

COMPSCI 2120A/9642A/DIGIHUM 2220A Course Outline

1. Course Information

Course Information – Fall 2024

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	
	Thursday	1:30 PM	2:20 PM	
Tutorial 002	Thursday	10:30 AM	12:20 PM	
Tutorial 003	Thursday	3:30 PM	5:20 PM	
Tutorial 004	Wednesday	10:30 AM	12:20 PM	

List of Prerequisites

CS 2120A – No prerequisites. DIGIHUM 2220A – COMPSCI 1033A/B or DIGIHUM 1011A/B

No previous programming background assumed.

Unless you have either the requisites for this course or written special permission from your Dean's Designate (Department/Program Counsellors and Science Academic Advisors) to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

Antirequisites: Computer Science 1025A/B or Computer Science 1026A/B, Data Science 1200A/B, Engineering Science 1036A/B, Digital Humanities 2220A/B.

2. Instructor Information

How to Contact Instructors

Instructors	Email	Office	Office Hours
Dr. Arshin Rezazadeh			
(Course Instructor)	arezaza6 <at>uwo.ca</at>		TBD
Sara Fotouhi (TA)	sfotouhi <at>uwo.ca</at>		TBD
Sepideh Bahrami (TA)	sbahra3 <at>uwo.ca</at>		TBD

Students must use their Western (@uwo.ca) email addresses when contacting their instructors 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 Discussions are for. For individual help with an assignment, you should attend office hours.

Topics Impacting Everyone

Please use the Brightspace Discussions. Any question you have about course content or assignments has almost certainly come up for your classmates. By using the Discussions 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 Brightspace Discussions aren't Reddit, so let's stick to the subject matter of the course and be courteous to each other.

Discussions 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 Discussions. 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

Office hours will be delivered via Zoom or in-person. A waiting room will be used to allow for assignments to be discussed privately when using Zoom.

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.

3. 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.

Delivery Mode

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

Important dates

Classes begin: September 5, 2024; Fall Reading Week: October 12 – 20; Classes end: December 6, 2024; Exam period: December 9 – 22, 2024;

4. Course Materials

Required Textbook

Think Python, 2nd 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: <u>https://greenteapress.com/wp/think-python-2e/</u>.

Required Software

VS Code (It's free)

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: <u>https://code.visualstudio.com/</u>.

All course material will be posted to OWL: https://westernu.brightspace.com/

Students are responsible for checking the course OWL site (https://westernu.brightspace.com/) regularly for news and updates. This is the primary method by which information will be disseminated to all students in the class.

If students need assistance with the course OWL site, they can seek support on the <u>OWL Brightspace</u> <u>Help</u> page. Alternatively, they 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 to attend Zoom office hours, you must also have a working microphone and/or webcam.

5. Methods of Evaluation

Grading Scheme and Assessment Dates

The overall course grade will be calculated as listed below:

Assignments (x4)	47%
Quizzes (x3)	15%
Tutorials (x8)	8%
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	Tentative Date Assigned	Tentative Due Date	Course Weight
Assignment #1	September 20	October 1	9%
Assignment #2	October 5	October 22	12%
Assignment #3	October 23	November 12	12%
Assignment #4	November 13	December 3	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 11:55pm Eastern time** on the assigned due date. Assignments will be accepted up to three days (72 hours) after the assigned due date. Assignments will not be accepted after the threeday late period. There is no late penalty for the first day or two that a student submits the assignment; on the third late day, there is a 30% late penalty, and no submission is allowed thereafter. 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 need to complete 8 out of 10 tutorial assignments to receive full marks for tutorials.

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 11:55pm 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 10 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 10 assignments are worth 8% of your final grade.

Quizzes

Quizzes	Tentative Date	Weight
1	September 26	4%
2	October 31	5%
3	November 21	6%

In lieu of a stressful 15% midtern, we will have three in-class quizzes worth 4%, 5%, and 6%, respectively. You will be given fifty minutes to complete the quizzes (you shouldn't really need more than \sim 40 minutes, but some extra time never hurts), and they will be during class time.

