

## **Course Syllabus**

**Course Title:** AI and Society: Ethics, Cognition, and Critical Analysis

**Course code:** CTDL1902

**Academic Year:** 2024/25

**Course credits:** 3

**Grading Type:** Letter Grades

**Course duration:** 1 term

### **Course Description:**

This course explores how artificial intelligence (AI) will impact society and the economy. It covers key topics such as ethics, social justice, and the benefits and existential risks of AI. Throughout the course, students will learn about AI through by using AI to complete various tasks. The course is designed around active learning exercises encouraging students to develop hybrid critical thinking skills, which leverage generative AI to extend their natural human capabilities. Students will be expected to learn how to maximize the benefits gained from AI assistance while avoiding potential pitfalls. The course employs a range of assessment methods, including group projects and individual reflection journals, to foster both collaborative learning and personal growth.

### **Intended Learning Outcomes:**

By the end of this course, students should be able to:

1. Explain the fundamental concepts of AI, its capabilities and limitations, and its potential impact on the society and economy.
2. Explain how AI differs from human cognition, and how AI may complement and/or disrupt human cognition.
3. Apply critical thinking skills to evaluate AI technologies, particularly in the context of cognitive science theories and human-machine relationships.
4. Analyze the role of AI in society using network theory, complexity theory, ethical theories, and other relevant theoretical frameworks.
5. Demonstrate the ability to communicate effectively about AI, its role in society, and its social, economic, and ethical implications.

## **Assessment:**

### **Group Project (35%):**

- - First Draft Paper (10%)
  - Group Presentation (10%)
  - Final Draft Paper (15%).

Group members will receive one grade for each of these assignments. However, their individual grades will depend not only upon the group grade, but also the peer evaluations they receive at the end of the semester:

- Students in the same group will evaluate each other three times: after the first draft, after the group presentations, and after the final draft. The first two evaluations will not be graded -- the instructors will monitor them and alert underperforming students that there will be an opportunity to improve.
- The third and final evaluation will be the basis upon which the individual scores will be calculated. The high and low peer evaluations for a student will be dropped to ensure fairness. Then, the remaining peer evaluations for that student will be averaged and converted into a percentage score. The three group grades (i.e., for the first draft, the group presentation, and the final draft) will be added together. Then, this sum will be multiplied by the percentage score for the peer evaluations. This will be the final group assignment grade for individual students.
- This system is specifically designed to reward strong contributors and punish free riders. At the same time, please keep in mind that it is important to maintain good relationships with group members.

The use of Generative AI is permitted and requested to assist students with brainstorming, drafting, and writing their papers.

- Because you will be expected to leverage Generative AI, we will not be using any AI detectors. However, you will be responsible for an AI-generated content you incorporate into your projects.

### **Reflections (40%):**

Because the use of Generative Artificial Intelligence is required in this course, students will need to reflect on how they use GenAI tools to assist to complete group work. Students will write reflection memos on their use of generative AI in the project, their insights about the AI tool's contributions and limitations, and their role in the group

project. This will be broken down into reflections corresponding to each phase of the project:

1. Reflection on First Draft Phase (20%)
2. Reflection on Final Draft Phase (20%)

**Classroom Exercises (16%):**

We will be asking you to conduct in-class reflections at the end of four randomly selected class sessions. Each reflection, worth up to 4% of your grade, will be assessed on insight and thoughtfulness.

**3x Quizzes (9%):**

These small stakes quizzes will measure individual learning outcomes on key concepts and theories in the course, and provide feedback to students