

GNM 2248: Artificial Intelligence in Society

Summer 2023: Syllabus

Instructor: Dr. Vincent Cicirello
E-mail (course related): Use Blackboard "Course Messages" tool

Office: G-116
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Course Time/Location: Online Asynchronous, Summer Session 1: May 15, 2023 – June 22, 2023.

Office Hours: Zoom by appointment (contact me via Blackboard's Course Messages tool to arrange a day/time).

- **Scheduling Virtual Office Hours:** Since office hours will be virtual via Zoom, I'm not setting specific days/times. Send me a message via the Course Messages tool in Blackboard. For simple issues, we might be able to interact that way. But if you want to "meet" via Zoom include suggested days/times (multiple options preferably) in your message, and I will either pick one or I'll suggest alternatives if your requested days/times conflict with my schedule. Note: I won't meet on weekends or holidays, or after 4:30pm (I often have regular meetings for committees, etc at 4:30, and I don't work in the evening). My preference for meetings with students is between 10am and 2pm, but can be available outside that time window if necessary.
- You can call my office phone. I will be there some days/times, and even if I'm not, I will get voicemail. Although if I don't answer when you call, you will likely get a quicker response if you send me a message in Blackboard.

Electronic Communications:

- **Discussion Forums:** There are three discussion forums within Blackboard, each of which will be available for approximately one-third of the course, and each is on a different course topic. Later in the syllabus you will see the details of what is expected of you in each of these three discussion forums (they are graded).
- **Course Messages:** If you have some issue specific to you (e.g., your grades, or if you want to set up an office hours appointment), then use the "Course Messages" link in Blackboard on the left.
- **My Response Time:** If you send me a direct message in Course Messages, my goal is to respond no later than 11:59pm the next weekday. E.g., if you send me a message anytime on Monday, my goal is to respond by 11:59pm on Tuesday night, or if you send a message anytime on Friday, Saturday, or Sunday, my goal is to respond no later than 11:59pm on Monday night. Memorial Day is treated like weekend days. See later in the syllabus for details on my response time in the Discussion Forums, which will vary based on how active the forum is with student posts.

Course Attributes: H (Historically Conscious)

Minors: This is an elective in the minors: (a) **Behavioral Neuroscience**, and (b) **Digital Literacy & Multimedia Design**.

Course Description: This course will provide a broad overview and introduction to the field of artificial intelligence (AI) focusing on the impacts it has made on society during the past 60+ years. The intended audience for this course is that of the general student. No mathematical background is required. The course will begin by providing a broad overview of what AI is, and what it is not, including a discussion of the notions of Strong and Weak AI. Strong AI hypothesizes that the human mind is nothing more than a computational device and thus that computers can in principle be programmed with the capability of thought (i.e., to truly reason and solve problems). Contrast this with Weak AI which does not focus on whether machines can be made to actually think, but rather whether machines can be made to act intelligently. We will read and discuss articles by the pioneering scientists and philosophers that explore these notions. Next, the course will focus on introducing the student to applications of AI that have been making their ways into our everyday lives. Attention will be placed on the ethical issues and the impacts AI technology will continue to make on society. The course will include a combination of lectures, class discussion of films (both fiction and non-fiction) and assigned readings (both non-fiction and fiction), as well as current day news articles.

Required Textbooks/Readings: There are no required textbooks. There will be required readings consisting of articles available electronically. You will be required to read articles by the dates indicated.

Required Films: Throughout the Blackboard page for the course, there are links to online videos that you must watch. Additionally, there are 2 movies you must watch by the end of Topic 3, streams of which are freely available via Stockton's library's subscriptions, and the links to the streams are in Blackboard:

- "2001: A Space Odyssey," directed by Stanley Kubrick (1968).
- "A.I. Artificial Intelligence," directed by Steven Spielberg (2001).

Prerequisites: None

Learning Objectives: A few of the learning objectives of this course include the following:

- Gaining factual knowledge pertaining to the field of Artificial Intelligence, such as some of the terminology of the field, approaches to problem solving that scientists have been taking in the field, and historical trends;
- Learning the fundamental principles and theories of the field of AI, including foundational elements from related fields such as philosophy of mind and cognitive science; and
- Learning to analyze and critically evaluate ideas and points of view pertaining to the field of AI.

Grading: Three discussions (10-11 days in length each).
Five quizzes.
Your best 6 grades out of the above 8 grades are averaged together with equal weight.
Your low 2 grades out of the above 8 are simply dropped.

