

# Syllabus

## Description

This course is an introduction to the field of artificial intelligence including search, knowledge representation, reasoning, uncertainty, learning, and perception. Credit hours: 3

## Prerequisites

Advanced Data Structures (CptS 223/233)

## Student Learning Outcomes

1. Understand the major areas and challenges of AI
2. Apply basic AI algorithms to solve problems
3. Understand the ethical issues in AI

## Time and Location

Tuesday & Thursday 9:10-10:25am

Pullman: ETRL 101, Tri-Cities: TFLO 224, Everett: EVRT 457

Zoom: <https://wsu.zoom.us/j/99206655397?pwd=TCsvQjhBd2RlOGVhYzJRL0d4dz09>

## Instructor

Larry Holder, Email: [holder@wsu.edu](mailto:holder@wsu.edu), Office hours: By appointment

## Teaching Assistant

Pegah Mavaie, Email: [pegah.mavaie@wsu.edu](mailto:pegah.mavaie@wsu.edu), Office hours: By appointment

## Textbook (Required)

[Stuart Russell](#) and [Peter Norvig](#), [\*Artificial Intelligence: A Modern Approach, Fourth Edition\*](#), Prentice Hall, 2020.

## Course Resources

- [Wumpus World Simulator in C++ and Python](#)
- [Google C++ Style Guide](#)
- [Style Guide for Python Code](#)
- [Canvas](#)
- [my.wsu](#)
- Wumpus World App Downloads



## Attendance

Attendance is not required, but students are responsible for all lecture content, including announcements about changes to course policies, schedule, and assignments.

## Readings

Assigned readings are shown on the course schedule and are taken from the required textbook [\*Artificial Intelligence: A Modern Approach, Fourth Edition\*](#), Prentice Hall, 2020. Students are expected to complete the readings by the beginning of class for which they are assigned.

## Homeworks

Students will be required to complete several homework assignments. Homeworks will evaluate the student's ability to apply concepts discussed in class. Some coding may be required. All submitted work, including code, must be your own, and cannot be copied, in whole or in part, from any other source. Homework due dates are shown on the class schedule. Graduate students will be required to complete additional assignments. *Late Policy*: Work submitted after the deadline will receive a zero.

## Exams

Students will be required to complete two midterm exams and one final exam. Exams will evaluate the student's understanding of the concepts discussed in class and applied in the homeworks. The midterm exams will focus on topics taught since the last exam. The final exam will be comprehensive. Exam dates and times are shown on the class schedule. Exams will be administered via Canvas and taken remotely, so students will need a computer to take the exams. Exams are open-book, open-notes. Students may use a calculator. No other resources can be used during an exam. Students must complete the exam individually with no assistance from others or the internet. More instructions will be available before the first exam.

## Grading

12 Homeworks (50%), Exam 1 (15%), Exam 2 (15%), Final Exam (20%)

Final grades will be based on the following scale (no curve):

Letter grade	Percentage		Letter grade	Percentage
A	93–100%		C	73–76%
A–	90–92%		C–	70–72%
B+	87–89%		D+	67–69%
B	83–86%		D	63–66%
B–	80–82%		D–	60–62%
C+	77–79%		F	0–59%

## Students with Disabilities

Reasonable accommodations are available for students with documented disabilities or chronic medical conditions. If you have a disability and need accommodations to fully participate in this class, please visit your campus Access Center website (websites listed below) to follow published procedures to request accommodations. Students may also call or email the Access Center to schedule an appointment with an Access Advisor. All disability related accommodations are to be approved through the Access Center. It is a university expectation that students with approved accommodations visit with instructors (in person or via Zoom) within two weeks of requesting their accommodations to discuss logistics.

