



California State University, Chico
Department of Philosophy



HNRS 330: Mind in the Machine, Spring 2018

Note: this syllabus is tentative, and does not yet include specific dates for readings, papers, or exam.

Course Description:	<i>An Honors seminar that explores the psychological, philosophical, social, biological, and technical aspects of machine “minds.” Explores core issues within a subset of the disciplines that comprise the cognitive sciences, including artificial intelligence, philosophy, and psychology. Readings and discussions focus on theories of artificial intelligence and classic themes in human cognition and philosophy, such as determinism, consciousness, free-will, and the mind-body problem. The course focuses on increasing one’s capability to express beliefs and evaluate arguments concerning various issues. This is an approved WI GE course for Hnrs.</i>
Instructor:	Prof. Eric Gampel
Office location:	ARTS 384
E-mail:	Please use the Blackboard Learn message system.
Office hours:	TBA
Class sessions:	MWF 1-1:50 PM, PAC 210
Prerequisites:	Prerequisites: Acceptance into the Honors Program; faculty permission
Required textbooks available through the Wildcat Store (please use these editions):	<ol style="list-style-type: none"> 1. Steven Pinker, <i>How the Mind Works</i>, Norton, ISBN: 9780393334777 2. John Perry, <i>A Dialogue on Personal Identity and Immortality</i>, Hackett, ISBN: 978-0915144532 3. Clifford Williams, <i>Free Will and Determinism: A Dialogue</i>, Hackett, ISBN: 978-0915144778 4. Torin Alter and Robert J Howell, <i>A Dialogue on Consciousness</i>, Oxford, ISBN: 978-0195375299
Requirements:	<ol style="list-style-type: none"> 1. Weekly 1-page think pieces, graded pass/fail (10%) 2. Daily clicker questions (20%) 3. Two presentations (10%, about impact of AI on your career) 4. Two 4-6 page papers (20/20%) 5. Final exam (20%)
Class format	Class sessions will be participatory, involving small group and class discussions, as well as sharing and making written comments on think pieces. Lectures will be brief.

Readings and other assignments

	Syllabus and course overview
	Pinker, <i>How the Mind Works</i> ("HMW"), "Standard Equipment," pp. 3-21 (to "Reverse- Engineering the Psyche")
	Pinker, <i>HMW</i> , "Standard Equipment," pp. 21-58 (to chapter's end)
	Epstein, " The Empty Brain "
	Wolchover, " New Theory Cracks Open the Black Box of Deep Learning "
	A.M. Turing, "Computing Machinery and Intelligence," (to "Contrary Views"), via Blackboard
	Turing, "Computing Machinery and Intelligence" (to end)
	Williams, <i>Free Will and Determinism</i> ("FW&D"), pp. 1-26
	Williams, <i>FW&D</i> , pp. 26-41
	Williams, <i>FW&D</i> , pp. 41-58
	Perry, <i>A Dialogue on Personal Identity and Immortality</i> ("Dialogue on PI"), "The First Night", pp. 1-18
	Perry, <i>Dialogue on PI</i> , "The Second Night", pp. 19-36
	Perry, <i>Dialogue on PI</i> , "The Third Night", pp. 37-49
	Pinker, <i>HMW</i> , "Thinking Machines," pp. 59-83
	Pinker, <i>HMW</i> , "Thinking Machines," pp. 83-112
	Pinker, <i>HMW</i> , "Thinking Machines," pp. 112-148
	Plantiga, "Against Materialism" (via Blackboard)
	Pinker, <i>HMW</i> , "Revenge of the Nerds," pp. 149-190
	Pinker, <i>HMW</i> , "Revenge of the Nerds," pp. 191-210; 1st draft of 1st paper due
	Pinker, <i>HMW</i> , "Good Ideas," pp. 299-333; peer comments on 1st paper due
	Pinker, <i>HMW</i> , "Good Ideas," pp. 333-362; final draft of 1st paper due via Turnitin on Blackboard
	Pinker, <i>HMW</i> , "Hotheads," pp. 363-374
	Pinker, <i>HMW</i> , "Hotheads," pp. 374-424
	Pinker, <i>HMW</i> , "Family Values," pp. 425-460

