MCS 260 – Introduction to Computer Science – Fall 2021
Emily Dumas

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1. BASIC COURSE INFORMATION

Course Web Page

While the course is running
https://uic.blackboard.com/ultra/courses/_202683_1/cl/outline

After the course ends (permanent archive) & backup in case of Blackboard outage
https://dumas.io/teaching/2021/fall/mcs260/

Lecture sections
(50 min, register for one)

MWF 10am	MWF 2pm
CRN 42917	CRN 12337
LCC 004	GH 205

Lab sections for students in 10am lecture
(110 min, register for one)

Tue 10am	Thu 10am
CRN 43624	CRN 42919
SES 205	SES 205
J. Joyce	J. Joyce

Lab sections for students in 2pm lecture
(110 min, register for one)

Tue 2pm	Thu 8am
CRN 39191	CRN 12334
SCE 408	SES 205
J. Joyce	K. Viswanathan

Instructor Emily Dumas <ddumas@uic.edu>
Office hours MWF 11:00-11:50am
Office 722 SEO
Zoom office https://uic.zoom.us/my/daviddumas

TA Johnny Joyce <jjoyce22@uic.edu>
Office hours Mon 11am and Wed 2pm
Office 609 SEO
Zoom office https://uic.zoom.us/j/85927135789?pwd=MFVFc2xQS2tnVDhBU0ZXNEoxSVZ1dz09

TA Kylash Viswanathan <kviswa5@uic.edu>
Office hours Tue 8:50-9:50am in person, Thu 10:00-10:50am on Zoom
Office MSLC (3rd floor of SES)
Zoom office https://uic.zoom.us/j/85031845630?pwd=RGxxOEtZNkVGWXEzWEdGS0QwOHhFUT09

2. WELCOME STATEMENT

Welcome to MCS 260. As your instructor, my main goals are to

(1) **Treat everyone with dignity and respect**, to create a positive and welcoming learning environment.

(2) **Make the course rules clear** so that there are no surprises about deadlines, grading, or other policies.

(3) **Offer effective instruction and assessments**, so that you have a clear path to learning the material and to ensure that your progress is assessed carefully and fairly.

Because the syllabus is the definitive document describing course policy, it is important for everyone to read it carefully. Of course I will also announce upcoming deadlines and make other policy reminders in class from time to time.

3. COURSE CONTENT

This course is an introduction to computer science that assumes no prerequisite knowledge of computer programming or computer science concepts. The course focuses primarily on teaching the basics of the Python programming language (version 3). A secondary goal is to discuss general topics from computer science encountered along the way.

A list of topics for each lecture may be found on the course web site.

4. PREREQUISITES

- Credit or concurrent registration in Math 180.

5. REQUIRED MATERIALS

To complete the course work you will need access to a computer with certain software installed. We support computers running Windows, MacOS, or Linux. A software list and installation guide can be found on the course web page.

UIC computer labs (including the virtual lab you can access through a web browser) have computers running Windows 10 that have the necessary software installed. It is possible to complete all course activities using computers in university labs. However, if you have a personal computer where you can install the necessary software, it is recommended that you do so.

6. TEXTS

No textbook purchase is required. The course is designed so that students can complete all required coursework by referring to the lecture materials and the online Python documentation. However, referring to the textbooks listed below may also be helpful, and the lectures will indicate relevant sections for further reading.

- Primary text (free)
    - *Think Python, Second Edition* by Allen B. Downey
      https://greenteapress.com/wp/think-python-2e/
- Secondary texts/references (free)
    - Official Python Standard Library Documentation
      https://docs.python.org/3/library/index.html
    - The official Python 3 tutorial
      https://docs.python.org/3/tutorial/
- Secondary texts (non-free but available online to current UIC students)

- These books are available from the O'Reilly technical library. The steps necessary to access them are described below.
- Learning Python, 5th Edition, by Mark Lutz
  * This book dates from 2013 and hence is written to support the language we use in MCS 260 (Python 3) as well as an older language that we won't discuss (Python 2). Official support for Python 2 ended on January 1, 2020.
- Python Cookbook, 3rd Edition, by David Beazley and Brian K. Jones

- Secondary texts (non-free print books)
  - *Python Programming: An Introduction to Computer Science, Third Edition* by John Zelle
  - *Computer Science: An Overview, 12th Edition* by Glenn Brookshear and Dennis Brylow

Accessing online O'Reilly books. To access the books listed as "non-free but available online to current UIC students", you need to log in to the O'Reilly technical library using your UIC netid. To do this, open the following link:

https://www.safaribooksonline.com/library/view/temporary-access/?orpq

Then, in the dropdown menu to select your institution, choose "Not listed? Click here", which is at the top of the list. You will then be prompted to enter your uic.edu email address. Then, click the "Let's Go" button and follow any subsequent instructions.