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

Final Examination

The final exam is closed-book examination. You are **NOT** permitted any reference materials. No electronic devices (including a calculator) are permitted.

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.

IMPORTANT NOTE: To be eligible to receive a passing grade in the course, your mark on the final exam must be at least 40%, and your weighted average on the assignments must be at least 40%. Otherwise, the maximum overall mark you can receive is 45%. To be eligible to receive a grade of 60% or higher, your mark on the final exam must be at least 50%. Otherwise, the maximum overall mark you can receive is 58%. This rule cannot be waived.

General information about missed coursework

Students must familiarize themselves with the University Policy on Academic Consideration – Undergraduate Students in First Entry Programs posted on the Academic Calendar: https://www.uwo.ca/univsec/pdf/academic policies/appeals/academic consideration Sep24.pdf

This policy does not apply to requests for Academic Consideration submitted for **attempted or completed work**, whether online or in person.

The policy also does not apply to students experiencing longer-term impacts on their academic responsibilities. These students should consult <u>Accessible Education</u>.

For procedures on how to submit Academic Consideration requests, please see the information posted on the Office of the Registrar's webpage:

https://registrar.uwo.ca/academics/academic_considerations/

All requests for Academic Consideration must be made within 48 hours after the assessment date or submission deadline.

All Academic Consideration requests must include supporting documentation; however, recognizing that formal documentation may not be available in some extenuating circumstances, the policy allows students to make <u>one</u> Academic Consideration request **without supporting documentation** in this course.

When a student <u>mistakenly</u> submits their <u>one</u> allowed Academic Consideration request without supporting documentation for the assessments listed above or those in the Coursework with Assessment Flexibility section below, <u>the request cannot be recalled and reapplied</u>. This privilege is forfeited.

When a student misses the Final Exam and their Academic Consideration has been granted, they will be allowed to write the Special Examination (the name given by the University to a makeup Final Exam). See the Academic Calendar for details (under <u>Special Examinations</u>), especially for those who miss multiple final exams within one examination period.

Essential Learning Requirements

Even when Academic Considerations are granted for missed coursework, the following are deemed essential to earn a passing grade.

Missed Assignment

Assignments will not be re-weighted, nor will the grade be shifted to another course component. If an assignment is missed with valid academic consideration, 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 Quizzes

If a quiz is missed with valid academic consideration, then the weight of the quiz will be added to the weight of other quizzes.

6. Additional Statements

Religious Accommodation

When conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request an accommodation for their absence in writing to the course instructor and/or the Academic Advising office of their Faculty of Registration. This notice should be made as early as possible but not later than two weeks prior to the writing or the examination (or one week prior to the writing of the test).

Please visit the Diversity Calendars posted on our university's EDID website for the recognized religious holidays:

https://www.edi.uwo.ca.

Accommodation Policies

Students with disabilities are encouraged to contact Accessible Education, which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found at:

https://www.uwo.ca/univsec/pdf/academic policies/appeals/Academic Accommodation disabilities.pdf

Academic Policies

The website for Registrar Services is https://www.registrar.uwo.ca/.

In accordance with policy,

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 their official university address is attended to in a timely manner.

No electronic devices (including a calculator) are permitted during the final exam.

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 Web site:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

Support Services

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

Students who are in emotional/mental distress should refer to Mental Health@Western (<u>https://uwo.ca/health/</u>) 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

To connect with a case manager or set up an appointment, please contact 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

if you have any questions regarding accommodations.

Learning-skills counsellors at Learning Development and Success (<u>https://learning.uwo.ca</u>) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Western University is committed to a thriving campus as we deliver our courses in the mixed model of both virtual and face-to-face formats. We encourage you to check out the Digital Student Experience website to manage your academics and well-being: <u>https://www.uwo.ca/se/digital/</u>.

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