Grading Scale: The grade scale is as listed in the following table. Note my use of 2 decimal points in the scale. I don't round grades up. For example, 64.99 is a D+ and will not be rounded up to a C-.

A (at least 90.00 overall)	A- (at least 89.00 overall)	B+ (at least 88.00 overall)
B (at least 78.00 overall)	B- (at least 77.00 overall)	C+ (at least 76.00 overall)
C (at least 66.00 overall)	C- (at least 65.00 overall)	D+ (at least 64.00 overall)
D (at least 54.00 overall)	D- (at least 53.00 overall)	F (less than 53.00 overall)

Online Discussions: There are three discussions during the course. The first discussion is on the Turing Test, and takes place during the first third of the course. The second is on the character of HAL from "2001: A Space Odyssey" and A.I. in science fiction more generally, and will take place during the middle third of the course. The third is on the future of A.I., and will take place during the last third of the course. In each of these discussions, you are expected to contribute at least 4 posts containing your original and substantive thoughts, relevant to the specific discussion topic. In your posts, demonstrate that you have read and reflected upon your classmate's ideas. That is, make it a true discussion. At least one of your four posts in a discussion must be within the first 5 days of the discussion, and at least one of your four posts must be within the last 5 days of the discussion. Why the "first 5 days" and "last 5 days" rules? Well, if everyone leaves posting to the end of the discussion, then nobody has anything to respond to (the rationale for the "first 5 days rule"). And if you simply do all of your posts at the beginning of the discussion and then leave, you won't see how others responded to you, and it wouldn't really be a discussion (the rationale for the "last 5 days rule"). The rubric that used to grade each the discussion is found later in the syllabus, as well as in Blackboard within each Discussion Forum. The forums for each discussion are started and end automatically, and the dates and times are listed in Blackboard.

My Response within the Online Discussion Forum: I regularly monitor the online discussion forums. I do not post a response to every student posting. Doing so would risk unintentionally biasing the direction of the discussion. I would rather the discussion go where the students take it (provided it is on topic, etc). The nature of my posts within the online discussion will likely be to clarify any course content, to answer any questions asked about the course content, or to make sure the discussion stays relevant. If a student post requires a response from me (e.g., a question was asked that requires clarifying course content, etc), then my response time will likely vary based on the overall volume of posts in the discussion forum (e.g., to discover that post that really needs a response, I must first read all posts). My goal is to respond to such discussion posts no later than 11:59pm the following weekday (much like I indicated earlier in the syllabus in the paragraph on response to private communications). However, if the discussion forum has particularly heavy volume, then it may take an extra weekday or two.

Quizzes: The quizzes are conducted electronically. You will have limited time to complete them. You will have 40 minutes to complete each quiz. Each quiz will have 16 questions. You can take a quiz up to 2 times. If you take a quiz twice, your grade is the higher of the two grades. The questions are randomly selected, so you will not likely get the same questions on retakes. Although you will see your grade for a quiz upon completing it, you will not be given the correct answers to the questions until after the due-date—thus, if you retake a quiz the system will not have shown you which questions you answered incorrectly the first time. All quizzes are available to take from as early as the first day of classes. Each quiz has a due-date, at approximately equal intervals throughout the course. Quiz due-dates are strict. See Blackboard for specific dates. **The deadline for each quiz is 1pm.** Each of the 5 quizzes corresponds to one of the general course topics, and covers the required readings for that topic and any other material covered in the lectures. If you do not take a quiz by its designated due-date, then your grade on that quiz is a 0.

Grade Drop Policy: There are 5 quizzes and 3 discussions. Your two lowest out of those 8 grades will be dropped. The remaining 6 will be averaged together equally.

Quiz Due Dates and Discussion Date Ranges: Quiz dates are strict. If you miss a quiz, your score on that quiz is 0. If you have conflicts, then plan ahead (e.g., all quizzes are available to take from the start of the course). If you miss a quiz and have a legitimate illness, please provide the Stockton Wellness Center with a note from a doctor explicitly indicating the dates that you are unable to participate in course activities, and the Stockton Wellness Center will contact me and the instructors of any other courses you are taking. Valid medical excuses are the only ones that will be considered in the event of a missed quiz. The start and end dates/times of the discussions are also strict. After all, it isn't a discussion if only one person is involved. It is unlikely that you would have an issue that would justify missing a discussion in its entirety (e.g., the issue would need to span a 10-11 day period, and if you miss that much time, you've missed a third of the course).

