

Contents

Part 1: Introduction	3
Part 2: Overview of AI in Business Ethics Module	3
Description	3
AI Ethics Principles/Guidelines	3
Learning Outcomes	4
Part 3: Instructor Guide	5
Part 4: Case Study 1: The Trolley Problem and Self-Driving Cars	5
Description	5
Goals	5
Tags	5
Assigned Readings	5
Implementation and Assessment	6
Part 5: Case Study 2: AI in Hiring and Promotion Decisions	7
Description	7
Goals	7
Tags	7
Assigned Readings	7
Implementation and Assessment	7
Part 6: Case Study 3: The use of generative AI and the possibility of copyright, patent, and trademark infringement	9
Description	9
Goals	9
Tags	9
Assigned Readings	9
Implementation and Assessment	9
Part 7: Case Study 4: The Ethical Use of Deepfakes	11
Description	11
Goals	11
Tags	11
Assigned Readings	11
Part 8: Case Study 5: The Implementation of Universal Basic Income (UBI)	13
Description	13
Goal	13

Tags.....	13
Assigned Readings and Videos.....	13
Implementation and Assessment.....	13
Part 9: Assessment of the Student Learning Experience	15

Part 1: Introduction

This course examines the ethical dimensions of business and the role ethics plays in sound business decisions and a healthy workplace environment. Various ethical theories and corporate models will be studied. The practical application of ethical theory will be discussed through case study analysis, the study of various corporate ethics codes, and student research on current ethical issues in business.

Part 2: Overview of AI in Business Ethics Module

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 of 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. 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/rubrics/ethical-reasoning)

Part 3: Instructor Guide

Follow the provided link for a guide to the case studies as explained by the course instructor, Dr. Zagros Madjd-Sadjadi.

- [AI IN BUSINESS ETHICS](#)

Part 4: Case Study 1: The Trolley Problem and Self-Driving Cars

Description

The use of ethical AI frameworks surrounding the Trolley Problem, specifically in regards to AI autonomous driving vehicles and the decisions that must be pre-built into AI vehicles including the impact that certain decision trees will have on adoption of this technology as well as the liability that AI designers will have for design flaws when there is an accident.

In this case study, students are put in the position of being executives in an automobile company that seeks to manufacture self-driving cars and are asked whether they should allow their programmers to handle the so-called “trolley problem” and what the ramifications of doing so are from an ethical standpoint. In addition, they will explore whether self-driving cars should have the ability for those in the car to take over in order to respect the Principle of Responsibility from the Montreal Declaration.

Goals

- Introduce students to the “Trolley Problem,” which has become a key conversational topic for AI designers of autonomous vehicles
- Identify the issues from an ethical perspective with attempting to solve the Trolley Problem as well as whether they should be solving this problem
- Identify whether full autonomous driving with absolutely no override would violate the Montreal Declaration’s Principle of Responsibility
- Have students actually test their own ethical beliefs using the Moral Machine from MIT Labs

Tags

- Principle of Responsibility from the Montreal Declaration
- Consequentialist Ethics (both short- and long-term)*
- Deontological Ethics*

*Consequentialist, Deontological, and Virtue Ethics are major frameworks throughout this course and this module really needs to be placed either within the framework of a business ethics or philosophy course or these concepts need to be introduced prior to using this case study.

Assigned Readings

Renda, Andrea, Ethics, Algorithms and Self-Driving Cars – A CSI of the ‘Trolley Problem’ (January 17, 2018). CEPS Policy Insight - No 2018/02, January 2018 , Available at SSRN: <https://ssrn.com/abstract=3131522>

[Major legal changes needed for driverless car era \(bbc.com\)](#)

[Why self-driving cars still require a lot of human supervision : NPR](#)

This material was developed by Zagros Madjd-Sadjadi as a part of Winston-Salem State University's Center for Applied Data Science (CADS) Faculty Adopter Program 2023-2024

[AI and machine learning has its own trolley problem debate | World Economic Forum \(weforum.org\)](https://www.weforum.org/agenda/2018/05/ai-machine-learning-has-its-own-trolley-problem-debate/)

<https://www.turing.ac.uk/blog/ais-trolley-problem-problem>

[The folly of trolleys: Ethical challenges and autonomous vehicles | Brookings](https://www.brookings.edu/articles/the-folly-of-trolleys-ethical-challenges-and-autonomous-vehicles/)

