Florence University of the Arts (FUA) is an academic institution for study abroad in Florence, Italy. FUA collaborates with The American University of Florence (AUF), an international university offering US-style undergraduate and graduate degrees, in a cooperation to offer study abroad programs with a diverse breadth and depth of academic curriculum.
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SCHOOL OF LIBERAL ARTS
DEPARTMENT OF PHILOSOPHY
COURSE TITLE: PHILOSOPHY OF ARTIFICIAL INTELLIGENCE
COURSE CODE: LAPHAI200
3 semester credits

1. DESCRIPTION

This course tackles the puzzling questions raised by the rapid advancements of Artificial Intelligence. The course critically analyzes the theories of relevant philosophers, and it explores notions of consciousness, free will, and the very nature of intelligence itself, while evaluating the ethical dilemmas surrounding AI in warfare, job displacement, and human augmentation. Students will investigate the possibility of AI achieving personhood and ponder the meaning of creativity in an age of machine-generated content. The course comprises debates, thought experiments, and critical analysis of real-world scenarios, with the aim of challenging assumptions and questioning the future of humanity alongside intelligent machines.

2. OBJECTIVES

The aim of this course is to:

- Examine core philosophical questions surrounding the nature of intelligence, consciousness, and free will in the context of AI.
- Become familiar with relevant philosophical theories concerning machines and Artificial Intelligence.
- Analyze the ethical implications of AI development and deployment, considering issues like responsibility, bias, and warfare.
- Identify the potential impact of AI on various aspects of human life, including the future of work, creativity, and even the concept of personhood.
- Develop critical thinking skills by engaging in debates, thought experiments, and discussions surrounding AI's ethical and philosophical challenges.
- Gain understanding of the philosophical debates surrounding the mind-body problem and its connection to artificial consciousness.
- Gain a broader perspective on the relationship between technology and humanity, fostering a more informed approach concerning the future of AI.

3. REQUIREMENTS

There are no prerequisites for this course.

4. METHOD

This course consists of lectures, class discussions, projects, and site visits within the local community. Mediums for instruction used will include, but are not limited to, interactive and hands-on activities which challenge thought processes, academic texts and studies, videos, slides, guided problem solving, and experiential and/or field learning activities where applicable.

5. TEXTBOOK – FURTHER READINGS – RESOURCES

- Morioka, M. (Ed.). (2023). *Artificial Intelligence, Robots, and Philosophy*. Journal of Philosophy of Life, 13(1).

The textbook is mandatory for successful completion of the course.
Where applicable, additional materials, handouts and/or notes will be provided by the instructor.

FURTHER READINGS

- Bostrom, Nick, and Eliezer Yudkowsky. 2024. "The Ethics of Artificial Intelligence. In Cambridge Handbook of Artificial Intelligence, edited by Keith Frankish and William Ramsey. New York: Cambridge University Press.
- Bostrom, Nicholas. 2003. "Are We Living in a Computer Simulation?," *Philosophical Quarterly*. 53, 2011. 243-255.
- Deruty, Emmanuel & Grachten, Maarten & Lattner, Stefan & Nistal, Javier & Aouameur, Cyran. 2022. "On the Development and Practice of AI Technology for Contemporary Popular Music Production," *Transactions of the International Society for Music Information Retrieval*. 5. 35.
- Manna, Riya & Nath, Rajakishore. 2021. *Kantian Moral Agency and the Ethics of Artificial Intelligence.* Problemos. 100. 139-151.
- Morandini, S., Fraboni, F., De Angelis, M., Puzzo, G., Giusino, D., & Pietrantoni, L. 2023. "The Impact of Artificial Intelligence on Workers' Skills: Upskilling and Reskilling in Organisations," *Informing Science: The International Journal of an Emerging Transdiscipline*, 26. 39-68

LIBRARIES IN FLORENCE

Please consult the posted schedules for official opening times of the university library. Also note that the library is for consultation only and it is not possible to borrow materials. The library is equipped with a scanner and internet access so that you may save or email a digital copy of the pages needed.
Students may also utilize additional libraries and research centers within the local community:

