

The Philosophy of Animal Minds

HSS-404 / Fall 2025



Section 055

CKB 341

Mon / Thurs 2:30 - 3:50

Section 063

CKB 219

Mon / Thurs 11:30 - 12:50

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How did minds evolve? How unique is the human mind in nature? Are humans the only species on this planet capable of *thinking*? What does this even mean? How could we tell? Can other species form beliefs and concepts about the world? Do some animals possess the capacity for language? Do other species have a rudimentary sense of morality? If so, what challenges would this raise toward traditional notions of “human nature”? Furthermore, what might these questions tell us about our moral obligations to other species? This class offers a detailed look into contemporary debates in the philosophy and science of animal minds. These debates are inherently multi-disciplinary, ranging from questions in evolutionary biology, cognitive science, developmental psychology, ethics, the philosophy of mind, and the future of artificial intelligence.

Required Text: Kristin Andrews' *The Animal Mind* (Second Edition)

GRADE BREAKDOWN

35%	PIAZZA PARTICIPATION
20%	SHORT ESSAY
20%	IN-CLASS PARTICIPATION
15%	MIDTERM
10%	QUIZZES

IN-CLASS PARTICIPATION

Students who are never absent and who speak up often with questions and comments will receive a perfect participation grade. I will update participation grades a few times throughout the semester. Phone use during class will lower participation grades.

Missing Class: If you need to miss class for any reason, you must contact the Office of the Dean of Students and request an **excused absence**. Your absence will be validated once I receive an email from the Dean of Students.

QUIZZES

Expect occasional pop-quizzes (usually one a week). Each quiz contains only one or two questions, designed to be answered in a couple sentences within a 5-7 minute window (you should only need 1-2 minutes, or less than a minute). **Note:** if you are late for class and miss the quiz, your grade will be zero.

SHORT ESSAY (~1500 words)

I will provide [topics](#), but you are encouraged to choose your own. Your essay is due around the end of the semester (TBD).

MIDTERM

This class has one in-class midterm. It will take place after Lesson Five. Details and date TBD.

PIAZZA PARTICIPATION (you must sign up [here](#))

Discussion boards are the most important feature of our class. Each student must make **at least three** substantive posts for each forum exercise (submitted via **Piazza**). Since the purpose of this exercise is back-and-forth dialogue, posts should be spread out throughout the week. This course has **3** forum exercises. Take them seriously!

Forum Expectations

- You must make **at least three substantive posts** within the span of a week. To receive a high grade, these posts should be somewhat spread out over the week.
- **At least two** of these posts **must be substantive replies** to others. Generally speaking, **replies should be as long as original posts**.
- Your major posts (but not necessarily *all* of your posts) must be **informed by content from our class readings**.

What is a Substantive Post?

Substantive responses do not have a word limit, but should be generally 350-400 words or longer. It is very difficult to say anything substantive in less space than that. Use your judgment. These forums are also intended to be big conversations so chat away naturally too! Occasional short responses are strongly encouraged. The tone should always be conversational.

The ultimate point of our forums is to evaluate you on your argumentative skills. If someone says something you disagree with, *respond to them*, get in there! And, if you get responded to, don't just reply like "oh yeah, my bad" -- no, *defend yourself*, or *change your mind*. Regardless of how you approach the forum, I want to see you anticipate strong counter-arguments to your own ideas. And, definitely, I need you to demonstrate familiarity with the assigned material.

How to Start a Great Thread

In Piazza, **always use the "Note" format** rather than the "Question" format.

Your posts are meant to demonstrate that you **(1)** have done the reading, **(2)** have thought closely about some *particular* aspect of the text, and **(3)** that you are willing to discuss the course content with your classmates.

Never just summarize!

I want you to critically analyze the text and engage with the ideas. For inspiration, here's an idea derived from Edward J. Gallagher. One can look at works of philosophy and/or science as if one has "four eyes". Each eye reveals a different perspective, and each one taps into a different level of your own thinking and requires the practice of a different skill. The **"four eyes"** are...

(1) Hypothesize: ask a detailed question and formulate a hypothesis about some element of the reading. Then, hypothesize potential *competing* answers to that question.

(2) Analyze: pick one portion of the text that confuses you and dive deep. What's really going on here? What does this concept really mean? What is the true foundation of this argument?

(3) Synthesize: relate a particular part of this reading to something else we read this semester. Could one idea from somewhere else be *productively* combined with one from this reading?

