

# COMPSCI 2120A/9642A/DIGIHUM 2220A

## Course Outline - Fall 2022

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## Course Information

### Course Information – Fall 2022

COMPSCI 2120A – Modern Survival Skills I: Coding Essentials

DIGIHUM 2220A - Computing & Informatics for the Humanities I

COMPSCI 9642A – Programming for Scientists

Component	Day	Start Time	End Time	Location
Lecture 001	Tuesday	10:30 AM	12:20 PM	UCC-146
	Thursday	1:30 PM	2:20 PM	UCC-146
Tutorial 002	Thursday	10:30 AM	12:20 PM	AHB-1B08
Tutorial 003	Thursday	3:30 PM	5:20 PM	AHB-1B06
Tutorial 004	Wednesday	10:30 AM	12:20 PM	HSB-35

### List of Prerequisites

CS 2120A – No prerequisites.

DIGIHUM 2220A – COMPSCI 1033A/B or DIGIHUM 1011A/B

No previous programming background assumed.

## Instructor Information

### How to Contact Instructors

Instructors	Email	Office	Office Hours - via Zoom
Duff Jones - Lecturer	djone5<at>uwo.ca	MC 26	Tuesdays: 1:30pm – 2:30pm
TAs - TBA			

### Topics Specific to You

Students must use their Western ([@uwo.ca](mailto:@uwo.ca)) email addresses when contacting the instructor and teaching assistants. **Please include the course code in the subject line of the email** to avoid the possibility of your email being overlooked (e.g., *DIGIHUM 2220 – Absence*).

An example of a topic specific to you would be informing your instructor of an absence. **You should not email the instructor, nor the TAs, to ask questions about course content (or assignments) that would be of interest to other students**—that’s what the Forums are for. For individual help with an assignment, you should attend office hours.

### **Topics Impacting Everyone**

Please use the [OWL Forums](#). Any question you have about course content or assignments has almost certainly come up for your classmates. By using the Forums instead of email, everyone can benefit from the answer.

When you post a question, please provide an informative title. For example, if you are asking a question about Python naming conventions, then the post title should be something like, [Python Naming Conventions](#). If you can be more specific, that's even better (e.g., [Python's Use of Underscores in Variable Names](#)). That way, anyone who has a question about Python naming conventions knows that their question may have already been answered. Try to keep threads to one topic; it makes finding a previous answer a lot easier.

**If you know an answer to a classmate's question, please go ahead and answer it.** If you see a mistake, offer a fix. Computer science and programming, like other areas of science, are collaborative, and the Forums allow for collaboration with your classmates. It should go without saying, but **the OWL Forums aren't Reddit**, so let's stick to the subject matter of the course and be courteous to each other.

Forums will be arranged into a variety of topics, so please try to post to the right place. If it could go in two places, flip a coin to make the choice. Or, better yet, write a small program to flip a coin for you.

**Please do not post your assignment code to the Forums.** This may be deemed an academic offence. Questions requiring the instructor or TA to see your code should be asked during office hours.

### **Office Hours**

All office hours will be delivered via Zoom. A waiting room will be used to allow for assignments to be discussed privately.

Students may make Zoom appointments with the instructor/TAs if they are unable to attend office hours due to a course scheduling conflict. These appointments must be scheduled several days in advance.

## **Course Syllabus, Schedule, Delivery Mode**

*From the Academic Calendar:* "Essential information processing and coding skills for students. Includes core concepts of algorithms and data structures; creating programs and scripts to address problems that arise in applied research; examples of data sets and analyses drawn from a variety of disciplines. No previous programming background assumed."

## Learning Outcomes

Upon completion of the course, students will:

- be able to write scripts and programs using the Python programming language;
- know how to debug scripts and programs written in Python;
- understand how to implement and manipulate basic data structures like lists, tuples and dictionaries;
- understand basic algorithms (e.g., searching, counting) and how to apply them to a variety of problems;
- be comfortable using Python to read from, and write to, files; and
- understand the basics of the object-oriented programming paradigm.

Please refer to "[COMPSCI 2120A/9642A/DIGIHUM 2220A: Suggested Study Schedule – Fall 2022](#)" for a week-by-week breakdown of the topics to be covered and the required readings for each week.

## Delivery Mode

All lectures and tutorials will be delivered in-person and according to the schedule listed under "Course Information" above.

## Contingency Plan for Online Learning

In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, affected course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will **not** change. Any remaining assessments will also be conducted online as determined by the course instructor.

## Course Materials

### Required Textbook

***Think Python, 2<sup>nd</sup> Edition by Allen B. Downey***

This book can be purchased as a paper textbook if you so choose, but it is a free textbook that can be accessed as a PDF or HTML document via the publisher's website:

<https://greenteapress.com/wp/think-python-2e/>.

## Required Software

### *Anaconda Individual Edition*

This software manages a lot of the more complicated aspects of Python, allowing you to focus on learning how to program rather than on how to set up a programming environment. You can download it here: <https://www.anaconda.com/products/individual>.