		Pinker, <i>HMW</i> , "Family Values," pp. 460-520
		Sharon Begley, "Why do We Rape, Kill, and Sleep Around?," via link
		Alter and Howell, <i>A Dialogue on Consciousness</i> (" <i>Dialogue on C</i> "), Monday and Tuesday nights
		Alter and Howell, <i>Dialogue on C</i> , Wednesday and Thur nights
		Alter and Howell, <i>Dialogue on C</i> , Friday and Saturday nights
		Pinker, <i>HMW</i> , "The Meaning of Life," pp. 521-554; 1st draft of 2nd paper due
		Pinker, <i>HMW</i> , "The Meaning of Life," pp. 554-565; peer comments on 2nd paper due.
Final Exam: during finals week, date and time TBA Final Paper: final draft of 2nd paper due by Wednesday of finals week, 5 pm via Turnitin		

Assignments and Grading Policy

1. **Think pieces (10%).** Roughly every week a one-page, single-spaced, typed and printed think piece will be due on the assigned readings. Other students will have a chance to read, discuss, and write comments on your think piece during class.

Think pieces will be graded credit/half credit/no credit, based on both your think piece and the comments you write on the think pieces of other students during class. Your final think piece grade will be calculated as a percentage based on the total number of full credits possible, out of the total assigned minus one freebie. So you can miss one thinkpiece without penalty; after that, your thinkpiece grade will go down roughly a full grade (e.g. A to B, B to C, etc.) for each thinkpiece you miss.

The think pieces are essential to the course! They are the basis of class discussion for roughly one day each week; if you do not complete one, you will likely be quite lost during the class period, and have some catching up to do before the next class period. The purpose of including such think pieces is to encourage regular reading, reflection, and sharing of your thoughts with others, to practice specific writing techniques, and to begin working on ideas for your papers. The best way to learn about the course topics is to actively think about the questions that have puzzled great minds, and discuss them with others, rather than just passively reading or listening to lectures. The think pieces aim to promote such **active engagement**. Late think pieces will not be accepted, nor can think pieces be sent to me by email. However, if you can document that you were unable to turn in a think piece due to a University-sponsored activity, or due to a "serious and unforeseeable" circumstance, as explained in FAQs below, then you can write a late make-up think piece. Just bring your documentation to my office during office hours, along with your make-up think piece.

In most cases each think piece should include the following three items, with a few lines of space in between for other students to write comments:

- a. One question: Identify one question about something in the day's reading that you would like to discuss with others, that you think other students or a teacher might be able to help you figure out. Try not to pick something a dictionary or Google could easily answer. Cite the page and perhaps provide a brief quote. This section need only be 2-3 sentences to prompt discussion.
- b. One interesting point or insight in the reading. Pick one point you find interesting, intriguing, surprising, new, troubling, exciting, confusing, problematic, or outrageous. Cite the page. Explain the point, and why you think it interesting. Relate the point to your own life, or to other issues. Reflect on the point, question it, criticize it, and or simply express your opinion about it.
- c. A specific writing exercise. At the end of each class session, I will give you a specific writing exercise for this part of your think piece. I might ask you to explain an idea in your own words and with your own examples, or clarify the evidence or argument for a claim, or raise objections and replies to an argument. If you miss a class session, be sure to find someone from the class to tell you what is required for this third part of the think piece. If you turn in a think piece without the proper third part, it will receive only half credit. Do not contact me for this information; it is your responsibility to be in class or to contact another student who was in class for the assignment.

Since other students will read your think pieces, you should be careful to only state reflections you are willing to share. All written or oral comments about another student's think piece should be respectful. Feel free to disagree with the author, but always explain your reasons, and focus on the *ideas* rather than on the author's writing abilities, character, or intelligence.