BIBLIOTECA PALAGIO DI PARTE GUELFA

Located in Piazzetta di Parte Guelfa between Piazza della Repubblica and Ponte Vecchio. Please consult the library website for hours of operation:
http://www.biblioteche.comune.fi.it/biblioteca_palagio_di_parte_guelfa/

BIBLIOTECA DELLE OBLATE

Located in via dell'Oriuolo 26. Please consult the library website for hours of operation:
www.bibliotecadelleoblate.it

THE HAROLD ACTON LIBRARY AT THE BRITISH INSTITUTE OF FLORENCE

Located in Lungarno Guicciardini 9. Please consult the library website for hours of operation. This library requires a fee-based student membership. For information: www.britishinstitute.it/en

6. FIELD LEARNING

Please consult your Official Registration for any mandatory field learning dates. Field Learning Activities cited in Official Registrations are an integral part of the course and also include an assignment that counts towards your final grade, details will be provided on the first day of class.

7. COURSE MATERIALS

No additional course materials are necessary.

8. COURSE FEES

Course fees cover course-related field learning activities, visits, and support the instructor's teaching methodologies. Book costs are not included in the course fee. The exact amount will be communicated by the instructor on the first day of class.

9. EVALUATION – GRADING SYSTEM

10% Attendance
20% Participation and Assignments
20% Midterm Exam
25% Final Exam
15% Final Paper
10% Final Presentation

A = 93-100 %, A- = 90-92%, B+= 87-89%, B = 83-86%, B-=80-82%, C+ = 77-79%, C=73-76%, C-=70-72%, D = 60-69%, F= 0-59%, W = Official Withdrawal, W/F = Failure to withdraw by the designated date.

10. ATTENDANCE – PARTICIPATION

Academic integrity and mutual respect between instructor and student are central to the academic policy and reflected in the attendance regulations. Student presence is mandatory and counts toward the final grade.

Absences are based on academic hours: 1 absence equals 3 lecture hours.
Two absences: 6 lecture hours, attendance and participation grade will be impacted.
Three absences: 9 lecture hours, the final grade may be lowered by one letter grade.
Four absences: 12 lecture hours, constitutes automatic failure of the course regardless of when absences are incurred.
Please note:
- The above hours refer to lecture hours. Please note that the contact / credit hour policy in the academic catalog includes additional distribution ratios according to delivery category. Ex: 1 absence equals 6 FL/SL/Lab hours or 9 EL hours.
- Hours may be distributed in different formats according to the academic course schedules.

LATE ARRIVAL AND EARLY DEPARTURE

Arriving late or departing early from class is not acceptable. Two late arrivals or early departures or a combination will result in an unexcused absence. Travel is not an exceptional circumstance.

TRAVEL (OR DELAYS DUE TO TRAVEL) IS NEVER AN EXCUSE FOR ABSENCE FROM CLASS.

It is the student's responsibility to know how many absences are incurred. If in doubt, speak with your instructor!

Participation: Satisfactory participation will be the result of contributing to class discussions by putting forth insightful and constructive questions, comments and observations. Overall effort, cooperation during group work, proper care of work space and tools, responsible behavior, and completion of assignments will be assessed. All of the above criteria also apply to Field Learning and site visits.

11. EXAMS – PAPERS – PROJECTS

The **Midterm** exam accounts for 20% of the final course grade. For exam time and date consult the course addendum. **The time and date of the exam cannot be changed for any reason.**
Format: the exam is divided into three sections:

- Part I: 10 Multiple choice questions. Each correct answer is worth 2 points, for a total of 20 points.
- Part II: 10 short-answer questions. Each correct and complete answer (concise explanations, main ideas, key words, names, etc.) is worth 5 points, for a total 50 points.
- Part III: two essay questions; each correct and complete answer is worth 15 points (based on content, vocabulary, detail, etc.) for a total of 30 points.

The **Final Paper** accounts for 15% of the course grade. Students will write a 2000-word scholarly paper concerning AI. A list of questions will be proposed by the instructor on the first day of class. Students must incorporate in-text citations and a bibliography of relevant sources.

