CS1026a - Course Outline – Summer 2018

Course Description

The nature of Computer Science as a discipline; the design and analysis of algorithms and their implementation as modular, reliable, well-documented programs written in an object-oriented language (Python). Intended for students with little or no background in programming.

Programming skills will be developed using the Python programming language. Course topics include data types, variables, expressions, program constructs, strings (text), functions, basic data structures (lists, tuples, sets dictionaries), objects, object-oriented design, classes, modularity, and problem-solving techniques. Programming examples and assignments are taken from a variety of disciplines.

Course Prerequisites

There are no prerequisites to CS1026. However, programming experience may be an asset.

Course Staff

Instructor	TA	TA
James Hughes	Daniel Page	Nima Khairdoost
Off. Hours: TBD	Off. Hours: 3-4:30pm W & Th	Off. Hours: N/A
MC 27E	MC 22	N/A
Email: jhughe54@uwo.ca	Email: dpage6@uwo.ca	Email: nkhairdo@uwo.ca

Course Schedule

Lecture Section	Room	Time
001	SH-2316	Tuesdays and Thursdays 7pm-10pm

For lab times, see the online timetable at
http://studentservices.uwo.ca/secure/timetables/SummerTT/ttindex.cfm
For other information about programs, courses, etc., see the Registrar's web site:
http://www.registrar.uwo.ca.

Course Materials

Textbooks:

Lightly Suggested: For those that prefer a traditional textbook (either hard copy or digital), the textbook used for this course is available for purchase from the University Bookstore on campus. The textbook is:

Python for Everyone, (2nd Edition) by Cay S. Horstmann and Rance D. Necaise, Wiley, 2016.

There are two versions available:
- o Paperback: ISBN : 978-1-119-05655-3
- o e-Text: ISBN : 978-1-118-73522-0

The first edition of this textbook can also be used. Buying the book is not required for success in this course.

Lecture Slides
Course lecture slides will be made available on the course website (OWL) on a regular basis. They are provided as a courtesy by the course instructor. Possessing (and even reading) these notes is not a suitable substitute for attending lectures. The notes do follow the text and do make use of examples in the text.

Programming Tools
The course makes use of the Python programming language (https://www.python.org/). **We will be using Python 3.6.5** primarily, though **any version of Python 3** will work for exercises and assignments. Please DO NOT use Python 2.

When you download and install Python, you will get a simple editor/development environment called *IDLE*; you may use this for editing and creating your Python programs. Other tools and IDEs will be discussed and recommended throughout the course.

We will also make use of PyCharm – a richer development environment. We will make use of PyCharm Educational Version 3. We recommend using PyCharm (**Version 3.0.1,** under Version 3), this is the version available on the lab computers. You can download it from here: https://www.jetbrains.com/pycharm-edu/download/previous.htm

This version is also used to run all the labs in the course. More details on this will be covered in the initial labs.

Other Course Material

Additional course material including laboratory exercises, examples, etc. will also be available on the course website (OWL) on a regular basis.

Course Website

The CS1026a website is accessible through OWL: https://owl.uwo.ca/portal. Announcements, assignments, labs, lecture notes, and other course-related information will be posted on this website. It is the responsibility of the student to check this website often.

TA Consulting Schedule

Teaching Assistants and their consulting hours for CS1026 will be posted on the course website and announced ASAP.

Computing Facilities

Each student enrolled in CS1026 will be given an account on the Computer Science Department First Year Network. By using your CS1026 account, you agree to abide by the Rules of Ethical Conduct established by the Department of Computer Science.

Labs

The purpose of the weekly labs is to give students guided, hands-on experience with Python programming. It is expected that students will come *prepared* to the labs by reading the lab instructions. Lab instructions will be available on the CS1026a course website in advance.

