

Overview

Description

In this module, five different case studies are followed, each one presenting an ethical dilemma for business leaders. Throughout this module, business students will examine the various problems from different sides in order to determine what they believe to be a proper moral outcome. The key to all of this is to demonstrate to students that there are different solutions to each problem and that there is not one unique solution that can always be implemented. Each solution will have different benefits and costs and students will need to examine these in order to understand the proper role of how to utilize AI in a business setting. This will require students to see how different aspects of the Montreal Protocol may come into conflict with one another as well as how different ethical perspectives can lead us to different outcomes. The most important lesson from all of these is to engage a wide variety of stakeholders in order to come to a proper understanding of the question and devise an acceptable solution to the that are presented. Each case study will take one week of class time. Prior to starting the module, students will be asked to do a write-up answering the following five questions and will be asked *why* they chose to answer the question in the way that they did.

Students will learn the Montreal Declaration's ten guiding principles that are reproduced here from a document authored by Professor Debzani Deb of Winston-Salem State University:

AI Ethics Principles/Guidelines

Montreal (<https://montrealdeclaration-responsibleai.com/the-declaration/>)

1. Well-being

The development and use of artificial intelligence systems (AIS) must permit the growth of the well-being of all sentient beings.

2. Autonomy

AIS must be developed and used while respecting people's autonomy, and with the goal of increasing people's control over their lives and their surroundings.

3. Privacy and Intimacy

Privacy and intimacy must be protected from AIS intrusion and data acquisition and archiving systems (DAAS).

4. Solidarity

The development of AIS must be compatible with maintaining the bonds of solidarity among people and generations.

5. Democratic Participation

AIS must meet intelligibility, justifiability, and accessibility criteria, and must be subjected to democratic scrutiny, debate, and control.

6. Equity

The development and use of AIS must contribute to the creation of a just and equitable society.

7. Diversity Inclusion

The development and use of AIS must be compatible with maintaining social and cultural diversity and must not restrict the scope of lifestyle choices or personal experiences.

8. Prudence

Every person involved in AI development must exercise caution by anticipating, as far as possible, the adverse consequences of AIS use and by taking the appropriate measures to avoid them.

9. Responsibility

The development and use of AIS must not contribute to lessening the responsibility of human beings when decisions must be made.

10. Sustainable Development

The development and use of AIS must be carried out so as to ensure a strong environmental sustainability of the planet.”

These principles will be tested on the course final examination in the form of a definitions section that will require students to write out what each principle means when they see the principle listed and to provide a brief example of how each principle might be violated and another example of how each principle might be upheld (LO2).

Learning Outcomes

The following five learning outcomes are taken from the Responsible AI workshop put together by Professors Debzani Deb and Greg Taylor of Winston-Salem State University and thus closely parallel the learning outcomes they gave to ensure comparability.

- The student will analyze the fundamental principles that consciously or unconsciously influence one’s ethical conduct and ethical thinking to be assessed through written assignments that require the student to discuss these fundamental principles in analyzing at least one of the case studies
- Student will understand the different AI ethical principles and concepts as well as understand the Montreal Framework and name/explain several of its key principles to be assessed through written assignments that require the student to discuss these in the context of the problem under consideration
- Student will recognize ethical issues when presented in the form of a case study and recognize cross-relationships among the issues to be assessed through a debate
- Student will apply ethical perspectives/concepts independently to an ethical question to be assessed through a debate
- Student will evaluate different AI ethical perspectives by stating a position regarding an ethical problem and reasonably defend his or her position through a debate Each case study incorporates all five elements since students cannot evaluate an ethical problem and provide a position without applying, recognizing, understanding, and analyzing in accordance with each of the other learning goals.