The **Final Presentation** is worth 10%. Students will discuss a philosophical issue of AI, and use AI-created materials to support their thesis, or demonstrate potential limitations.

The **Final** exam accounts for 25% of the final course grade. For exam time and date consult the course addendum. **The time and date of the exam cannot be changed for any reason.** Format: the exam is divided into three sections:

- Part I: 10 Multiple choice questions. Each correct answer is worth 2 points, for a total of 20 points.
- Part II: 10 short-answer questions. Each correct and complete answer (concise explanations, main ideas, key words, names, etc.) is worth 5 points, for a total 50 points.
- Part III: two essay questions; each correct and complete answer is worth 15 points (based on content, vocabulary, detail, etc.) for a total of 30 points.

The Final Exam is cumulative.

12. LESSONS

Lesson 1	
Meet	In class
Lecture	Artificial Intelligence: Meaning, Questions, Growth.
Objectives	Identify why AI raises unique philosophical questions compared to other technologies and gain knowledge about the key queries of AI. Discuss the historical development of AI and its impact on philosophical inquiry.
In-Class Activity	Brainstorm a list of philosophical questions raised by the existence and potential future advancements of AI and ask those to an AI platform. Discuss.
Readings/ Assignments	Read: Textbook, *Introduction*.

Lesson 2	
Meet	In class
Lecture	The Nature of Consciousness.
Objectives	Explain the mind-body problem and its connection to AI. Differentiate between various philosophical stances on consciousness. Analyze the implications of different theories of consciousness for the possibility of artificial consciousness.
In-Class Activity	Debate the arguments for and against the possibility of creating artificial consciousness.
Readings/ Assignments	Read: Textbook, *Artificial Intelligence and Contemporary Philosophy*. Assignment: Going around in the city, which uses of AI do you notice in everyday

	life?

Lesson 3	
Meet	In class
Lecture	The Nature of Intelligence.
Objectives	Define and discuss different types of intelligence, such as biological, computational, and social intelligence. Explore the Turing Test and its limitations in determining intelligence. Analyze the philosophical implications of defining and measuring intelligence in the context of AI.
In-Class Activity	Design your own test to assess intelligence in an AI system, discussing its strengths and weaknesses.
Readings/ Assignments	Read: Textbook, *Clockwork Courage: A Defense of Virtuous Robots.*

Lesson 4	
Meet	In class
Lecture	Ethics and AI: Responsibility, Agency, and Moral Decision-Making.
Objectives	Discuss the challenges of attributing responsibility and moral agency to AI systems. Explore various ethical frameworks for developing and deploying AI, such as utilitarianism and deontology. Analyze the potential risks and benefits of AI in relation to various ethical concerns, such as bias, privacy, and safety.
In-Class Activity	Research and present on an existing ethical guideline or regulation for AI development, analyzing its strengths, weaknesses, and potential impact.
Readings/ Assignments	Read: Bostrom & Eliezer, *The Ethics of Artificial Intelligence.* Assignment: Research and present the work of a prominent philosopher who has contributed to the discussion on the mind-body problem and its relation to AI.

Lesson 5	
Meet	In class
Lecture	The Matter of Free Will.
Objectives	Explain the concept of free will and its connection to moral responsibility. Discuss the philosophical debate on whether AI can possess free will, considering arguments from determinism and compatibilism. Analyze the implications of an AI system exhibiting behavior that appears to resemble free will.
In-Class Activity	Generate thought experiments exploring the possibilities and limitations of free will in hypothetical future scenarios involving highly advanced AI.
Readings/ Assignments	Read: Manna & Nath, *Kantian Moral Agency and the Ethics of Artificial Intelligence.*

Lesson 6	
Meet	In class
Lecture	Robots, Reskilling, and the Reshaped Workforce.
Objectives	Analyze the potential impact of AI on employment patterns, considering job displacement and creation. Discuss strategies for workforce reskilling and adaptation in the face of automation. Explore potential economic and social consequences of AI-driven job market changes.

