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| **Home University** | | Hanyang University | | | | | |
| **Department** | | School of International Studies | | | | | |
| **Homepage** | |  | | | | | |
| **Course Information** | **Class No.** | | TBA | **Course Code** | DIS4029 | | **Credits** | 3 |
| **Course Name** | | **AI Ethics and Society** | | | | | |
| **Lecture Schedule** | | Mon-Fri (9am – 12pm / 1pm – 3pm) | | | | | |
| **Course Description** | | This course explores how artificial intelligence (AI) is transforming our economies and society, the benefits it may bring, the risks it poses, and what can or should be done to address those risks. The course begins with an analysis of the nature of AI and how AI systems differ from humans. It then examines pressing issues such as algorithmic bias, disinformation, deepfakes, and AI-driven surveillance. It also considers how AI systems are increasingly replacing humans—not only in the workplace, but also for purposes of companionship and even romance. In its final section, the course addresses the potential long-term threats posed by lethal autonomous weapons (LAWS), artificial general intelligence (AGI), and artificial superintelligence (ASI). Classes include a mixture of live lectures, whole-class discussions, and breakout group discussions focused on key questions concerning the social and ethical implications of AI. | | | | | |
| **Course Objective** | | Artificial intelligence is transforming our lives, economies, and societies, but is this the dawn of a new era in human flourishing or the beginning of humanity’s decline? What benefits and harms is AI expected to bring about? What ethical concerns and questions of distributive justice does it raise? This course is designed to equip students with the knowledge, critical perspectives, and analytical skills needed to examine these questions and to prepare them for a future in which AI is certain to play an increasingly prominent role. | | | | | |
| **Prerequisite** | | There are no prerequisites for this course. However, as English is the language of instruction, students in this course should have a good command of English. | | | | | |
| **Materials/Textbooks** | | All reading and video material for this course will be available online. Links to the material covered in each class will be made available to students through a separate file. | | | | | |
| **Evaluation** | **Attendance** | | 20% | **Quiz** | |  | | |
| **Assignment** | | 10% | **Test 1** | | 20% | | |
| **Presentation** | |  | **Test 2** | | 20% | | |
| **Research Project** | | 20% | **Participation** | | 10% | | |
|  | | **Evaluation Item** | | | **Ratio** | | |
| Tests | | | 40 % | | |
| Assignments | | | 30 % | | |
| Attendance | | | 20 % | | |
| Participation | | | 10 % | | |
| **Daily**  **Lecture Topics & Activities** | **Week**  **1** | Day 1 | 1. Course introduction  2. The nature of AI  3. Ethical Theory I (Theories of Justice) | | | | | | |
| Day 2 | 1. Ethical Theory II and the Design of Autonomous Vehicles  2. The Environmental Impacts of AI | | | | | | |
| Day 3 | 1. AI, Media, and Society  2. AI in Education | | | | | | |
| Day 4 | 1. AI in Criminal Justice System  2. AI in the Healthcare System  3. Test 1 | | | | | | |
| **Week**  **2** | Day 5 | 1. AI, the Job Market, and the Economy  2. AI in the Workplace | | | | | | |
| Day 6 | 1. AI in Music and Art  2. AI and Human Relationships | | | | | | |
| Day 7 | Research project presentations  (Students in the class will have an opportunity to present and defend their responses to the research question they have been assigned) | | | | | | |
| Day 8 | 1. AI in Warfare  2. The Existential Risks of AI | | | | | | |
| Day 9 | 1. AI Safety and Regulating AI  2. Test 2 | | | | | | |
| **Lecture Questions** | 1. The Nature of AI | | a. What is AI, and what are its types (narrow AI, AGI, ASI)? How quickly is it advancing, and what is driving its explosive growth?  b. What is the difference between symbolic AI and machine learning, and why is this distinction important?  c. How does AI differ from biological intelligence?  d. How do AI systems compare with humans? Are they moral agents? Are they moral patients? Do they deserve rights? | | | | | | |
| **Lecture Questions**  **Lecture Questions** | 2. AI, Ethics, and Justice | | a. What are the major ethical theories and theories of justice used to assess AI (e.g. utilitarianism, deontology, libertarianism, virtue ethics)?  b. Who should be held responsible when AI systems cause harm?  c. What ethical principles should be embedded into the design and deployment of AI systems such as autonomous vehicles? | | | | | | |
| 3. The Environmental Impacts of AI | | a. What is the carbon footprint of the data centers that power AI? Can AI be used to reduce carbon emissions elsewhere in the economy?  b. What impact is AI having on global freshwater reserves?  c. Is the continued development and deployment of AI environmentally sustainable? | | | | | | |
| 4. AI, Media, and Society | | a. How is AI being used to spread mis- and disinformation in society?  b. How is AI-generated disinformation affecting politics and elections?  c. Is it acceptable for politicians to use AI in public communications?  d. What limits should be placed on government use of AI for surveillance? | | | | | | |
| 5. AI in Education | | a. How is AI transforming traditional methods of education?  b. Is it acceptable for students to use AI in completing assignments?  c. Is it acceptable for instructors to use AI in preparing classes and grading students?  d. What value does a university education have in the age of AI? | | | | | | |
| 6. AI, the Job Market, and Economic Inequality | | a. What impacts has AI already had on the job market? What impacts will it have on economic inequality?  b. What jobs or careers are most and least vulnerable to AI automation?  c. Are UBI or UBA practical solutions to mass job loss due to AI automation? | | | | | | |
| 7. AI in the Workplace | | a. How are companies using AI to screen job applicants?  b. What biases exist in AI-based hiring tools, and how do they compare to traditional methods?  c. What ethical guidelines should govern the use of AI to monitor employee productivity and behavior? | | | | | | |
| 8. AI in Criminal Justice and Healthcare | | a. How is AI being used in courts and policing?  b. What biases exist in AI systems used in criminal justice, and how do these compare to human bias?  c. How is AI being used in healthcare, and what are the associated benefits and risks?  d. Is it acceptable for doctors to use AI systems in diagnosing patients? Should patients be informed when they do so? | | | | | | |
| 9. AI in Music, Film, and Art | | a. How will AI impact songwriting, painting, and other artistic practices?  b. Should AI-generated music or films be considered true art?  c. Who owns the rights to music, images, or videos generated by AI?  d. What implications does AI art have for the future of human artistic labor and cultural identity? | | | | | | |
| 10. AI and Human Relationships | | a. How is AI affecting the way people speak, think, and relate to one another?  b. How is AI use affecting users’ mental health?  c. What are the benefits, risks, and ethical concerns of using AI systems for companionship, love, or therapy?  d. Will AI assistants solve the current epidemic of loneliness or will they only make it worse? | | | | | | |
| 11. AI in Warfare | | a. What are autonomous weapons systems (AWS), and how are they currently being used?  b. Is it wrong to remove humans from decisions to kill others?  c. What are the main countries and companies developing AWS? Which countries oppose them, and why?  d. Should there be a global treaty banning the development or use of AWS? | | | | | | |
| 12. The Existential Risks of AI | | a. What are the different types of existential risks posed by AI and how likely are they, according to leading AI researchers and safety experts?  b. Why is AI research and development progressing so quickly despite their known risks?  c. What actions can or should be taken to mitigate existential risks from AI? | | | | | | |
| 13. Regulating AI | | a. Which countries have the best and worst AI regulatory frameworks, and why?  b. What are the technical and political obstacles to effective AI regulation?  c. Should there be an international regulatory body for AI, similar to the IAEA or WHO? | | | | | | |