### *PyCharm (Community or Professional)*

We will be using this as our integrated development environment (IDE). An IDE makes life easier for us when programming, as it will give us useful features like syntax highlighting, code autocompletion, debugging, language support and more. (It's okay if that all sounds meaningless to you right now—it will make more sense as we delve into the course.) You can download it here: <https://www.jetbrains.com/pycharm/>. Your student information will give you access to the professional edition. You are encouraged to get that edition, as it will look more like the one that your instructor will use during lectures.

## Using OWL

Students are responsible for checking the course OWL site (<https://owl.uwo.ca/>) on a **regular basis** for news and updates. This is the primary method (outside of lectures) by which information will be disseminated to all students in the class. **All course material will be posted to OWL.**

If students need assistance with the course OWL site, they can seek support on the OWL Help page: <https://owlhelp.uwo.ca>. Alternatively, students can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

## Technical Requirements

Students must have access to a computer onto which they can install the course software. A stable internet connection will also be important, particularly if we must shift to online learning at some point in the course. To attend office hours, which are being held via Zoom, you must also have a working microphone and/or webcam.

# Methods of Evaluation

## Course Grade

The overall course grade will be calculated as follows:

Assignments (x4)	46%
Tutorial Assignments (x11)	9%
Midterm	15%
Final Exam	30%

## Assignments

The table below includes the suggested timeline for assignments. If, for any reason, the assignment schedule cannot be adhered to, the assignment marks will be prorated (i.e., if an assignment must be removed for some reason, the remaining assignments will still be worth 45% of the course grade).

Assignment	Date Assigned	Due Date	Course Weight
Assignment #1	September 16	September 27	10%
Assignment #2	September 30	October 14	10%
Assignment #3	October 17	November 9	12%
Assignment #4	November 11	December 2	14%

Note: **The assigned dates and due dates listed above are tentative.** Final due dates will be officially assigned with each assignment, but you can assume that they will be very close to the tentative due dates listed above.

## Submitting Assignments

**Assignments will be submitted via Gradescope** and will be checked to ensure that the code is of your own creation (see *Academic Policies* below). Assignments will be tested by automated software prior to the TAs evaluating them. It is important, therefore, that you follow assignment instructions carefully in terms of naming conventions. Failure to do so may cause the autograder to fail, which will result in a **mark deduction**.

You will be added to Gradescope from the OWL roster. If you do not have access to Gradescope when the first assignment is assigned, please email the instructor.

## Late Assignments

All assignments are **due at 11:59pm Eastern time** on the assigned due date. Assignments will be accepted up to four days (96 hours) after the assigned due date. **Assignments will not be accepted after the four-day late period.** For each day late, there will be a 10%

deduction from the overall value of the assignment. For example, the highest grade an assignment that is three days late can receive is 70%.

### ***Request for Mark Adjustment***

**Prior to requesting a mark adjustment, you should contact the TA who graded the assignment** to ensure that you have correctly understood the TA's comments and that the error wasn't simply an oversight. You may then request a regrade through Gradescope.

Any request for an assignment mark adjustment **must be made within one week** of the assignment being returned on Gradescope. **After that, regrading will not be considered.**

**If you are not satisfied with the TA's response**, a regrade request must be submitted to the course instructor via email, and it must include the specific reasons why you believe the grade is incorrect. (Please use the subject line [<Your Course Code>: Request for Assignment Regrade](#).)

The instructor will inform you by email when the re-evaluation process is complete.

### ***Assignment Backups***

It is each student's responsibility to keep up-to-date backups of assignment files in case of system crashes or inadvertently erased files. Students must keep copies of all material submitted, as well as the actual graded assignment, to guard against the possibility of errors in recording marks. It is not safe to discard these materials until you are satisfied that your final mark for the course has been computed properly.

### **Tutorials**

Tutorials are based on the previous week's lecture material. The TA will review the material during the weekly tutorial session, so you are strongly encouraged to attend and ask questions. **Each tutorial will have an assignment associated with it.** These assignments will typically involve answering a few questions and writing some code.

You are welcome to work with your classmates during tutorials. You should make sure that you understand the material, however, as the purpose of the tutorials is to help you with both the assignments and the exams. **You must submit each tutorial assignment via Gradescope by 11:59pm Eastern time on the Tuesday following the tutorial session.**

As tutorial assignments are meant to ensure that you understand the material needed for success in the course, you cannot submit a tutorial assignment after it is due. **A tutorial assignment that is not submitted on time will receive a grade of zero.** There are 11 tutorial assignments in total, with each assignment being worth 1% of your final grade. **Your**



**two lowest tutorial assignment grades will automatically be dropped so that the 11 assignments are worth 9% of your final grade.**

### **Examinations**

Both the midterm and the final exam are closed-book examinations. You are **NOT** permitted any reference materials. No electronic devices (including a calculator) are permitted.