Once you have logged in this way, the textbook links for *Learning Python* and *Python Cookbook* given above will work. It is also possible to find and open these textbooks using the search feature of the O'Reilly technical library page (searching by title or author is recommended).

7. DELIVERY METHOD

As listed in the course schedule, MCS 260 will be run using a mix of in-person and online instruction. It is a **purely synchronous** course, meaning that registered students are expected to be available at the scheduled course meeting times. The specific delivery plan for MCS 260 activities is:

- Lectures (MWF) will be delivered in a **hybrid** format: Students can participate in person (*strongly recommended for everyone* and expected for all on-campus students), or else they can join a Zoom call at the scheduled time if necessary.
- Discussions (Tue/Thu) **require in-person participation**.

Students who are feeling ill or who are required to quarantine by campus policy should of course not attend course meetings in person; such short term absences are handled under the attendance policy listed below. Students who know they will need to miss course meetings on a regular basis should not take the course. While lectures are recorded and posted online, this is primarily for review purposes and occasional absences, and not meant as a replacement for attending lecture.

Labs will not be recorded. Students who cannot attend a weekly lab meeting should contact their TA. Review the attendance policy below for details.

All written course materials (lecture slides, homework, worksheets, projects, etc.) will be posted to the course web site. Sample programs developed for or during lectures will be posted to Github and linked from the course web page.

All graded assignments will be collected using Gradescope, an online assignment submission system accessed through UIC's Blackboard Learn system.

8. MASKING AND VACCINATION REQUIREMENTS

The following description of university policy is accurate as of August 22, 2021. The university may announce changes to these policies during the semester.

Everyone must wear a mask while attending MCS 260 meetings in person, regardless of vaccination status. (This rule applies more generally to all campus buildings.) Failure to comply with these campus rules will result in referral to the Dean of Students office for possible disciplinary action. Course staff will monitor and enforce masking requirements.

All students who will participate in on-campus activities in Fall 2021 are required to receive a COVID-19 vaccine if they are able to do so. Students who are unable to receive a COVID-19 vaccine for medical or religious reasons must request and receive an exemption from the university in order to participate in on-campus activities. Students who receive an exemption will be required to participate in the COVID-19 saliva testing program and UIC Healthcheck. The university will monitor and enforce vaccination and testing requirements.

9. IMPORTANT DATES AND DEADLINES

Fixed dates:

Aug 23	Mon	First day of class
Sep 3	Fri	Add/drop deadline
Sep 6	Mon	No meetings (Labor Day)
Sep 17	Fri	Project 1 due at 6pm Central
Oct 8	Fri	Project 2 due at 6pm Central
Oct 29	Fri	Late drop deadline
Nov 5	Fri	Project 3 due at 6pm Central
Nov 25–26	Thu–Fri	No meetings (Thanksgiving)
Dec 3	Fri	Project 4 due at 6pm Central & Last day of class

Recurring:

- Starting Aug 31, homework assignments are due every Tuesday at 10:00am Central time, unless a schedule change is announced.

10. TYPES OF COURSE WORK

There are three main types of work in MCS 260: ungraded **worksheets** that are the focus of Tue/Thu labs, weekly **homework**, and scheduled coding **projects**. Each type of work affects your course grade in some way: Homework and Projects are graded and these scores are averaged as part of your course grade. Worksheets are not graded, but participation in labs (where you work on the worksheets) counts toward the course grade. See the section on grading for details.

Note in particular that there are **no midterm exams, no final exam, and no other high-stakes assessments**. I have tried to distribute graded work across the semester as evenly as possible, with the four coding projects (each worth 11.25% of your grade) being the most substantial individual items that factor into your course grade. There are also **no graded in-class quizzes or tests**.