To write these think pieces you will need to read carefully and take notes. Some readings may require substantial time for outlining, re-reading, and looking up words and ideas. I recommend using the [Stanford Encyclopedia of Philosophy](#) as a regular source for the ideas and figures we are studying in the course, though in a pinch Wikipedia will do. There are also secondary texts on the course topics that you can find in the library that can help if you are especially curious or confused about something.

2. Daily clicker exercises (20%). These are multiple-choice exercises during every class session. At the start of class, there will be a few clicker questions on the day's reading and any audio or video episodes assigned for that day. In the midst of each class session and at the end there will be clicker questions to check your deeper understanding of concepts, and to survey your views. In some cases you will work in groups. All clicker answers will contribute to your clicker score for the day.

The purpose of clickers is to encourage regular reading of class materials and deeper learning of course concepts. In order to do well on the clicker exercises you will need to read and take notes on assigned readings and audio/video materials before class meets. Some readings may require substantial time for outlining, re-reading, and looking up

words and ideas. I recommend using the [Stanford Encyclopedia of Philosophy](#).

You may drop your three lowest clicker exercise scores. Please see me during office hours for an alternative assignment if you miss clicker exercises due to “serious and unforeseeable” reasons such as an illness you can document, or university-sponsored activities such as debate or athletic events (see FAQs below for more information about what counts as serious and unforeseeable). Such reasons do not include leaving your clicker in another backpack, running out of battery, or finding out it does not work. It is your responsibility to have a working clicker for each class session. The three drop policy is meant to cover such situations, as well as cases in which you are absent. Also, do not offer to help a fellow student by taking their clicker to a class they will not attend, or tilting your clicker to show your answer to a neighbor during an individual clicker question. If you are found helping another student in these ways, or receiving such help, it counts as a violation of the Academic Integrity policy and will result in an “F” for the course and referral to Student Judicial Affairs (see Academic Integrity policy below).

3. **Two presentations (10%)**. These will be presentations about how AI may affect your future career. The first will be a rough sketch and a brainstorming session with the class; the second will be a more finished presentation based on your research.
4. **Two papers (20/20%)**. Both papers are 4-6 page essays in which you critically examine a position on one of the main course topics. The first essay should focus on a philosophical argument, while the second should focus on evidence provided by evolutionary psychology or brain science. The papers will be written in stages, with feedback from me and from other students. Due dates are on the Schedule; topics and guidelines will be posted on Blackboard.
5. **Final exam (20%)**. These will be an in-class exam during the scheduled final exam date, covering the concepts, principles, theories, and arguments from the course. Some questions will be multiple choice, and similar to the clicker questions; others will be short answer. You will have a study guide in advance. The final is not cumulative. The midterm date is on the Schedule; the date and time of the Final Exam is TBA.

The course is set up so that everyone who keeps up with the assignments and clicker exercises should be able to pass. If you have a complicated work and/or personal life that will require skipping more than three clicker exercises, I recommend taking a different section of this course, taught by a different instructor, or waiting until a semester when you would be able to regularly complete class assignments.

Course Objectives

Course Content Learning Outcomes

Upon successful completion of this course, students will be able to:

1. understand and explain ways that research in artificial intelligence, neurophysiology, and cognitive psychology has illuminated and challenged commonsense and philosophical views of the human mind;

2. identify and critically evaluate their own assumptions and philosophical commitments about the nature of the mind;
3. understand the reasons for and against the claim that machines can or could have intelligence, mind, or consciousness;
4. understand and explain some of the ethical questions raised by machine intelligence;
5. form and defend reasoned positions on these issues about machine intelligence and human minds.

Students will demonstrate having achieved these outcomes through daily think pieces, papers, and exams.

