

Western University

CS 3346A / CS 3121A Course Outline

FALL 2020

Course Description

The academic calendar states "Introduction to Artificial Intelligence; logic programming; heuristic search; knowledge representation; expert systems." This description is a bit dated. The course is an introduction to Artificial Intelligence but looks instead at the fundamentals used in the construction of intelligent agents. Included is heuristic search, probabilistic reasoning, and machine learning. Expert systems will not be covered.

Students will be introduced to a number of fundamental ideas which are useful for understanding the research literature and building intelligent artifacts.

Prerequisites

Either (Computer Science 2210A/B and 2211A/B or 2121A/B or (Software Engineering 2203A/B, 2205A/B and 2250A/B); Computer Science 2209A/B, or registration in the BESC program in Computer Engineering or Software Engineering. Students are responsible for the appropriate algorithmic or logic background. Please see [Academic Calendar](#) for details.

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you will 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.

Instructor

Charles Ling, charles.ling@uwo.ca (preferred way of contact), Office MC 374, x 83341
Office hours: TBD, via ZOOM

Textbook

Artificial Intelligence: A Modern Approach (3rd Ed; by Stuart J. Russell and Peter Norvig). Please note that the Western Bookstore will be offering online ordering this year. See 'Course Planning Info' document for services offered by Western Bookstore in online order and selling of Custom Course Materials in electronic format (e-book).

The lectures will be delivered **asynchronous online**, via Youtube videos, with links provided in the course OWL website for the registered students only. Please note that these videos are copyrighted by the instructor, and are posted as “unlisted” (not for public) on Youtube. Students should not post the links of the videos on the websites or pass them to others.

With Youtube videos, you can easily change the speed of the viewing, turn on automatic captions, and leave comments. TAs and I will try to reply to the comments when needed. Please be respectful when leaving comments.

Live ZOOM Q&A and Tutorial sessions may be arranged during the course when needed. We will announce these live sessions with Announcements via OWL.

Note that if the TAs and instructor receive multiple emails about the same/similar questions, we will send out an Announcement via OWL, instead of replying to every email. Please review Announcements in OWL constantly.

Course Website

Login your OWL, which you will find a **Weekly Schedule** with videos and slides files

If students need assistance, they can seek support on the OWL Help page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

Students should check the course website as well as OWL on a regular basis for news and updates. These are the primary methods by which information will be disseminated to all students in the class. The missing of critical information due to your failure to check the course website or OWL cannot be used as a basis for appeal.

Obviously, you will need to have a stable internet connection, computer with working microphone and/or webcam (for the final exam).

Some useful dates:

Classes begin: September 9

Reading Week: November 2-8

Classes end: December 9

Class Schedule (to be delivered asynchronous online)

(Original scheduling: Tu 1:30 – 2:30 pm; Thur 1:30 to 3:30 pm)

TA for the course: TBD

TA Consulting Hours (from the week of 09/27): TBD

Student Evaluation

Three assignments worth 15% each.

Take-home Midterm: 20%

Final Exam: 35%

All assignments are due by midnight of the due date.

Assignment 1: Due 10/16

Assignment 2: Due 11/13

Assignment 3: Due 12/7

Late Assignment Policy of assignments:

1 day late: -10%

2 days late: -30%

3 days late: -100%

Midterm: Released at noon of 10/29 (Take-home midterm will be due in 24 hours). Open book/notes but **must be individual effort**.

Final Exam with remote proctoring, 3 hours, open book/notes but **must be individual effort**.

Date and time TBD.

Extensions of assignments:

Generally, no extensions to assignments will be given (except for lengthy illness, or other compassionate grounds).

In those cases where an extension is granted, only the course instructor can grant the extension. If you have serious medical or compassionate grounds for an extension, you should take supporting documentation to the office of the Dean of your faculty, who will contact the instructor.

There will be no makeup Midterm Exam, except for students requesting a Special Midterm Exam for religious 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 in question.

If you miss the Midterm Exam for any other reason, and present valid documentation to the Dean's office, your Final Exam mark will be reweighted to include the weight of the Midterm Exam. You must notify the course instructor within a week of the missed Midterm Exam, and documentation must be received by your Dean's office within 2 weeks of the missed exam.

If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or supporting documentation to the

Academic Counselling Office of your home faculty as soon as possible.

If you are a science student, the Academic Counselling Office of the Faculty of Science is located in WSC 191, and can be contacted at 519-661-3040 or scibmsac@uwo.ca. Their website is <http://www.uwo.ca/sci/counselling>.

A student requiring academic accommodation due to illness is recommended to follow the policy on Accommodation for Illness http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf (which includes a link to the Student Medical Certificate)

If you miss the Final Exam, contact your faculty's Academic Counselling Office as soon as possible. They will assess your eligibility to write the Special Exam (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": http://www.uwo.ca/sci/counselling/procedures/exam_conflicts.html.