11. WORKSHEETS

The main activity of the Tue/Thu labs will be students working individually or in small groups on a worksheet of problems and short coding exercises that reinforce and expand on the lecture material. The worksheets will be posted to the course site before the lab meeting. Worksheets are the main way for students to practice course material before completing the graded homework assignment for each week. Worksheets are not

collected or graded, though students will be given a lab participation score each week (see for details).

Worksheet collaboration policy: Collaboration on worksheets is strongly encouraged (inside or outside labs).

12. HOMEWORK

Each week, a homework assignment will be posted in Gradescope shortly after the Thursday lab meetings. Unless the assignment indicates otherwise, homework is due the following Tuesday at 10am.

Each homework assignment is to be completed individually, outside of class meeting times. Students can check the deadline for the next upcoming homework by accessing Gradescope from the course home page.

Homework assignments are graded primarily by the TAs and reviewed by the instructor.

Completing homework regularly and doing well on the assignments is important, but we understand students face occasional variations in their workload (e.g. midterms, deadlines in other courses, etc.) and hence we adopt the following relatively generous excuse and dropping system for homework:

Monthly homework excuse: Once in each full calendar month of the semester (September, October, November) a student may request to be excused from one homework assignment whose deadline falls in that month. Students must request excuse **before the assignment is due** by email to their TA. No reason for the request should be given. Unused excuses do not "roll over" (e.g. if no request is made in September, it does not allow two in October). Keep in mind that months have different numbers of homework assignments.

Homework dropping: At the end of the semester, the **two** lowest homework grades for each student will be dropped.

Homework collaboration policy: Collaboration is not permitted on homework. Each assignment will list what textbooks and online resources students are allowed to consult, if any.

13. PROJECTS

Four coding projects will be assigned during the semester. These will be substantial projects that students work on over a longer period, writing a program or set of programs to meet given specifications. These specifications, the *project descriptions*, will be posted to the course web site.

Projects will be submitted using Gradescope. The due dates for the projects are listed in above. Once a project is accepting submissions, its deadline can also be seen in Gradescope.

Each student's project submission will be graded in two ways: First, an automated system (the "autograder") will run a series of tests to see whether the submission performs the requested tasks. Students can view the autograder report shortly after submission, and can use the results to revise and resubmit their project (before the deadline). There is no limit to the number of submissions, but only the last submission received before the deadline will count toward the project grade. As a result it is highly advantageous to make the first submission well before the deadline, to allow time to debugging. The results of the autograder will account for most of the points available in each project; the exact fraction may vary from project to project, and will be announced in the project description.

Second, a manual code review by the instructor will look for good coding practices, sufficient comments, etc., as requested in the project description. Some feedback will be given at this stage to help students improve their performance on future projects.

Project dropping: All four projects will count toward a student's final grade; that is, no project scores will be dropped.

Project collaboration policy: Collaboration is not permitted on projects. Students may consult the course texts and the lecture slides or videos when working on projects. However, each student must be the sole author of the code they submit for a project; copying code from online resources or from other students is not permitted.

Project deadlines are strict: The project deadlines are important: Unless an extension is granted (see section 15), a project submitted after the deadline will receive no credit. If you know you will miss a project deadline, *ask for an extension*.

Differences for Project 4: The last project of the semester will involve a certain amount of flexibility for students to decide what they want to do. Thus the last project description will not be as detailed as the first three. Details will be announced later.

14. ATTENDANCE/ABSENCE POLICY

Lecture attendance. The best way to attend lectures is in person. A Zoom meeting run from the lecture room is provided as a backup option for students who cannot attend due to international travel difficulties, quarantine, or other significant hardships. On-campus students are expected to attend in person.

Occasional absences from lectures due to illness or other short-term factors can be handled by simply watching lecture videos posted to the course web page. This is not meant to be used regularly as an alternative to attending lectures. It is not necessary to notify course staff about occasional lecture absences. Lecture attendance is not factored into your course grade.

Students who usually attend lecture in person but are unable to come to campus on occasion can join the class Zoom meeting instead.

Lab attendance. Attending the Tuesday/Thursday labs is essential. Students are expected to attend these sessions in their entirety, and to arrive ready to work on Python code. Students who plan to work primarily on their own devices (which we encourage, when possible) should bring those devices to each lab meeting.