- **Labs begin Wednesday May 9th (first 2 hours only, Section 003) and Thursday May 10th (Section 002).**
- Lab exercises must be completed for marks; attendance and lab completion is mandatory. Each completed lab is worth 1% of your final grade (to a maximum of 10%). It is your responsibility to ensure the TA records your attendance.
- Labs will be held throughout all 6 weeks of the course, and there is a total of 11 lab assignments.
- You may only attend the lab session for which you are registered.
- Lab exercises are due Fridays at midnight. See OWL for details.
- Students must bring their UWO identification to all labs.
- The TA will attend at least half the duration of each lab session, and if there are no more students during lab to assist, the TA will leave.

Lecture Activities

In class activities will take place during each lecture. There will be a total of 12 activities and will account for 10% of the final grade. Although there are 12, marks will be based

on your best 10 performances. There will be no make-up activities; however, students who encounter serious health or other personal difficulties are encouraged to contact their Dean's office.

These activities require students to answer questions based on lecture material. Answers must be written by hand on clean blank paper that the students bring to class; paper will not be provided to the students. The paper will be submitted to the lecturer within the allotted time. The paper must be clean, the writing must be legible, the submission must be made by the student who completed the task, and the submission must have the completing/submitting student's name and student number. If any of these requirements are violated, a mark of 0 will be applied. If a student attempts to submit another student's work, this will be considered academic misconduct and will be investigated fully.

These activities are open book, students should collaborate and share ideas, and students can check the internet, however, all work must ultimately be done individually.

Assignments

Assignment submission:
- Instructions for the submission of assignments will be posted on the course website. It is each student's responsibility to read and follow the instructions. Failure to follow the submission instructions may result in the assignment receiving a mark of zero.
- You will be required to submit each programming assignment electronically. Details will be given in the assignment descriptions. We reserve the right to use similarity detection software to detect possible cheating cases.

Assignment due dates:
- The date and exact time assignments are due will be given in the assignment specifications.
- ***Late assignments will NOT BE ACCEPTED –*** i.e. zero marks will be given for late assignments.
- No extensions will be given for assignments; however, if a student has serious medical or compassionate grounds, they should take supporting documentation to the Office of the Dean of their faculty and their instructor will be contacted.

Assignment marking:
- Assignments are marked by the Teaching Assistant, who follows marking schemes provided by instructors.
- A request for adjustment in an assignment mark must be made within 2 weeks of the date on which it was first available after marking; beyond that date, regrading will not be considered. Students must request regrading from the TA first, and should only contact the instructor about regrading in case of either a refusal by the TA to regrade or a regrading appeal.
- ***It is each student's responsibility to back up their work. Losing an assignment for any reason is not grounds for accommodation.***

Exams

- There is a midterm exam and a final exam. Both exams are closed book. No reference materials, calculators or other electronic devices are allowed. (No cheating allowed; nothing any reasonable person would perceive as acting in bad faith is allowed).
- Students must bring their UWO identification to the exams.
- There will be no makeup midterm exam, except for students requesting a special midterm exam for University recognized reasons. These students must have notified the course instructor and filed documentation with their Dean's Office at least 2 weeks prior to the midterm exam. **If there are other serious medical or compassionate grounds for missing the midterm exam, please take supporting documentation to the office of the Dean of your faculty, who will contact the instructor.** In such cases and only in such cases, the weight of your midterm exam will be shifted to the final exam, which would then be worth 45% of your final overall grade. **Do not request accommodation from the instructor directly. All accommodation requests must be made via your faculty's Dean's Office.**
- The final exam is scheduled by the Office of the Registrar during the final exam period. Students are advised not to make travel plans until they have consulted the final exam schedule.

Student Evaluation (tentative dates)

Element	Weight	Due
Labs	10%	All labs are due Fridays at 11:55pm
Assignment 1	8%	Middle of May-ish
Assignment 2	8%	Early June-ish
Assignment 3	16%	Middle of June-ish
Lecture Activities	8%	In class
Mid-Term	20%	End of May-ish. In class. (2 hours)
Final	30%	TBD by Registrar. (3 Hours)

If for any reason the assignment schedule given cannot be adhered to, the assignment marks will be prorated.