General Education Status

Successful completion of this course with a D or better will count towards fulfilling your Upper Division GE requirements for Honors. The course is interdisciplinary, including significant readings and discussion about the humanities, social sciences, and natural sciences. In addition, the course will count as a GE Writing Intensive class. This course has substantial writing and rewriting, with class time devoted to learning and practice writing techniques.

General Education Area C Goals

In this course you will cultivate your intellect by forming, developing, and defending your own views about the nature of the mind, in light of the concepts, arguments, and perspectives offered by different philosophical traditions, as well as by the social and natural sciences. Understanding arguments and theories other than your own requires developing your imagination, and your ability to understand the perspectives of others very different from you.

General Education Student Learning Objectives

In this course you will develop your ability to think critically, learning and practicing techniques for interpreting and evaluating controversial and important claims, evidence, and arguments about the nature of the mind. This process will require active engagement with the course content, regularly writing up ideas about the issues, trying them out in class and in writing, and revising them based on what you learn from others and from the class materials. Reflecting and writing about these issues will require creative thinking, identifying your own ways to understand and evaluate claims and arguments about the mind.

Required Technology

Computer Needs

This course will require regular access to a computer and printer, since think pieces will need to be printed out before each class period. If you have any technical questions, please go to the University web page which has on-line information and contact numbers for technical support (<http://www.csuchico.edu/stcp>). If you are on campus, there are computer labs for students around campus. Some of the larger ones are Merriam Library

1st floor and BMU Rooms 116 and 450. You can also check the list at <http://www.csuchico.edu/stcp> or ask staff in your home department or college.

Course Use of Blackboard Learn

The course syllabus, schedule, assignments, and other essential course materials are posted on Blackboard Learn (“BbLearn”), which is accessed through the Chico State Portal at <http://portal.csuchico.edu>. You are responsible for regularly checking the online resources. If you need technical assistance with the portal or Bb Learn, please contact IT Support Services at 530-898-HELP (4357).

Dropping and Adding

You are responsible for understanding the policies and procedures about add/drops, academic renewal, etc. found at <http://www.csuchico.edu/catalog/>. You should be aware of the new deadlines and penalties for adding and dropping classes.

If you add the course late, and miss one or more days of class, you are responsible for obtaining class notes from another student in the course, and you will not be able to make up any think pieces that you miss due to signing up late. (The lowest two think piece scores are dropped, so missing a day or two of class will not destroy your grade, though it gives you less flexibility to miss classes later in the semester.)

General Education Goals

In this course you will learn knowledge and skills from three different disciplinary areas: social science (psychology), natural science (evolutionary theory and neurophysiology), and philosophy (theories of mind). The main textbook emphasizes the social and natural sciences, while the dialogs emphasize philosophical analysis and argument.

General Education Student Learning Objectives

In this course you will develop your ability to think critically, learning methods for evaluating information, theories, concepts, and philosophical arguments. This process will require active engagement with the course content, regularly writing up ideas about the course topics, trying them out in class and in writing, and revising them based on what you learn from others and from the class materials. **Since this is a Writing Intensive section, you will be responsible for regular writing, including daily think pieces and two papers, with opportunities for feedback and revision.**

University Policies and Campus Resources

Academic integrity

Any student caught cheating or plagiarizing on an exam or paper will receive an "F" in the course, and the case will be turned over to the Office of Student Judicial Affairs for disciplinary action. Plagiarism is any uncredited use of another person's words, ideas, or

intellectual work. It is your responsibility to ensure that you understand how to avoid plagiarism. If you have any questions, please see me.

Students are expected to be familiar with the University's Academic Integrity Policy. Your own commitment to learning, as evidenced by your enrollment at California State University, Chico, and the University's Academic Integrity Policy requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the Office of Student Judicial Affairs. The policy on academic integrity and other resources related to student conduct can be found at: <http://www.csuchico.edu/sjd/integrity.shtml>.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability or chronic illness, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Students with disabilities requesting accommodations must register with the Accessibility Resource Center (ARC) to establish a record of their disability. Special accommodations for exams require ample notice to the testing office and must be submitted to the instructor well in advance of the exam date. ARC will help you understand your rights and responsibilities under the Americans with Disabilities Act and provide you further assistance with requesting and arranging accommodations. The Accessibility Resource Center website is <http://www.csuchico.edu/arc>.