Each student will receive a grade for their participation in each lab meeting. Specifically, the TA will assign each student a participation score of 0 or 1 for each meeting based on whether or not they attend and participate meaningfully in the activities.

Students who know they must miss an upcoming lab meeting can ask their TA to be excused from the participation grade for that meeting. When doing so, the student should give a brief description of the reason for the request. When received in advance, such requests will be granted as long as they are not frequent. If a request of this type is made after the lab meeting, it will instead be considered under the course policy on missed or late work and must be directed to the professor.

Plan in case of instructor absence. If the instructor is able to present a lecture at the usual time but cannot attend in person (e.g. due to minor illness or required quarantine), the class will be delivered remotely via Zoom, using the same Zoom meeting provided for remote participation. If the instructor is unable to present a lecture at the usual time, one of these plans will be used:

- Asynchronous delivery: A lecture video will be recorded and provided on the course web page.
- In-person substitute: Another instructor will give the lecture as usual (synchronous hybrid).

Students will be informed of an instructor absence by email, which will also contain details about the alternative delivery plans. It is expected that instructor absences will be rare.

Plan in case of TA absence. If a TA cannot attend a scheduled lab meeting, then a substitute TA may run the meeting. If a different arrangement is made, students will receive email instruction.

15. POLICY ON MISSED OR LATE WORK

The sections above concerning Homework and Projects describe the standard policies that are in place to handle missed or late Projects. In general, meeting the deadlines for course work is important.

Students who add the course after August 23 should contact the instructor to develop a plan for the work they have missed (e.g. extension or excuse from missed assignments and attendance scores).

For other missed or late work: We understand that emergencies happen and that circumstances outside the course can sometimes interfere with a student's ability to complete the work on time. Students in MCS 260 may contact me (the instructor) to request an extension for some course work; such a request should indicate the scope (which assignment, how much additional time is requested, etc.) and should provide a brief description of the reason for the request. Requests of this nature remain confidential.

In my experience (over a decade of teaching at UIC), *students whose circumstances would easily justify an extension of this type are often very hesitant to request it*. It is unfortunate when an extension policy only benefits those who need it least, and therefore, my advice to students who are missing deadlines due to difficult circumstances is simple: Please contact me.

16. ACADEMIC HONESTY

Everything you submit for a grade in this course must be entirely your own work. You are also not allowed to give or receive assistance on graded work in MCS 260, except for assistance given by course staff or which is explicitly allowed by the assignment instructions.

Here are some examples of activities that violate the rules in MCS 260 and hence constitute academic misconduct. Keep in mind this list is not exhaustive.

- Sending your code for a homework question or project to another student to submit as their own, or to use as a reference as they work on the assignment

- Searching the internet for answers to a homework question or for help with a project

- Asking for help solving homework problems or part of a project in an online forum or commercial service

- Asking an instructor or TA in another course a question for the purpose of using their answer as a solution to a homework problem or as part of a project in MCS 260

Most forms of academic misconduct are far easier to detect than students typically expect. **In MCS 260, we use automated tools as well as manual review to detect cheating.** For example, we can easily tell if two pieces of code differ by changing variable names, adding and removing comments and indentation, and other common superficial evasion techniques. If you are ever tempted to cheat, please do not take the risk! Instead, contact the course staff and discuss what you are struggling with. Extension requests are always given serious consideration while instances of cheating are never tolerated.

Incidents of academic misconduct will be reported to the Dean of Students office and handled under UIC's Student Disciplinary Policy (`https://go.uic.edu/DisciplinaryPolicy`) for investigation, hearings, and possible sanctions. No warning will be given in advance. The penalties for academic misconduct are typically quite severe.

Many students find it helpful to do course work in a team or study group. Please do this, but only for the elements of the course where collaboration is allowed. For example, if you don't complete the worksheet in the weekly lab meeting, finishing them in a group study setting is an excellent idea.

17. COURSE GRADE COMPUTATION

Homework and projects each account for 45% of the course grade, with the remaining 10% determined by lab participation.

More precisely, the course grade will be computed as follows:

- Each homework score and project score is converted to a percentage; unsubmitted projects or homework assignments are considered as 0%

- The list of homework assignment percentages is modified as follows:
    - Any homework from which the student was excused is removed
    - Then, the two lowest remaining homework percentages are removed

- The remaining homework percentages are averaged to obtain a *homework average*

- The four project percentages are averaged to obtain a *project average*.