Academic Honesty: Please familiarize yourself with Stockton's policy on academic honesty. The penalty for each violation is: (a) a grade of 0 on the quiz or assignment of your violation, **and** (b) a 10 point reduction of your overall course grade. Examples of violations include but are not limited to: plagiarism, any other form of presenting work of another as your own, any form of cheating on quizzes, helping someone cheat on a quiz, asking someone to help you cheat even if they refuse, etc.

ChatGPT and Academic Honesty: Using ChatGPT (or similar A.I. generated text) to write discussion posts for you is also a violation of academic honesty if you do so in a way as to claim it as your own work. However, ChatGPT is a current example of A.I., and the course is about A.I. Using ChatGPT to create examples that you utilize in your discussion posts, and clearly identify as having been created by ChatGPT (or some other tool) is allowed.

Topics and Tentative Schedule: Strongly recommend working ahead whenever you are able to do so.

Complete Topic's Required Readings, Materials, and Quiz by 1pm on:	Topic
Quiz 1 due: May 19	Intro to the Course; The Turing Test
Quiz 2 due: May 26	History of AI: From early days to present
Quiz 3 due: June 2	AI in Fiction
Quiz 4 due: June 9	Common Sense Reasoning
Quiz 5 due: June 16	Collective Problem Solving

Quiz Deadlines are all at **1pm on Fridays** (see table above for specific dates).

Discussions Dates and Topics:

Date Range	Topic
May 15, 12:01am to May 26, 11:59pm	Discussion 1: Critique the Turing Test
May 27, 12:01am to June 6, 11:59pm	Discussion 2: HAL and A.I. in Science Fiction
June 7, 12:01am to June 16, 11:59pm	Discussion 3: The Future of A.I.

Discussion Grading Rubric

Expectations: In each of the three discussions, you are expected to post at least 4 times. At least 1 of those 4 (or more) posts should be within the first 5 days of the approximately 10-11 day discussion; and at least 1 of those 4 (or more) posts should be within the last 5 days. The content of your posts must be relevant to the topic of the specific discussion, and must contain your own original and substantive viewpoint on the discussion. You should read the posts of your classmates, and demonstrate that you've considered the ideas of your classmates. Each of the discussion forums will appear automatically at 12:01am on the date scheduled and listed in the syllabus and in Blackboard. Likewise, each will disappear automatically at 11:59pm on the date it is scheduled to end.

Grading: I am not going to grade each individual post. Rather, your grade on each discussion topic is based on: (a) the number and timing of your posts, (b) substantive contributions, (c) relevant contributions, and (d) engaging with your fellow classmates perspectives. Your grade on a discussion topic will be determined at the end of that discussion. Your discussion grade will be determined based on the following rubric, which is also found in Blackboard within each discussion forum.

Criteria	Excellent	Very Good	Good	Fair	Poor
Number and timing of posts ⌵	25 Points At least 4 total posts within the discussion for this topic; AND at least 1 of your posts for this topic is within first 5 days and at least 1 of your posts for this topic is within last 5 days of this discussion topic.	18.75 Points At least 3 total posts within the discussion for this topic; AND at least 1 of your posts for this topic is within first 5 days of this discussion topic.	12.5 Points At least 2 total posts within the discussion for this topic.	6.25 Points At least 1 post within the discussion for this topic.	0 Points Didn't post in this topic.
Discussion Engagement ⌵	25 Points It is evident in your posts that you often read and reflected upon the posts of your fellow classmates.	18.75 Points It is evident in your posts that you regularly read and reflected upon the posts of your fellow classmates.	12.5 Points It is evident in your posts that you occasionally read and reflected upon the posts of your fellow classmates.	6.25 Points It is evident in your posts that you read and reflected upon the posts of your fellow classmates at least once.	0 Points You do not appear to have read and reflected upon the posts of your classmates.
Relevance ⌵	25 Points The content of your posts, as a whole, are entirely relevant to the course.	18.75 Points The content of your posts, as a whole, are mostly relevant to the course.	12.5 Points The content of your posts, as a whole, are inconsistent in relevance to the course, but do contain relevant content.	6.25 Points Your posts, as a whole, contain very little content relevant to the course.	0 Points Your posts, as a whole, contain no content relevant to the course.
Substantive Contributions ⌵	25 Points Overall, you made a substantive contribution to the discussion.	18.75 Points Your posts as a whole are mostly substantive.	12.5 Points Inconsistent in substantive content.	6.25 Points Your posts as a whole contain very little substantive content.	0 Points Your posts as a whole contain no substantive content.