Module Organization and Timeline

Case Study 1: The Trolley Problem and Self-Driving Cars (Week 1)

- Prior to the first class for the week, students are to complete the reading assignments. They will also come into class with a written statement answering the question, “Is it ethical to use AI to solve the trolley problem?”
- After handing in their written statements, students are to break up into small groups on three key philosophical questions.
- In between the first class and the second class, students are asked to use the Moral Machine to see how they would “solve” various Trolley Problems.
- During the second class, students are to discuss what they learned about themselves with respect to their own moral frameworks. This class session is devoted to debating the question: Is there a fundamental issue with the Montreal Declaration’s Principle of Responsibility with respect to self-driving cars and the Trolley Problem?
- Students will then do a short (2 to 4 page) paper answering the four questions that were detailed for themselves with reference to both the debate and class readings that will be due the following week.

Case Study 2: AI in Hiring and Promotion Decisions (Week 2)

- Prior to first class for the week, students are to complete the reading assignments and to come in with a written statement that answers the question: “Is it ethical to use AI in promotion and hiring decisions?”
- During the first class, students are to break up into small groups on three key philosophical questions.
- Between the first and second classes, students will be asked to take one or more of the Harvard Implicit Association Tests: [Take a Test \(harvard.edu\)](https://implicit.harvard.edu/implicit/takeatest.html)
- During the second class, students are to discuss what they learned about themselves with respect to their own implicit associations.
- Students will then do a short (2 to 4-page) paper answering the five questions that were detailed for themselves with reference to both the debate and class readings that will be due the following week.

Case Study 3: The use of generative AI and the possibility of copyright, patent, and trademark infringement (Week 3)

- Prior to the first class for the week, students are to complete the reading assignments and to come in with a written statement that answers the question: “Should copyrighted, patented, or trademarked works be used to train generative AI?”
- During the first class, students are to break up into small groups on three key philosophical questions.
- Between the first and second classes, students will also be asked to use both the Chat GPT/Open AI model as well as Stable Diffusion to generate a written and image work respectively.
- During the second class, students will be asked to discuss what clues can be gleaned as to whether something is AI-generated or human-generated.
- Students will then do a short (2 to 4-page) paper answering the three questions that were detailed for themselves with reference to both the debate and class readings that will be due the following week.

Case Study 4: The Ethical Use of Deepfakes (Week 4)

- Prior to the first class for the week, students are to complete the reading assignments and to come in with a written statement that answers the question: “Should deepfakes be allowed in movies when actors or the estate of actors provide permission and are compensated?”
- During the first class, students are to break up into small groups on three key philosophical questions.
- Between the first and second classes, students will also be asked to watch a deepfake that was authorized by the persons being deepfaked and one where it was not authorized.
- During the second class, students will be asked to discuss what clues can be gleaned as to whether something is deepfaked or human-generated.
- Students will then do a short (2 to 4 page) paper answering the three questions that were detailed for themselves with reference to both the debate and class readings that will be due the following week.

Case Study 5: The Ethical Use of Deepfakes (Week 5)

- Prior to the first class for the week, students are to complete the reading assignments and watch the videos and to come in with a written statement.
- During the first class, students are to break up into small groups to address the first five principles of the Montreal Declaration and how they impact the answer to this question.
- There is no outside activity for this particular case study because this is more about how we need to react to AI than an application of AI itself.
- During the second class, students will be asked to discuss the second five principles of the Montreal Declaration and how they impact the answer to this question.
- Students will then do a short (2 to 4-page) paper answering the two philosophical questions that were detailed for themselves with reference to both the debate and class readings that will be due the following week.

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://www.aacu.org/value/ethical-reasoning).

For this course, all five evaluation criteria of the ER Value Rubric were utilized. For convenience, the AACU Value Rubric is also provided below:

ETHICAL REASONING VALUE RUBRIC

for more information, please contact 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 (cell one) level performance.

	Capstone 4	Milestones 3 2		Benchmark 1
Ethical Self-Awareness	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.
Understanding Different Ethical Perspectives/Concepts	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.
Ethical Issue Recognition	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.
Application of Ethical Perspectives/Concepts	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).
Evaluation of Different Ethical Perspectives/Concepts	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.