For more information contact a Disability Specialist on your home campus:

- Pullman or WSU Online: 509-335-3417 <http://accesscenter.wsu.edu>, [Access.Center@wsu.edu](mailto:Access.Center@wsu.edu)
- Spokane: <https://spokane.wsu.edu/studentaffairs/access-resources/>
- Tri-Cities: <http://www.tricity.wsu.edu/disability/>
- Vancouver: 360-546-9138; <https://studentaffairs.vancouver.wsu.edu/student-wellness-center/access-center>

## Academic Integrity

Washington State University, a community dedicated to the advancement of knowledge, expects all students to adhere to high expectations of scholarship and the Standards of Conduct for Students. Potential violations of the Standards of Conduct for Students should be referred to the Center for Community Standards. The Center for Community Standards supports students, upholds their rights and responsibilities, and holds them accountable for behavior that doesn't meet our community expectations.

University instructors have the authority, and are expected to intervene, in all situations where students may have violated [academic integrity expectations](#). Where an instructor believes it is more likely than not that a student violated expectations, they have the authority to assign an academic consequence consistent with the academic integrity statement found in their course syllabus. The instructor is required to [report the violation to the Center for Community Standards](#) to provide an appropriate and fundamentally fair process for the student. More information regarding responding to academic integrity violations can be found at: <https://www.handbook.wsu.edu/academic-integrity-process/>.

Feel free to contact the Center for Community Standards if you would like more specific information about the process. Contact information for each campus can be found at: (<https://communitystandards.wsu.edu/contacts-by-campus/>).

The Writing Program (509-335-7959) can assist with proactive assignment design that minimizes the risk of academic dishonesty.

## COVID-19 Statement

Per the proclamation of Governor Inslee on August 18, 2021, masks that cover both the nose and mouth must be worn by all people over the age of five while indoors in public spaces. This includes all WSU owned and operated facilities. The state-wide mask mandate goes into effect on Monday, August 23, 2021, and will be effective until further notice.

Public health directives may be adjusted throughout the year to respond to the evolving COVID-19 pandemic. Directives may include, but are not limited to, compliance with WSU's COVID-19 vaccination policy, wearing a cloth face covering, physically distancing, and sanitizing common-use spaces. All current COVID-19 related university policies and public health directives are located at <https://wsu.edu/covid-19/>. Students who choose not to comply with these directives may be required to leave the classroom; in egregious or repetitive cases, student non-compliance may be referred to the Center for Community Standards for action under the Standards of Conduct for Students.

## Policy Prohibiting Discrimination and Harassment (Executive Policy 15)

This policy expresses WSU's commitment to maintaining an environment free from discrimination, including sexual harassment. This policy applies to all students, faculty, staff, or others having an association with the University.

Discrimination, including discriminatory harassment, sexual harassment, and sexual misconduct (including stalking, intimate partner violence, and sexual violence) is prohibited at WSU (See WSU Policy Prohibiting Discrimination and Harassment (Executive Policy 15) and WSU Standards of Conduct for Students).

If you feel you have experienced or have witnessed discriminatory conduct, you can contact the WSU Office of Compliance and Civil Rights (CCR) and/or the WSU Title IX Coordinator at 509-335-8288 to discuss resources, including confidential resources, and reporting options. (Visit <https://ccr.wsu.edu/> for more information).

Most WSU employees, including faculty, who have information regarding sexual harassment or sexual misconduct are required to report the information to CCR or a designated Title IX Coordinator or Liaison. Visit <https://ccr.wsu.edu/file-a-complaint/> for more information.

## Class Attendance and Absences (Academic Regulation 72)

As is common in any semester, this fall we will see students who are ill when they present to take an exam. In this situation, it is not appropriate to either forward a request for accommodations to the Access Center or send students to meet with Access Center staff. Students who are temporarily ill do not need official accommodations or approval to take a make-up exam. Make-up exam policies should be clearly stated in the course syllabi and other appropriate communication channels and instructors should follow them.

Faculty should exercise understanding and generosity in responding to students' requests to keep up with the coursework or make up missed work due to illness. It is the expectation of the Provost's Office that instructors will reasonably accommodate students who are absent.

