early once without solid reason;	---	Missed two or more classes; OR typically arrived late OR Left early more than once	---	Missed two or more classes; AND (typically arrived late ; OR Left early more than once)	---	Attended class a few times.	--	Did not attend class.	---
Attendance -Mental	Always actively involved in whatever classroom activity was going on	---	Always aware of classroom activity; Usually actively involved	---	Usually aware of classroom activity; Occasionally preoccupied with other concerns	---	Sometimes aware of classroom activity. Sometimes actively involved in other concerns having nothing to do with the class	---	---	--	Did not attend class	---
Classroom Etiquette	Always turned off my cell phone. Did not use the computer inappropriately or the cell phone during lecture.	---	Always turned off my cell phone. Did not use the computer inappropriately or cell phone in lecture.	---	My phone never went off. I never used computer during a lecture. I minimized texting during class.	---	I was regularly online texting, gaming, shopping, surfing, or emailing, but I was careful to do this quietly and not disturb others.	---	My phone went off once or twice during class OR I texted regularly OR I played a game or two on the computer during class.	--	I was almost always texting or using the computer inappropriately.	---
Lecture participation-activity level	At all class sessions, made relevant, thoughtful contributions to class lecture / discussions	---	During most class sessions, made relevant, thoughtful contributions to class lecture / discussions	---	Occasionally made relevant, thoughtful contributions to class lecture / discussions	---	Commented once or twice during class.	---	Never added to class discussion during lecture time.	--	Did not attend class.	---

IMPORTANT: On the back, please write anything else you would like me to know about your performance in this class.

Appendix D: Lab Rubric

Grading rubric for the CSC 241 labs - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Grading rubric for the CSC 241 labs

facweb.cdm.depaul.edu/asettle/csc241/info/labRubric.html

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CSC 241: Introduction to Computer Science I

Lab grading rubric

This page describes a grading rubric for the lab sessions associated with the course.

Each lab session is worth 10 points. There are two things that contribute to your grade in the lab: your attendance at the lab session and your submission of solutions to the lab exercises. In order to receive full points for attendance, you must arrive no later than 11:55 am, leave when the exercises are complete or 12:40 pm whichever comes later, and work the entire time on the lab exercises or some other activity associated with the course. To receive full points for the lab exercises, you must submit a file containing a solution to all exercises on the lab assignment by the deadline specified in the exercise set. A specific rubric for each area is given below:

Exercise completion	Points earned
Submits a file by the deadline containing a solution for all of the lab exercises	5
Submits a file by the deadline containing a solution to a majority of the lab exercises	4
Submits a file by the deadline containing at least a partial solution to a majority of the lab exercises	3
Submits a file by the deadline containing at least a partial solution to some of the lab exercises	2
Does not submit any solutions to the lab exercises	0

Lab attendance	Points earned
Arrives on time (i.e. no later than 11:55 am), stays for the duration of the lab (i.e. when the exercises are done but no earlier than 12:40 pm), and works the entire time either on the lab exercises or on something related to the course, including doing the assignment, reading the textbook or other Python documentation, or studying for exams.	5
Arrives on time (i.e. no later than 11:55 am), stays for the duration of the lab (i.e. when the exercises are done but no earlier than 12:40 pm), but does not work the entire time on something related to the course, including doing the assignment, reading the textbook or other Python documentation, or studying for exams.	4
Arrives late (i.e. later than 11:55 am) or does not stay for the duration of the lab (i.e. leaves before the lab exercises are complete and before 45 minutes have passed) but not both, and works the entire time on something related to the course, including doing the assignment, reading the textbook or other Python documentation, or studying for exams.	3
Arrives late (i.e. later than 11:55 am) or does not stay for the duration of the lab (i.e. leaves before the lab exercises are complete and before 45 minutes have passed) but not both, and does not work the entire time on something related to the course, including doing the assignment, reading the textbook or other Python documentation, or studying for exams.	2
Arrives late (i.e. later than 11:55 am) and does not stay for the duration of the lab (i.e. before the lab exercises are complete and before 45 minutes have passed).	1
Does not attend the lab	0

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