(4) Criticize: what did you like or not like about a particular part of the reading? Did particular arguments strike you as bad? Why? Create a hypothetical dialogue with a figure from the text.

How to Structure Counter-Argumentation

- 1) Author X defends idea P in the following way...
- 2) I disagree with X; P is a weak argument due to the following reasons...
- 3) The strongest way that author X might *respond to my criticisms* is as follows...
- 4) Author X's counter-argument would be strong/weak because...

OR:

- 1) Author X presents argument P in defense of her ideas
- 2) I find argument P convincing, however it still faces the following issues...
- 3) The best way that author X might *respond to my criticisms* as follows...
- 4) Author X's counter-argument would be strong/weak because...

Essentially, think of counter-argumentation in this class as a **dialogue** where you engage in a concise 'back-and-forth' with the author/philosopher of the reading. The more engaging the dialogue, the higher your grade will likely be. As a rule of thumb: the stronger you present your opponents arguments, the stronger your *own* position will come across. **High scores are given to students whose responses are nuanced, i.e., partially critical of *all* sides, including of the strength of one's *own* positions. Be humble!**

Citation Format

Every homework assignment and forum post must be professionally cited. For resources cited in the lesson lecture or reading material, the author name in parentheses is sufficient, with page numbers where appropriate. For instance, your essay might read:

Turing said that the question “can machines think?” was “too meaningless to deserve discussion.” (Turing, 4)

Final grades are calculated on the following scale

- | | |
|---------------------------|-----------|
| • A (90% of total points) | • C (70%) |
| • B+ (87%) | • D (50%) |
| • B (80%) | • F (49%) |
| • C+ (77%) | |

Uploading Your Piazza Post Record

After you have completed your participation, please copy and paste **all** of your posts from that week (even small ones) into a single document and upload it to the weekly assignment on Canvas with TurnItIn.

To easily collect your posts, **simply search for your own name** in the Piazza search field. Only copy and paste the posts relevant to the current lesson. Each copied post must have a date and time visible.

You can use Canvas to update / resubmit your post record if you decide to post more.

To find the date/time stamp for each post: hover your cursor over the part of your post where it says how long ago your post was made. The date/time stamp will appear.

The reason I ask you to do this is that Piazza is not easily compatible with Canvas, so in order to use my rubric (and thus give you specific feedback) Canvas needs a document that I can grade.

I will be following all discussions every week and participating in many threads, so the context of your participation will always be at the forefront of my mind. As such, don't think of the documents you'll be uploading as anything but *basic records*. I'll be looking at Piazza itself when I determine your weekly participation grade.

Grading Policy

Your writing assignments will often be expressions of your own thoughts and beliefs on ethical issues. So I want to be clear that your grade will not depend on whether I agree with you. You are encouraged to think independently and to bring your own values and interests to our discussions. If you disagree with the views being presented or discussed in lecture and readings, you are *encouraged* to respectfully explain why by providing clear reasons and arguments. The grading rubric for this course is designed to be as objective as possible.

Many students struggle with abstract writing assignments, and many students do not have English as their first language. So I also want to be clear that your writing will not be graded on grammar or spelling, unless it makes your writing incomprehensible. The point of this course is not to write the perfect essay or perform extensive high level research. The goal of the course is to introduce you to pressing ethical issues and to provide you with various opportunities for thoughtful philosophical reflection on your *own* prior beliefs.

For this reason, your grade will largely depend on my impression of how seriously you have engaged with the course material in a thoughtful discussion of the issues. Substantive, thoughtful homework will be given more credit than half-baked or last minute homework that are transparent attempts to meet the minimum word count. To do well in class you need to demonstrate that you are thinking critically about the issues, and that you're taking the time to express your thoughts carefully.

In-Class Technology Policy: cell phone and laptop use is prohibited during lectures and will lead to a deduction in In-Class Participation points. If you have special circumstances that require you to have your phone out (children, occupation, family issue, etc.) just let me know.

Late Policy: Students who fail to hand in an assignment will receive a zero on the assignment. Students who fail to show up for a midterm will fail that exam. **Night-before or day-of excuses are almost never acceptable.** The only excuses that I will accept are those **accompanied by a doctor's note.** Otherwise, late work will be deducted a half-point each day.