Per Academic Regulation 72, students are responsible for ensuring that they attend all class meetings and complete all in-class and out-of-class work as assigned by the instructor. Students are also responsible for communicating with the instructor should they need to be absent.

- Attendance Policy

The instructor is responsible for determining the attendance policy and for making decisions regarding the policy, including the consequence of missed classes, within guidelines established by the academic unit. The instructor is responsible for communicating the policy to the students in the course syllabus.

- Administrative Drops for Non-Attendance

Students who have not attended class meetings (including lectures, laboratories, and other meetings) during the first week of the semester or according to a prorated schedule for shorter sessions may be dropped from the course by the department. Students enrolled in online classes may be dropped if they have not logged into the class during the first week. Students should not assume that they have been dropped without checking their class schedules.

- Absences

Students should make all reasonable efforts to attend all class meetings. However, in the event a student is unable to attend a class, it is the responsibility of the student to inform the instructor as soon as possible, explain the reason for the absence (and provide documentation, if appropriate), and make up class work missed within a reasonable amount of time, if allowed. Missing class meetings may result in a reduction in a student's overall grade in the class.

- University Sponsored. Any student who is required to participate in off-campus, university-sponsored activities such as field trips, musical performances, judging teams, intercollegiate athletic events, etc., should obtain an official Class Absence Request form from the faculty or staff member supervising the on- or off-campus activity. The form must contain specific information concerning the activity and date, be signed by the supervising faculty or staff member, and be submitted by the student at least one week in advance to the individual instructors of the student's classes. Alternative forms of the class Absence Request may also be provided by the supervising faculty or staff member and are acceptable for requesting university- sponsored absences. It is recommended, but not required, that a student not be penalized for absence from class provided a properly signed form has been filed with the instructor prior to the absence. These university-sponsored absences are subject to an instructor's

attendance policy and are not intended to imply additional acceptable absences. In all instances, it is the student's responsibility to make up all work missed.

- *Military Service Members*. Students who are members of the National Guard or a reserve branch of a military service are occasionally required to miss class for weekend drills, active duty, and related responsibilities and are entitled to make up the class (RCW 28B.10.270). In such a case, instructors must not penalize students for the absences and must allow them to make-up the missed work. In each instance, it is the responsibility of the student to inform the instructor of the duty before the absence, provide appropriate documentation if requested, and complete the missed work as soon as reasonably possible.
- *Flexible Attendance as an Access Accommodation*. Some students have disabilities or chronic medical conditions of an episodic nature that may require flexibility regarding attendance. The Access Center recognizes that in some cases, allowing absences beyond those normally allowed in a course is a reasonable accommodation. However, there are courses in which a specified standard of attendance may be an essential part of the course. When the Access Center determines that flexible attendance may be a reasonable accommodation, instructors will receive notification of approved accommodations and procedures for their consideration. Final determinations regarding flexible attendance will be determined on a case-by-case basis. See the Flexible Attendance Guidelines at the Access Center website and Rule 83. NOTE: The Access Center does not provide accommodations for acute illnesses such as the common cold or flu. In these cases, students are to work with their instructors as indicated under c.6. Other Absences.
- *Reasonable Religious Accommodation*. Washington State University reasonably accommodates absences allowing for students to take holidays for reasons of faith or conscience or organized activities conducted under the auspices of a religious denomination, church, or religious organization. Reasonable accommodation requires the student to coordinate with the instructor on scheduling examinations or other activities necessary for course completion. Students requesting accommodation must provide written notification within the first two weeks of the beginning of the course and include specific dates for absences. Approved accommodations for absences will not adversely impact student grades. Absence from classes or examinations for religious reasons does not relieve students from responsibility for any part of the course work required during the period of absence. Students who feel they have been treated unfairly in terms of this accommodation may refer to Academic Regulation 104 - Academic Complaint Procedures. See also Academic Regulation 82, available at <https://registrar.wsu.edu/academic-regulations/>  
**Instructors must reasonably accommodate students who, due to the observance of religious holidays, expect to be absent or endure a significant**

**hardship during certain days of the course.** "Reasonably accommodate" means coordinating with the student on scheduling examinations or other activities necessary for completion of the course and includes offering different times for examinations or activities.