#### **Midterm**

The midterm is a one-and-a-half-hour, closed-book exam. The midterm will be delivered during class time on **Tuesday, October 25**. It will be composed of true/false, multiple choice, short answer and code writing questions. You can use your tutorial assignments to help you prepare for the exam.

**The midterm includes all material from Week #1 until the end of Week #7.** (Please refer to "[COMPSCI 2120A/9642A/DIGIHUM 2220A: Suggested Study Schedule – Fall 2022](#)").

#### **Final Examination**

The final exam will be scheduled by the Registrar during the final examination period. The final exam is a three-hour, cumulative, closed-book exam. It will be composed of true/false, multiple choice, short answer and code writing questions. You can use your tutorial assignments to help you prepare for the exam.

## **Student Absences**

### **Accommodated Evaluations**

Excused absences will be handled as follows:

For work totalling 10% or more of the final course grade, you must provide valid medical or supporting documentation to the Academic Counselling Office of your Faculty of Registration as soon as possible. For further information, please consult the University's medical illness policy at

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/accommodation\\_medical.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf).

The Student Medical Certificate is available at

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/medicalform.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf).

### **Missed Assignment**

Assignments will not be re-weighted, nor will the grade be shifted to another course component. If an assignment is missed for a valid reason (as determined by the Academic Counselling Office of your Faculty of Registration), then an alternate due date will be

arranged with the course instructor. **Late penalties may still apply, depending on what dates are covered by the permission granted to you. Check with your instructor if you are unsure if a late penalty applies.**

### ***Missed Tutorial Assignment***

A missed tutorial assignment cannot be re-weighted or shifted to another course component. The two lowest tutorial assignment grades will be dropped to account for the possibility of illness or compassionate considerations.

### ***Missed Midterm***

If the midterm is missed for a valid reason (as determined by the Academic Counselling Office of your Faculty of Registration), then the weight of the midterm will be added to the weight of the final exam. In this situation, the final exam will be worth 45% instead of 30%.

### ***Missed Final Examination***

If you miss the Final Exam, please contact the Academic Counselling office of your Faculty of Registration as soon as you are able to do so. They will assess your eligibility to write the Special Examination (the name given by the University to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a "Multiple Exam Situation" (e.g., more than two exams in 23-hour period, more than three exams in a 47-hour period).

If a student fails to write a scheduled Special Examination, the date of the next Special Examination (if granted) normally will be the scheduled date for the final exam the next time this course is offered. The maximum course load for that term will be reduced by the credit of the course(s) for which the final examination has been deferred. See the Academic Calendar for details (under [Special Examinations](#)).

## **Accommodation and Accessibility**

### **Religious Accommodation**

When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request accommodation for their absence in writing at least two weeks prior to the holiday to the course instructor and/or the Academic Counselling office of their Faculty of Registration. Please consult University's list of recognized religious holidays (updated annually) at

<https://www.multiculturalcalendar.com/ecal/index.php?s=c-univwo>.

## Accommodation Policies

When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request accommodation for their absence in writing at least two weeks prior to the holiday to the course instructor and/or the Academic Counselling office of their Faculty of Registration. Please consult University's list of recognized religious holidays (updated annually) at

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/Academic%20Accommodation\\_disabilities.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic%20Accommodation_disabilities.pdf).

## Academic Policies

The website for the Registrar is <https://www.registrar.uwo.ca/>.

In accordance with policy,

[https://www.uwo.ca/univsec/pdf/policies\\_procedures/section1/mapp113.pdf](https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf),

the centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner.

Both the **final exam and the midterm are closed-book**. Electronic devices will **not be permitted** during either examination.

**Scholastic offences** are taken seriously, and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following website:

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_undergrad.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf).

**Code Checking Software** will be used (via Gradescope) to ensure that all code submitted for evaluation is the original work of the student submitting that code.

**In the event of a return to online learning due to the ongoing pandemic**, the final exam in this course will be conducted using a remote proctoring service. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide **personal information** (including some biometric data), and the session will be **recorded**. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about

this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at: <https://remoteproctoring.uwo.ca/>.

## Support Services

Please visit the Science & Basic Medical Sciences Academic Counselling site for information on adding/dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters: <https://www.uwo.ca/sci/counselling/>.

Students who are in emotional/mental distress should refer to Mental Health@Western (<https://uwo.ca/health/psych/>) for a complete list of options about how to obtain help.

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at

[https://www.uwo.ca/health/student\\_support/survivor\\_support/get-help.html](https://www.uwo.ca/health/student_support/survivor_support/get-help.html).

To connect with a case manager or set up an appointment, please contact [support@uwo.ca](mailto:support@uwo.ca).

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Accessible Education at

[http://academicsupport.uwo.ca/accessible\\_education/index.html](http://academicsupport.uwo.ca/accessible_education/index.html)

if you have any questions regarding accommodations.

Additional student-run support services are offered by the USC: <https://westernusc.ca/your-services/>.