Plagiarism: Suspected cases of plagiarism will be given **zero credit** for the assignment and **reported to the Dean** as a violation of the Student Code of Academic Integrity, which carries a maximum penalty of expulsion. Copying and pasting from the web is one form of plagiarism. Failing to provide adequate citations is also a form of plagiarism. Any work you use should be given adequate citation. If you use **any** resource in your research (including dictionaries, encyclopedias, and translation tools!), **even if you don't quote it directly**, provide a citation.

ANY EVIDENCE OF AI WRITTEN WORK (INCLUDING GRAMMARLY) WILL EARN A ZERO.

AI POLICY

Any use of GPT or AI writing tools (including Grammarly) at any stage in the writing process will automatically receive a zero.

If you are unsure whether your essay contains plagiarism, please email me. If you need extra time to complete an assignment, please just email me. Do not use AI.

This is a zero tolerance policy.

GRADING RUBRIC (Piazza)

1. OUTPUT / COMMUNITY

3+ (Bonus Point)	2 (Full Points / Great work)	1 (Default Grade)	0.5 / 0
5+ substantive posts You're a <i>serious presence</i> on the forums, but not in a point-grabbing kind of way. Your posts are numerous, spread out, and convey genuine interest in the course-content and our online community. Sometimes you function as an intermediary who clarifies or resolves issues that other students are struggling with.	~4 substantive posts Your posts are somewhat spread out over the week. Attempts are genuinely made to reply to those who reply to you. You do not simply agree with others. You either (1) disagree with them, (2) reveal a potential flaw in their argument, or (3) agree with them, but with qualifications, or with a new point of your own.	3 substantive posts Your overall output is satisfactory, but perhaps feels rushed at times in terms of length and content, usually posted all in one session. At least one post is uploaded within three days of the start of the lesson.	Beneath expectations

2. CLOSE READING / ASSIGNED MATERIALS

4 (Exemplary)	3 (Close & Focused)	2 (Surface-level Reading)	1
The text is analyzed with a superior eye to detail. You demonstrate intellectual humility in the face of challenging material. You raise--and are not afraid to respond to--incisive questions about difficult concepts / arguments.	There is a clear sense of your mind working through hard problems derived from the text. Key terms are defined. Connections are drawn to previous readings.	Posts are either (1) not closely related to the readings, or (2) focus too much on merely summarizing the content.	Beneath Expectations

3. CREATIVITY / CONTENT / CARE

4 (Exemplary)	3 (Original & Personal)	2 (Surface-level Analysis)	1
<p>Your posts are a real pleasure to read. They are original, creative, and entertaining, e.g., perhaps you construct a ridiculous yet insightful thought experiment.</p> <p>The strongest possible counter-arguments are constructed and considered.</p>	<p>You make an attempt to say something new or insightful about the text. Perhaps you evoke your own experiences.</p> <p>You start your own threads, do research, and aim to be a nuanced thinker by considering counter-arguments to your own views.</p>	<p>Posts are satisfactory in terms of content, but generally adopt an uncritical or non-nuanced perspective on the subject.</p> <p>Little-to-no attempt is made to entertain countervailing perspectives or to provide creative counter-arguments of your own design.</p>	Beneath Expectations

Total: 10 pts (w/ option for +1 bonus)

Student Learning Outcomes

By the end of the course, students will be able to:

Identify a wide variety of issues in the philosophy of mind, cognitive science, animal ethics, evolutionary biology, and the philosophy and science of animal minds.

Utilize and identify many approaches to interpreting the causes of animal behavior in a wide variety of species.

Develop critical skills at argumentation and counter-argumentation, particularly with respect to fostering intellectual humility.

Evaluate the broader societal and environmental impacts of human activity on the lives and welfare of non-human species.

*The mind is a
walled garden.*

Our aim: using contemporary science and philosophy to peer over the top and through the cracks.

