

# Philosophy

The Department of Philosophy belongs to the oldest intellectual tradition of all disciplines of study in higher learning. Philosophy is the very first subject ever studied in an academic setting and has always been a part of the pursuit of knowledge as humans continually seek to understand themselves and the world around them.

By opening up their minds to life's deep questions and engaging with them, we help philosophy students develop highly transferable skills, such as critical thinking, analytical writing, and moral reasoning. In evaluating arguments for opposing positions, students learn to critically examine their own views and charitably engage with the views of others, fostering tolerance and respect for all. As a result, students are prepared to use these skills in many areas of their personal and professional life.

The Department of Philosophy offers the Ethical Dimensions of Artificial Intelligence graduate certificate.

Further information about the department and its programs may be obtained at the department's website: [www.uab.edu/philosophy](http://www.uab.edu/philosophy).

The Department of Philosophy's Graduate Certificate in Ethical Dimensions of Artificial Intelligence is designed to equip students with the knowledge, skills, and ethical frameworks necessary to deploy AI systems in a way that aligns with moral values and minimizes potential harms. Students acquire foundational knowledge and hone critical thinking skills by studying moral theories, logic, scientific reasoning, and theories of agency and consciousness. These foundations are then applied to AI systems to identify potential concerns with bias, unfairness, privacy, transparency, security, accountability, autonomy, and sustainability.

This program is particularly suited for professionals in fields such as medicine, computer science, engineering, data science, bioethics, and philosophy who seek to understand the philosophical foundations for the ethics of AI and contribute to its responsible development.

## Graduate Certificate in Ethical Dimensions of Artificial Intelligence

Requirements	Hours
PHL 500 Philosophical Methods: Arguments, Evidence, and Fallacies	3
PHL 503 Philosophy of Artificial Intelligence	3
PHL 602 Neuroethics	3
PHL 680 Ethical Dimensions of Artificial Intelligence	3
<b>Elective</b>	<b>3</b>
Choose one of the following:	
PHL 501 Central Issues in Bioethics	
PHL 506 Ethical Theory	
PHL 604 Medical Epistemology	
PHL 607 Philosophical Issues in Research Ethics	
PHL 615 Metaethics	
PHL 636 Bioethics and the Law	
PHL 671 The Scientific Enterprise	
PHL 675 Philosophy of Mind	
PHL 690 Philosophy Seminar in Ethics	
CS 660 Artificial Intelligence	
BY 617 Science Policy	

EE 634	Introduction to Neural Networks
ENH 615	Environmental Justice and Ethics
ENH 617	Sustainability and Public Health
HCI 611	Foundations of Artificial Intelligence in Medicine
HCI 613	Leadership and Ethics for Artificial Intelligence in Medicine
IS 607	Introduction to Cybersecurity
HI 620	Security and Privacy in Health Care
<b>Total Hours</b>	<b>15</b>

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## Courses

### PHL 500. Philosophical Methods: Arguments, Evidence, and Fallacies. 3 Hours.

The goal of this course is for students to become fluent in the primary methodologies of analytic philosophy. These methods include the construction and evaluation of deductive arguments, the presentation and interpretation of evidence, and the recognition and avoidance of fallacious reasoning. To cultivate students' skills in these methods, we will read a series of influential articles from different areas of analytic philosophy and examine the methodologies they employ. Students will complete a series of assignments in which they analyze the deployment of philosophical methods in these articles and construct responses. This course will provide a foundation for the close reading and careful writing of philosophical texts that students will perform in the rest of their graduate studies.

### PHL 501. Central Issues in Bioethics. 3 Hours.

This course is an in-depth examination of ethical issues related to life, death, and health (for humans and nonhuman organisms). A breadth of areas in bioethics is covered, including some mixture of medical practice, public health, responsible biomedical research, animal care and use, and environmental sustainability. Specific topics might include end of life care, assisted reproduction, healthcare finance, addiction, neurodiversity, human subjects research, and animal experimentation. Students examine real case studies and policy proposals, ethical theories and analysis, principles of scientific literacy, and arguments on both sides of bioethical controversies. In addition to analyzing issues and arguments, students acquire skills in writing and communicating effectively about moral issues.

### PHL 503. Philosophy of Artificial Intelligence. 3 Hours.

This course employs the tools of philosophy to ask what artificial intelligence (AI) is and how we should engage with it. Making progress in understanding the nature of AI will involve surveying influential philosophical work on intelligence, computation, agency, consciousness, responsibility, and creativity. To consider how we should engage with AI, we will make contact with contemporary philosophical work on the epistemological, ethical, metaphysical, societal, and aesthetic puzzles that AI gives rise to.

### PHL 506. Ethical Theory. 3 Hours.

This course covers some of the central debates in moral theory. Various theories of right and wrong, such as consequentialism, deontology, and virtue ethics, will be considered. Students will understand how these theories differ, examine arguments for and against particular theories, and apply them to real-world scenarios. Other topics covered may include moral responsibility and the role of moral theory in human life.