- The list of lab participation grades is modified by removing any lab from which the student was excused, and each of the remaining participation scores is converted to a percentage (either 0% or 100%).

- All of the remaining lab attendance percentages are averages to obtain the *attendance average*.

- The final course grade is computed by the formula

$$0.45 \times (\text{homework average}) + 0.45 \times (\text{project average}) + 0.10 \times (\text{attendance average})$$

Starting a few weeks into the semester, a running indicator of the current homework, project, and overall averages will be shown in the Blackboard gradebook. However, this running average will only be updated at certain times, approximately once per week.

When final course grade percentages are available, they will be converted to letter grades according to the following scale:

- A = 85% − 100%
- B = 75% − 84.9999%
- C = 65% − 74.9999%
- D = 55% − 64.9999%
- F = less than 55%

Note that the scale above does not involve any rounding, so for example a final percentage of 84.97% corresponds to a grade of B.

18. COMMUNICATION WITH COURSE STAFF

Outside of course meetings, office hours, and scheduled appointments, email is the best way to contact course staff in most cases. Please only write to course staff from your @uic.edu email address. The instructor will also respond to questions received on the course Discord server.

The instructor will usually respond to email or Discord questions within 24 hours, and sometimes much sooner. Response over a weekend may be slower.

Keep in mind that questions received in the last couple of hours before a course deadline (for a homework assignment or project) often cannot be answered in time to help you with your work. It is a good idea to seek assistance as far in advance as possible.

19. COMMUNICATION WITH OTHER STUDENTS

In all class settings (meetings, office hours, online forums, etc.) students are required to treat everyone with respect. Harassment, bullying, discrimination, bigotry, and other behaviors that create a harmful or exclusionary environment will not be tolerated.

A discussion forum (Discord) will be provided for use by everyone associated with the course. Watch the course web site for announcements about this.

20. University Policies

UIC requires that every syllabus mention the following university policies.

20.1. **Academic deadlines.** The UIC academic calendar can be found at:

http://catalog.uic.edu/ucat/academic-calendar/

In particular this calendar includes the deadlines for adding and dropping courses.

20.2. **Academic honesty and standards of conduct.** All UIC students are required to abide by the rules and standards of conduct described in the Student Disciplinary Policy (https://go.uic.edu/DisciplinaryPolicy). In particular, this policy prohibits academic misconduct such as plagiarism.

20.3. **Disability accommodation.** The University of Illinois at Chicago UIC is committed to full inclusion and participation of people with disabilities in all aspects of university life. Students who face or anticipate disability-related barriers while at UIC should connect with the Disability Resource Center (DRC) by visiting drc.uic.edu, by emailing drc@uic.edu, or by calling (312) 413-2183 to create a plan for reasonable accommodations. In order to receive accommodations, students must disclose disability to the DRC, complete an interactive registration process with the DRC, and provide their course instructor with a Letter of Accommodation (LOA). Course instructors in receipt of an LOA will work with the student and the DRC to implement approved accommodations.

20.4. **Religious holidays.** The UIC Senate Policy on religious holidays (approved May 25, 1988) is as follows:

"The faculty of the University of Illinois at Chicago shall make every effort to avoid scheduling examinations or requiring that student projects be turned in or completed on religious holidays. Students who wish to observe their religious holidays shall notify the faculty member by the tenth day of the semester of the date when they will be absent unless the religious holiday is observed on or before the tenth day of the semester. In such cases, the students shall notify the faculty member at least five days in advance of the date when he/she will be absent. The faculty member shall make every reasonable effort to honor the request, not penalize the student for missing the class, and if an examination or project is due during the absence, give the student an exam or assignment equivalent to the one completed by those students in attendance. If the student feels aggrieved, he/she may request remedy through the campus grievance procedure."

The University Holidays and Religious Observances calendar can be found at:

http://oae.uic.edu/religious-calendar/

21. Revision history of this document

- 2021-09-22 Update to reflect change in Viswanathan office hours
- 2021-08-24 Viswanathan office hour info
- 2021-08-23 Correct typo in TA schedule
- 2021-08-23 Staff change, add Joyce zoom info
- 2021-08-20 Initial publication