- Any student seeking reasonable accommodations under this section must provide written notice to the instructor, within the first two weeks of the beginning of the course and include the specific dates for absences. Absence from classes or examinations for religious reasons does not relieve students from responsibility for any part of the course work required during the period of absence.
- The instructor shall inform the student of the decision in writing within seven calendar days of the receipt of the request.
- Approved accommodations for absences will not adversely impact student grades.
- The university provides notice to students of this policy on the university's web site and in course or program syllabi, including grievance procedures.

Any student who believes that she or he has not been appropriately accommodated under this policy may seek review of the decision by sending a written request to the chairperson of the department offering the course, as soon as possible and no later than seven days after learning of the instructor's decision. After the chair's decision, the student or the instructor may appeal to the dean's office. Appeals to the dean's office must be presented in writing within seven calendar days of the chair's decision. The decision of the dean or associate dean shall be made within seven calendar days and is final. The University Ombudsman is available at any stage for advice or assistance in resolving requests for accommodation. Students should understand that fairness in the examination process is an important consideration in the educational process and that they do have a duty to cooperate in making alternate arrangements.

- *Adverse Weather Conditions.* When appropriate campus authorities declare a "Yellow / Delayed or Limited Operations" or "Red / Closed" campus condition (BPPM 50.40-46), or travel to instructional locations is unsafe, classes may be cancelled or delayed. When a student does not attend due to adverse conditions, the instructor will not penalize the student. See the Inclement Weather Policy online at each campus website and at the Office of the Provost website.
- *Other Absences.* Students must sometimes miss class meetings, examinations, or other academic obligations affecting their grades due to extenuating circumstances. It is the responsibility of the student to provide a written explanation for the absence to the instructor as soon as it is reasonable to do so. When possible, students should provide appropriate documentation for their

absence, but instructors cannot require written excuses from health care professionals.

As long as absences are not excessive, it is recommended, but not required, that the instructor provide and document reasonable arrangements. Determinations regarding the acceptance of an absence are the discretion of the instructor based on the attendance policy as stated in the class syllabus.

Students who attempt to gain advantage through abuse of any aspect of the absence policy (e.g., by providing an instructor with false information) may be referred to the Center for Community Standards.

- *Emergency Notifications*

While the Office of the Dean of Students does not excuse or verify student absences, in the event a student is going to be away from class for an extended period and is unable to contact the instructor in a timely manner, the Office of the Dean of Students may provide an emergency notification on the student's behalf to the instructors, informing them of the student's absence and the planned duration of the absence. An emergency notification should not be required or used to excuse a student's absence.

It is the responsibility of the student to make contact with their instructors as soon as possible to make arrangements for missed work. It is up to the instructor to determine what if any arrangements will be made for the student based upon the attendance policy as stated in syllabus.

- *Request for Consideration*

The Office of the Dean of Students and/or the Office of Civil Rights Compliance and Investigation may contact instructors on a student's behalf when the student's involvement in a matter implicating the WSU Policy Prohibiting Discrimination, Sexual Harassment, and Sexual Misconduct, Executive Policy #15 is having a significant impact on the student's academic progress.

In such cases, the instructor is strongly encouraged to work with the student to address the student's needs without compromising learning objectives. It is the responsibility of the student to contact the instructor to make these arrangements.

- *Complaints*

Students who wish to raise a concern about the instructor's arrangement regarding missed work may follow the Academic Complaint Procedure, outlined in Academic Regulation 104.