### PHL 590. Directed Readings. 1-3 Hour.

Directed Readings in special areas or topics in philosophy; honors thesis supervision. Permission of Instructor.

**PHL 602. Neuroethics. 3 Hours.**

Ethical issues related to neuroscience and other sciences of the mind. Topics typically include: privacy and side effects of brain technologies; neuroscientific threats to free will; moral responsibility and mental illness; self-control in addiction; emotion and reason in moral judgment; cognitive enhancement and personality change; ethically sound research practices. Students explore the nature of agency by integrating social and neurobiological perspectives.

**PHL 604. Medical Epistemology. 3 Hours.**

This course examines epistemological issues in medicine. Topics typically include: the nature of evidence-based medicine and controversies surrounding it, debates about evidential hierarchies, placebos and masking, mechanistic reasoning, medical expertise, replicability, effect sizes, and the extent to which money and other factors influence both research and medical practice. Ultimately, the aim of the course is better understanding of the nature and extent of medical knowledge.

**PHL 607. Philosophical Issues in Research Ethics. 3 Hours.**

This course examines the ethical principles and standards governing research as well as the philosophical moral theories undergirding those principles and standards. Students will explore key ethical concepts, philosophical moral theories, relevant laws and regulations, and emerging ethical challenges in scientific inquiry. Common topics include informed consent, respect for vulnerable populations, research misconduct, privacy of information collected, ethical use of animals in research, gene editing, confidentiality, conflicts of interest, publishing ethics and authorship, ethical citations, as well as fraud.

**PHL 615. Metaethics. 3 Hours.**

This course is a survey seminar in metaethics. Metaethics is the area of moral philosophy that has to do with the nature of morality. It deals with questions such as: Is morality objective? Is there really such a thing as right and wrong? Does our moral discourse express beliefs or just feelings? Do we necessarily have reasons to be moral?.

**PHL 636. Bioethics and the Law. 3 Hours.**

This course will cover a range of questions in bioethics—both persistent and new/post-Covid—and explore both ethical and legal approaches to addressing those problems. We will consider patient autonomy, privacy, parents' rights to make medical decisions for their children, access to healthcare, public health, and research, among other topics. Each week, we will read both philosophical arguments and legal cases to identify and evaluate the differences in their approaches, as well as to better understand the current legal landscape in the healthcare environment.

**PHL 671. The Scientific Enterprise. 3 Hours.**

This course examines the nature, methods, and implications of scientific inquiry. Students delve into foundational questions about empirical theories, scientific explanation, and the demarcation between science and non-science. Topics may include: the role of observation, experiment, and modeling, the nature of scientific laws, the problem of induction, the philosophy of scientific realism, and other more specialized topics such as, e.g., model usage in pandemics or conceptualizing particular diseases. Students will develop critical thinking skills and a deeper understanding of the philosophical underpinnings of scientific knowledge.

**PHL 675. Philosophy of Mind. 3 Hours.**

The course concerns the nature, form, and functions of the mind. Topics covered may include consciousness, the mind-body problem, intentionality and mental content, artificial intelligence, and the nature of mental states such as perception, belief, pleasure, and desire.

**PHL 680. Ethical Dimensions of Artificial Intelligence. 3 Hours.**

This course is a philosophical examination of the ethical questions raised by the emergence of powerful artificial intelligence (AI). We will consider what sort of reliance on AI is morally permissible, under what circumstances the development of AI is itself morally permissible, and how humans should respond to the ethical dilemmas imposed upon us by AI. Topics include algorithmic bias, autonomous systems, trust and transparency, intellectual property, privacy, existential risk, and the prospects for morally responsible AI.

**PHL 690. Philosophy Seminar in Ethics. 3 Hours.**

This course is a seminar in ethics whose content may be different each time it is taught. It provides the opportunity for deeper examination of particular topics or subfields within ethics that may not be considered in other courses. Areas of focus may include particular approaches to moral theory, recent developments in contemporary literature, and particular subfields of ethics, such as population ethics, animal ethics, or environmental ethics.

**PHL 790. Problems ProSeminar. 3 Hours.**

Philosophic problems of current interest in graduate and professional education. Specific issues in cognitive science, the arts, or ethics and public policy may be selected for analysis. Content varies depending upon instructor and student demand.

**PHL 791. Problems ProSeminar. 3 Hours.**

Philosophic problem of current interest in graduate and professional education. Specific issues in cognitive science, the arts, or ethics and policy may be selected for analysis. Content varies depending upon instructor and student demand.

**PHL 792. Problems ProSeminar. 3 Hours.**

Philosophic problems of current interest in graduate and professional education. Specific issues in cognitive science, the arts, or ethics and public policy may be selected for analysis. Content varies depending upon instructor and student demand.