IT Support Services

Computer labs for student use are located on the first and fourth floor of the Meriam Library, Room 116 and 450, Tehama Hall Room 131, and the Bell Memorial Union (BMU) basement. You can get help using your computer from IT Support Services; contact them by calling 530-898-HELP (4347), or through their website, <http://www.csuchico.edu/itss>. Additional labs may be available to students in your department or college.

Student Services

Student services are designed to assist students in the development of their full academic potential and to motivate them to become self-directed learners. Students can find support for services such as skills assessment, individual or group tutorials, subject advising, learning assistance, summer academic preparation and basic skills development. Student services information can be found at: <http://www.csuchico.edu/current-students>.

Student Learning Center

The mission of the Student Learning Center (SLC) is to provide services that will assist CSU, Chico students to become independent learners. The SLC prepares and supports students in their college course work by offering a variety of programs and resources to meet student needs. The SLC facilitates the academic transition and retention of students from high schools and community colleges by providing study strategy information, content subject tutoring, and supplemental instruction. The SLC is online at <http://www.csuchico.edu/slc>. The University Writing Center has been combined with the Student Learning Center.

FAQs

How do I pass this class?

By regularly completing readings and think piece assignments, attending class, and doing well on the clicker questions. If your early grades are low, it is important to meet with me during office hours to find ways to improve your work. Philosophy is very different than most of your other subjects, and some students need more personal assistance to get on board.

This course includes very challenging readings and topics. Some of the readings will require re-reading. Be sure to take notes on what you read, so you can use those notes to understand and review before think pieces and exams, or while writing your paper. Always challenge what you read: ask “Does this make sense?”, “How does this apply to real life?”, “What is another point of view on this?”. If you engage with the readings in this way you are much more likely to understand and enjoy them.

The assignments in this course are designed so that you have to learn the specific skills and information from class sessions and readings. You’re likely to fail the course if you don’t regularly attend class and complete the assignments.

How do I get an A in this class?

Same way, but spend a lot more time and energy! Be sure to focus on the reading in a quiet place, rather than doing your work in front of a TV. Form study groups to discuss readings, and work with others to prepare for the exams or share paper drafts. Try out your ideas in the classroom, during office hours, on-line with other students through email, and even with friends and family. To work toward a good grade you should plan on at least 2 hours for each class session to complete the readings, write think pieces, and review notes (i.e. about 6 hours per week).

The requirements in this course are designed to reward hard work with what most students would find an acceptable grade. You will need to work hard to get an A, no matter how brilliant you may be, but even if you work hard, there is no guarantee that you will receive an A. Some of you will find that you do not excel at reading or writing about these issues. But if you work hard, you should surely pass the course, and in most cases earn a respectable B or C. If you work hard and you are good at thinking carefully and critically about these issues, then you are likely to receive an A.

This class seems like a lot of work. Why is it required?

Many students find studying these topics fascinating. If you don’t, that’s OK. But do your best to look for something interesting or curious about the topics, since that is likely to lead to a more engaged semester and, quite frankly, a better grade. Just buckle in, you may find that you enjoy it more than you expect.

What if my life is too busy to regularly attend class and complete the readings on time?

If you have a complicated work and/or personal life that will require skipping more than two or three classes, I recommend taking a different course, taught by a different instructor, or waiting until a semester when you would be able to regularly complete class assignments.

Can my friend or fellow classmate help me prepare my think piece or paper?