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%, and your weighted average on the assignments must be at least 50%. Otherwise, the maximum overall mark you can receive is 58%.

Email Contact

We may need to send email messages to the whole class or to students individually. ***Email will be sent to the UWO email address assigned to students by Information Technology Services (ITS) (user_name@uwo.ca).*** It is the responsibility of the student to read this email on a regular basis. You may wish to have mail forwarded to an alternative email address. See the ITS website for instructions on forwarding email.

Note that UWO and most other email providers establish quotas or limits on the amount of space available to you. If you let your email accumulate there, your mailbox may fill up and you may lose important email from your instructors. Losing email is not an acceptable excuse for not knowing about the information that was sent.

Students are encouraged to contact their course instructor via email with *brief, email appropriate questions* regarding lecture materials or clarification of assignments. However, before sending email to an instructor, the student should check the course website to see if the requested information is already there. Students must send email from their UWO ITS account and include CS1026 in the subject line of the email.

Statement of Academic Offenses

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

Use of Plagiarism-Checking Software

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system.

Use of Cheating-Analysis Software

All submitted work may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating (MOSS).

Academic Accommodation for Medical Illness or Distress

If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or other supporting documentation to your Dean's office as soon as possible and contact your instructor immediately. It is the student's responsibility to make alternative arrangements with their instructor once the

accommodation has been approved and the instructor has been informed. In the event of a missed final exam, a "Recommendation of Special Examination" form must be obtained from the Dean's Office immediately. For further information please see: http://www.uwo.ca/univsec/handbook/appeals/medical.pdf.

A student requiring academic accommodation due to illness should use the Student Medical Certificate when visiting an off-campus medical facility or request a Record's Release Form (located in the Dean's Office) for visits to Student Health Services. The form can be found here: http:www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf.

Students who are in emotional/mental distress should refer to Mental Health@Western http://www.uwo.ca/uwocom/mentalhealth/ for a complete list of options about how to obtain help.

Accessibility Statement

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation. More information can also be found here: www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_disabilities.pdf.

Accommodation for Religious Holidays

If you require accommodation for religious holidays, please consult the University's policy on accommodation for religious holidays: www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf.

Learning Skills

For assistance in study skills, examination preparation, etc., visit the Student Development Center (http://www.sdc.uwo.ca) as well as contacting the University Students' Council (http://westernusc.ca/services/).

Course, Department, University Policies on Ethical Conduct

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: http://www.uwo.ca/univsec/handbook/appeals/scholoff.pdf.

- Plagiarism: Students must write their assignments (or essays) in their own words. Whenever students take an idea or a passage from another author, they must

acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence (see the *Scholastic Offence Policy* in the *Western Academic Calendar*.

- Your assignments must be your own individual work, not the products of group effort. You may discuss approaches to problems with other students, but the work you submit (programming code, answers to concept questions, etc) must be an individual effort.

- With each assignment, you are required to confirm that you did the material you have submitted is exclusively your own work and that you understand the course policies concerning plagiarism and individual effort. You are responsible for reading and respecting the departmental policies on Scholastic Offences and Rules of Ethical Conduct.   The University of Western Ontario uses software for plagiarism checking.

- The standard departmental policy for assignments that are judged to be the product of academic dishonesty is, for the student's first offence, a mark of zero for the assignment, with an additional penalty equal to the weight of the assignment also being applied to the overall grade.

- The role of tutoring is to help students understand course material. Tutors should not write assignments or take-home tests for the students who hire them. Submitting an assignment that contains material written by a tutor is an academic offence. Having employed the same tutor as another student is not a legitimate defense against an accusation of collusion, should two students hand in assignments judged similar beyond the possibility of coincidence.