

## **Overview**

### **Module Description**

This module aims to seamlessly integrate AI into the course, allowing students to become familiar with the ethical issues of AI and enabling them to make responsible decisions regarding the use of AI in the future. The approach includes asking students to conduct evaluations of ChatGPT's performance, engage in comprehensive research on real-world case studies, and subsequently produce informative video presentations. This process has the potential to significantly enhance students' information literacy and oral communication skills.

### **Learning Outcomes**

- Students' information literacy will improve by developing skills for finding, evaluating, and analyzing information critically.
- Students will develop strong oral communication skills by articulating their findings and insights clearly and engagingly, enhancing their ability to convey complex concepts effectively to an audience.

### **Module Organization and Timeline**

#### **Project 1: ChatGPT- Take It with a Grain of Salt (Week 4)**

Following the Normal Distribution topics, a section for the definition of Artificial Intelligences (AIs), the intricate methodologies employed in the analysis of extensive large-scale datasets in professional settings, and an exploration of the manifold effects, both positive and negative, that AIs engender in our daily existence will be incorporated. Students then are assigned the first "ChatGPT – Take It with a Grain of Salt" project, where students are required to evaluate the provided prompts on ChatGPT, assess its accuracy, and compile a performance report.

#### **Project 2: Real-Life Case Studies of AI Biases (Week 7)**

In this project, students are provided with the predicted recidivism probabilities from two prediction models: (1) a model that utilizes Ethnicity as a predicting factor, provided by the COMPAS algorithm; and (2) a model developed by the instructor that does not use Ethnicity as a predicting factor. Students are required to complete tasks assigned by the instructor based on this information.

#### **Homework Assignment on Montreal Declaration Principles**

A homework assignment, titled Homework 09 - Montreal Declaration Principles, was designed to examine students' understanding of the Montreal Declaration Principles. In the assignment, besides questions about the definitions of certain principles, multiple small synthetic case studies are included with underlying ethical issues and students are required to identify these issues based on the Montreal Principles framework.

### **Assessment Rubric**

The student's work will be assessed using the AAC&U Ethical Reasoning VALUE Rubric available at VALUE Rubrics - Ethical Reasoning | AAC&U ([aacu.org](https://aacu.org))

For this course, three evaluation criteria of the ER Value Rubric were utilized: Understand Perspectives/Concepts, Issue Recognition, and Apply Perspectives / Concepts. For convenience, the AACU Value Rubric is also provided below:

## ETHICAL REASONING VALUE RUBRIC

for more information, please contact [value@aacu.org](mailto:value@aacu.org)



### Definition

Ethical Reasoning is reasoning about right and wrong human conduct. It requires students to be able to assess their own ethical values and the social context of problems, recognize ethical issues in a variety of settings, think about how different ethical perspectives might be applied to ethical dilemmas, and consider the ramifications of alternative actions. Students' ethical self-identity evolves as they practice ethical decision-making skills and learn how to describe and analyze positions on ethical issues.

*Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (all one) level performance.*

	Capstone 4	Milestones 3                      2		Benchmark 1
<b>Ethical Self-Awareness</b>	Student discusses in detail/analyzes both core beliefs and the origins of the core beliefs and discussion has greater depth and clarity.	Student discusses in detail/analyzes both core beliefs and the origins of the core beliefs.	Student states both core beliefs and the origins of the core beliefs.	Student states either their core beliefs or articulates the origins of the core beliefs but not both.
<b>Understanding Different Ethical Perspectives/Concepts</b>	Student names the theory or theories, can present the gist of said theory or theories, and accurately explains the details of the theory or theories used.	Student can name the major theory or theories she/he uses, can present the gist of said theory or theories, and attempts to explain the details of the theory or theories used, but has some inaccuracies.	Student can name the major theory she/he uses, and is only able to present the gist of the named theory.	Student only names the major theory she/he uses.
<b>Ethical Issue Recognition</b>	Student can recognize ethical issues when presented in a complex, multilayered (gray) context AND can recognize cross-relationships among the issues.	Student can recognize ethical issues when issues are presented in a complex, multilayered (gray) context OR can grasp cross-relationships among the issues.	Student can recognize basic and obvious ethical issues and grasp (incompletely) the complexities or interrelationships among the issues.	Student can recognize basic and obvious ethical issues but fails to grasp complexity or interrelationships.
<b>Application of Ethical Perspectives/Concepts</b>	Student can independently apply ethical perspectives/ concepts to an ethical question, accurately, and is able to consider full implications of the application.	Student can independently (to a new example) apply ethical perspectives/ concepts to an ethical question, accurately, but does not consider the specific implications of the application.	Student can apply ethical perspectives/ concepts to an ethical question, independently (to a new example) and the application is inaccurate.	Student can apply ethical perspectives/ concepts to an ethical question with support (using examples, in a class, in a group, or a fixed-choice setting) but is unable to apply ethical perspectives/ concepts independently (to a new example).
<b>Evaluation of Different Ethical Perspectives/Concepts</b>	Student states a position and can state the objections to, assumptions and implications of and can reasonably defend against the objections to, assumptions and implications of different ethical perspectives/ concepts, and the student's defense is adequate and effective.	Student states a position and can state the objections to, assumptions and implications of, and respond to the objections to, assumptions and implications of different ethical perspectives/ concepts, but the student's response is inadequate.	Student states a position and can state the objections to, assumptions and implications of different ethical perspectives/ concepts but does not respond to them (and ultimately objections, assumptions, and implications are compartmentalized by student and do not affect student's position.)	Student states a position but cannot state the objections to and assumptions and limitations of the different perspectives/ concepts.