If for any reason the assignment schedule given below cannot be adhered to, the assignment marks will be pro-rated. (The n assignments are worth $k\%$ of the overall mark for the course. If an assignment has to be cancelled for any reason, the remaining assignment weights will be prorated to add up to $k\%$.)

Every effort will be made to have assignments marked and handed back within 3 weeks of the handin date, preferably sooner.

Computing Facilities

Each student will have an account on the Computer Science Department senior undergraduate computing facility, GAUL. In accepting the GAUL account, a student agrees to abide by the department's Rules of Ethical Conduct .

Email Contact

We occasionally need to send email messages to the class or to students individually. Email is sent to the UWO email address as assigned to you by Information Technology Services (ITS), i.e. your email address @uwo.ca. It is your responsibility to read this email on a frequent and regular basis, or to have it forwarded to an alternative email address if preferred. See the ITS website for directions on forwarding email.

Accommodation and Accessibility

Accommodation Policies

Students with disabilities work with Accessible Education (formerly SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The Academic Accommodation for Students with Disabilities policy can be found at: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Accommodation_disabilities.pdf

Academic Consideration for Student Absence

Students will have up to two (2) opportunities during the regular academic year to use an on-line portal to self-report an absence during the semester, provided the following conditions are met: the absence is no more than 48 hours in duration, and the assessment for which consideration is being sought is worth 30% or less of the student's final grade. Students are expected to contact their instructors within 24 hours of the end of the period of the self-reported absence, unless noted on the syllabus. Students are not able to use the self-reporting option in the following circumstances:

- for exams scheduled by the Office of the Registrar (e.g., December and April exams)
- absence of a duration greater than 48 hours,
- assessments worth more than 30% of the student's final grade,
- if a student has already used the self-reporting portal twice during the academic year

If the conditions for a Self-Reported Absence are *not* met, students will need to provide a Student Medical Certificate if the absence is medical, or provide appropriate documentation if there are compassionate grounds for the absence in question. Students are encouraged to contact their Faculty academic counselling office to obtain more information about the relevant documentation.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. **All documentation required for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.**

For policy on Academic Consideration for Student Absences - Undergraduate Students in First Entry Programs, see:

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

and for the Student Medical Certificate (SMC), see:

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

Religious Accommodation

Students should consult the University's list of recognized religious holidays, and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the Western Multicultural Calendar:

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

You may also be eligible to write the Special Exam if you are in a "Multiple Exam Situation" (see http://www.registrar.uwo.ca/examinations/exam_schedule.html).

Academic Policies

The website for Registrarial Services is <http://www.registrar.uwo.ca>.

In accordance with policy, <http://www.uwo.ca/its/identity/activatenonstudent.html>, 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.

Contingency plan for an in-person class pivoting to 100% 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, all remaining 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.

All of the remote learning sessions for this course will be recorded. The data captured during these recordings may include your image, voice recordings, chat logs and personal identifiers (name displayed on the screen). The recordings will be used for educational purposes related to this course, including evaluations. The recordings may be disclosed to other individuals participating in the course for their private or group study purposes. Please contact the instructor if you have any concerns related to session recordings.

Participants in this course are not permitted to record the sessions, except where recording is an approved accommodation, or the participant has the prior written permission of the instructor.

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.

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 the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

Computer-marked multiple-choice tests and exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Tests and examinations in this course will be conducted using the remote proctoring service, such as Proctortrack. 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**. More information about this remote proctoring service is available in the Online Proctoring Guidelines at the following link:

<https://www.uwo.ca/univsec/pdf/onlineproctorguidelines.pdf>

Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. Information about the technical requirements are available at the following link:

<https://www.proctortrack.com/tech-requirements/>

Proctortrack will require you to provide personal information (including some biometric data). The session will be recorded. By taking this course, you are consenting to the use of this software. More information about remote proctoring is available in the Online Proctoring Guidelines at the following link:

<https://www.uwo.ca/univsec/pdf/onlineproctorguidelines.pdf>

Completion of this course will require you to have a reliable internet connection and a device that meets the system and technical requirements for both Zoom and Proctortrack. Information about the system and technical requirements are available at the following links:

<https://www.proctortrack.com/tech-requirements/>

<https://support.zoom.us/hc/en-us>

Support Services

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

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 Student Accessibility Services (SAS) at (519) 661-2147 if you have any questions regarding accommodations.

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: <https://www.uwo.ca/se/digital/>.

Learning-skills counsellors at the Student Development Centre (<http://www.sdc.uwo.ca>) 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.

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

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