Yes. You are allowed and encouraged to work with others, especially your classmates. However, if someone helps your writing in a significant way, giving you an idea or argument that you end up using, be sure to cite them and indicate how they helped you. Do not present their words or ideas as your own. If you want to quote them, provide quotation marks and cite the conversation (using standard format, either APA or MLA). It is your responsibility to understand this rule, and to ask me if you have any questions (see Academic Integrity above).

If I add the class after the first day, can I make up missed assignments?

No. You should get the notes from other students. I will drop two think pieces (see above), so with hard work you can still do well in the course. By adding late you will be at a disadvantage because you have missed some classes, and have used up some of your “freebies”. The only exception is if your reasons are “serious and unforeseeable” as defined below. Notice that I will not make exceptions because your advisor didn’t realize you needed the course, or you were dropped from other courses due to a mix-up in the financial aid office. Those are unfortunate circumstances, but unlike documented illness they do not count as “serious and unforeseeable”.

What happens if I miss class?

Find out from another student what you have missed, and copy their notes. Unless your reason can be documented as serious and unforeseeable (as defined below) you cannot make up the think piece, but you can get a sense from another student of the main points covered in the session. Remember, you get two ‘freebies’, so if this does not happen often you should be fine.

Can I give someone else my think piece to bring to a class I will miss?

Yes, but note that you will only receive half credit for the think piece, since you will not be in class to write comments on the think pieces of other students, which is part of the assignment.

What if I have a good reason for missing a class or an assignment?

The policy of two ‘freebies’ is designed to cover cases where you have a good reason for not making it to class, or not completing the readings before class. The only exception is for serious and unforeseeable reasons, as defined below.

What is a “serious and unforeseeable” reason?

These mainly include illness, or the death of close relative, but you must be able to document them, e.g. with a note from a doctor or other reliable source. Some events that you can document other than illness or death would count as serious and unforeseeable, e.g. a flat tire on the way to school from Red Bluff. But be forewarned it is my judgment call whether something will count (e.g. a flat tire on 5th avenue will probably not count, since you could walk to class, even if that means a parking ticket or some other inconvenience). Also, I will always require documentation.

As some other examples, the following kinds of reasons do not count as “serious and unforeseeable”, as I will be interpreting the phrase:

- *you need to work overtime in order to keep your job, or you have a job interview*
- *you have to write a paper or study for an exam for another course*
- *you want to save money on flights by leaving early for a semester break*
- *you have to help out friends and family who are sick, in the hospital, or dying*

- *you want to go to a family reunion*

It is your choice whether to miss a class for such reasons, and your right, based on your own priorities. But you will not obtain a make-up opportunity.

What if I have a serious and unforeseeable reason, or miss class due to a University-sponsored activity?

Bring your documentation along with your late think piece to my office hours, and we can go over them together. You can receive full credit (not half) if your think piece is well executed, and you engage in a brief discussion with me about it.

How do I see how I'm doing in the class?

Grades will be posted every week or two on Bb Learn in the "My Grades" area for the think pieces, exams, and papers.

How do I estimate what my grade will be?

Estimate your score out of 100 for each assignment category (e.g. think pieces), multiply each category's score by its percentage weight, and add them together (see below for details). For grades you have not yet received, plug in estimates for the grades you expect, and calculate the average for that category of assignment.

Grade Scale				
A+ 97-100	B+ 87-89	C+ 77-79	D+ 67-69	F <60
A 93-96	B 83-86	C 73-76	D 63-66	
A- 90-92	B- 80-82	C- 70-72	D- 60-62	

How to Estimate Your Grade
Use the grade scale above to figure your course grade. Here is the formula: (Think pieces X 10%) + (Clickers X 20%) + (Presentations X 10%) + (First paper X 20%) + (Final paper X 20%) + (Final Exam X 20%) = Course Grade

Can I do extra credit if I miss some classes or do poorly on an exam?

No. Don't take the class if you have a very complicated and busy life that will interfere with regularly completing homework and going to classes.

How do I get help?

Use the instructor's office hours, form a study group, and/or make appointments to work with a tutor at the Student Learning Center (see above).