Our attitude: rigor, open-mindedness, & intellectual humility

UNIT ONE

Evolution and Other Minds

LESSON 1 // Evolution, Aesthetics, and the Great Chain of Being

Richard Dawkins, [The Greatest Show on Earth](#), “Dogs, Cows, and Cabbages”
Philip Kitcher, [Abusing Science](#), “The Origin of Diversity” (22-25)
Richard Dawkins, *The Blind Watchmaker*, [“Making Tracks through Animal Space”](#)
Richard Prum, *The Evolution of Beauty*, [“Darwin’s Really Dangerous Idea”](#)
Gray, et al. [“The Music of Nature and the Nature of Music”](#) (recommended)
Tecumseh Fitch, [“The Evolution of Music in Comparative Perspective”](#) (recommended)
Richard Dawkins, *Greatest Show on Earth*, “The Primrose Path to Macro-evolution” (rec)

LESSON 2 // From Kin Selection to Empathy (PIAZZA LESSON)

Carl Safina, [Beyond Words](#) (.epub / .pdf) I recommend reading as .epub. It looks awkward as a .pdf
 Chapters: “Deep & Ancient Circuits,” “Elephant Empathy” and “Good Grief”
Monsó & Antonio Osuna-Mascaró, [“The Concept of Death in Other Species”](#)
Gonçalves & Carvalho, [“Death Among Primates: A Critical Review”](#)
Pérez-Manrique and Gomila, [“The Comparative Study of Empathy”](#)
Smith & Marzluff, [“Wild American crows and dead conspecifics”](#) (Recommended)
Brian Skyrms, [“Evolution, Norms, and the Social Contract”](#) (Recommended)
Horna-Lowell, et al., [“Personality of Ant Colonies”](#) (Recommended)

LESSON 3 // Knowing Other Minds: Anthropomorphism and Anthropocentrism

Kristin Andrews, *The Animal Mind* (Introduction and Ch.1-2)
Daniel Dennett, [Brainchildren](#), “Out of the Armchair and Into the Field” (Recommended)
Kristin Andrews, [“A Role for Folk Psychology in Comparative Cognition”](#) (Recommended)
Krebs and Dawkins, [“Animal Signals: Mindreading and Manipulation”](#) (Recommended)

LESSON 4 // The Science of Other Minds

Kristin Andrews, *The Animal Mind* (Ch.3)
Daniel Dennett, [Kinds of Minds](#) (in text pgs 19-26)
Richard Prum, “On the Null Hypothesis” ([The Evolution of Beauty](#): 76-81, 90) (Rec)
B. F. Skinner, [Beyond Freedom & Dignity](#), “A Technology of Behavior” (Recommended)
Irina Meketa, [“A Critique of the Principle of Cognitive Simplicity”](#) (Recommended)

LESSON 5 // Communication and Mindreading (PIAZZA LESSON)

Karen Bakker, “Bat Banter” [The Sounds of Life](#)
Kristin Andrews, *The Animal Mind* (Ch. 7)

UNIT TWO

Challenging Human Uniqueness

LESSON 6 // Consciousness

- Kristin Andrews, *The Animal Mind* (Ch. 4)
- Birch et al., [“Dimensions of Animal Consciousness”](#)
- Baron and Klein, [“What Insects Tell Us about the Origins of Consciousness”](#)
- Peter Godfrey-Smith, [Other Minds](#), “From White Noise to Consciousness” (Recommended)
- Peter Godfrey-Smith, *Metazoa*, “Put Together By Degrees” (249-281) (Recommended)
- Eileen Crist, [The Cognitive Animal](#), “The Inner Life of Earthworms” (pgs 3-9) (Recommended)
- Loukola, et al., [“Bumblebees show cognitive flexibility...”](#) (Recommended)

LESSON 7 // Beliefs, Concepts, Numerals (PIAZZA LESSON)

- Kristin Andrews, *The Animal Mind* (Ch. 5: pgs 116-123)
- Daniel Dennett, [Brainchildren](#), “Do Animals Have Beliefs?”
- Yuval Noah Harari, [Sapiens](#) (“Building Pyramids”)
- Donald Davidson, [Philosophical Essays](#), “Rational Animals”
- Nova: [Irene Pepperberg and Alex](#) (video)
- [How We Learned that Bees Perceive Time](#) // [Theories of Language and Thought](#)

LESSON 9 // Animal Ethics

- Peter Singer, [“All Animals are Equal”](#)
- Lori Gruen, [Ethics and Animals \(Second Edition\)](#) “Eating Animals”
- Lori Gruen, [Ethics and Animals \(Second Edition\)](#) “Experimenting With Animals”
- Bakker & Raskin, [“Digital Dr. Doolittle: Decoding Animal Communication with AI”](#)
- Mikhalevich and Powell, [“Minds without spines: Evolutionarily inclusive animal ethics”](#)
- James Rachels, [“Darwin, Species, Morality”](#) (Recommended)