In-Class Activity	Define which jobs will be drastically impacted by AI, assessing pros and cons.
Readings/ Assignments	Read: Morandini et al., *The Impact of Artificial Intelligence on Workers' Skills: Upskilling and Reskilling In Organisations.* Assignment: Design your own thought experiment or test to assess intelligence in an AI system. Explain the rationale behind your test and discuss its strengths and weaknesses.

Lesson 7	
Meet	In class
Lecture	MIDTERM EXAM

Lesson 8	
NA	ACADEMIC BREAK

Lesson 9	
Meet	In class
Lecture	Warfare and AI: Drones and AWS.
Objectives	Analyze the ethical considerations surrounding the development and use of autonomous weapon systems (AWS). Discuss the potential benefits and risks of AI in warfare, including issues of accountability and control. Explore international law and regulations concerning AI-powered military technologies.
In-Class Activity	Role-play a negotiation between nations debating the creation and use of autonomous weapons systems.
Readings/ Assignments	Read: Textbook, *Why Autonomous Agents Should Not Be Built for War*.

Lesson 10	
Meet	In class
Lecture	The Question of Personhood.
Objectives	Identify the concept of personhood and its philosophical underpinnings. Explore the debate on whether AI could ever achieve personhood and the implications for moral obligations and rights. Analyze potential criteria for considering an entity a "person" in the context of advanced AI.
In-Class Activity	Discuss what "personhood" entails and define if AI may ever achieve this (or has already).
Readings/ Assignments	Read: Textbook, *Wheat and Pepper: Interactions Between Technology and Human.* Assignment: Present a case study about the use of AI in warfare and assess the philosophical implications behind this choice.

Lesson 11	
Meet	In class
Lecture	Creativity in the Age of AI: Uses, Misuses, or Muses?
Objectives	Be able to reflect upon the capabilities of AI systems in generating creative content, such as art, music, and writing. Analyze the philosophical implications of AI creativity for traditional notions of human creativity and artistic expression. Explore potential collaborative possibilities between humans and AI in creative

	endeavors.
In-Class Activity	Compare and contrast a piece of human-created art with one generated by AI, discussing the qualities and limitations of each.
Readings/ Assignments	Read: Textbook, *Implications of Automating Science: The Possibility of Artificial Creativity and the Future of Science.*

Lesson 12	
Meet	In class
Lecture	Artificial Music with Real Machines.
Objectives	Analyze the capabilities of AI in composing and performing music. Explore the philosophical implications of AI-generated music for the nature of human creativity and artistic expression. Discuss potential future collaborations between human and AI musicians.
In-Class Activity	Compare and contrast a piece of human-composed music with one generated by AI, focusing on elements like emotion, originality, and musical style.
Readings/ Assignments	Read: Deruty et al., *On the Development and Practice of AI Technology for Contemporary Popular Music Production.* Assignment: Submit an art piece you generated with AI, writing down all the steps you had to feed the machine prior to arriving to the final result. Add a commentary on the philosophical implications of your work.

Lesson 13	
Meet	In class
Lecture	The Future of AI and Simulation Theory.
Objectives	Define and explore the concept of the technological singularity and its potential implications for humankind. Identify contrasting perspectives on the future of AI, including potential beneficial outcomes and existential risks. Analyze the possible impact of AI on the very nature of reality itself (e.g., simulation theory).
In-Class Activity	Simulation theory: the great debate.
Readings/ Assignments	Read: Bostrom*, Are We Living in a Computer Simulation?*

Lesson 14	
Meet	In class
Lecture	Using AI to Learn More: Our Own Case Study.
Objectives	Develop effective strategies for crafting a clear, concise, and engaging presentation on a complex philosophical topic. Identify how to create compelling visuals (slides, handouts) that enhance your message and support your arguments, with the support of AI.
In-Class Activity	Final Presentation Q&A
Readings/ Assignments	Submit Final Presentation Slides. Submit Final Paper.

Lesson 15	
Meet	In class
Lecture	FINAL EXAM