[The problem with the trolley problem \(qz.com\)](https://qz.com/1011111/the-trolley-problem-with-the-trolley-problem/)

[Autonomous Cars Don't Have a 'Trolley Problem' Problem | The Drive](https://www.theverge.com/2018/5/15/17281111/autonomous-cars-dont-have-a-trolley-problem)

In addition to looking at the case study itself that will be developed, students will interact with the modules at: <https://www.moralmachine.net/>

Students will engage in a debate on this topic and additionally will write a paper on this topic.

Implementation and Assessment

This topic will be covered in two days, within one week. 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 each of the three key philosophical questions:

1. Can self-driving cars be programmed to deal with the trolley problem and, to the degree that they can be, should they be? (drawing on the readings from the Brookings Institution and Quartz)
2. Who, if anyone, should be held accountable for deaths due to self-driving cars that encounter a Trolley Problem? (drawing on the readings from the BBC and NPR)
3. To what extent should we prioritize getting people into self-driving cars as opposed to how to deal with the Trolley Problem? (drawing on the reading from the Drive)

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. Note that students are effectively answering the question “Is it ethical to use AI to solve the trolley problem?” as part of their answer to the first question.

Part 5: Case Study 2: AI in Hiring and Promotion Decisions

Description

This case study examines the ethical issues of using AI in hiring and promotion decisions since subtle bias in training materials can lead to perpetuation of racial, ethnic, and gender stereotyping. In this case study, students take on the role of HR managers who are debating whether to use AI in hiring and promotion decisions and, if a decision is made to utilize AI, what will be the safeguards used to ensure against the perpetuation of subtle (and not so subtle) biases.

Goals

- Introduce students to the ethical issues of using AI in hiring and promotion decisions
- Have students test for the own subtle biases

Tags

- Respect for Autonomy
- Principle of Diversity Inclusion
- Principle of Democratic Participation
- Principle of Equity
- Virtue Ethics*

Assigned Readings

[How is AI is being used in the hiring process? | World Economic Forum \(weforum.org\)](https://www.weforum.org/agenda/2018/05/how-is-ai-being-used-in-the-hiring-process/)

[Employment Law Red Flags in the Use of Artificial Intelligence in Hiring \(americanbar.org\)](https://www.americanbar.org/groups/employment/law_red_flags_in_the_use_of_artificial_intelligence_in_hiring/)

[The Legal and Ethical Implications of Using AI in Hiring \(hbr.org\)](https://www.hbr.org/2018/05/the-legal-and-ethical-implications-of-using-ai-in-hiring)

[AI in Hiring and Evaluating Workers: What Americans Think | Pew Research Center](https://www.pewresearch.org/2018/05/01/ai-in-hiring-and-evaluating-workers-what-americans-think/)

[AI Can Be A Force For Good In Recruiting And Hiring New Employees \(forbes.com\)](https://www.forbes.com/sites/bernardmarr/2018/05/01/ai-can-be-a-force-for-good-in-recruiting-and-hiring-new-employees/#1a2c0e003000)

Students will engage in a debate over this topic and will be required to write a paper summarizing their position.

Students will also engage with the Harvard Implicit Association Test to see how we all have subtle biases and begin to think about how those subtle biases the training data that is used.

Implementation and Assessment

This topic will be covered in two days, within one week. 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 each of the three key philosophical questions:

- To what extent can we mitigate the problems of subtle bias in training materials?

- Is it sufficient to simply include more diversity when it comes to the training materials themselves or is it necessary to check for subtle biases in order to correct for them?
- What are the ethical issues that using AI can amplify in the hiring process if a concerted effort is not made to address them?

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. This class session is devoted to debating two questions:

- Should AI be used in the hiring and promotion process?
- If AI is used, how can we address the Montreal Declaration's Respect for Autonomy, Principle of Diversity Inclusion, Principle of Democratic Participation, and Principle of Equity while upholding Virtue Ethics?

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. Note that the fourth question on whether AI should be used in the hiring and promotion process is effectively the same question as the pre-question for this module.

Part 6: Case Study 3: The use of generative AI and the possibility of copyright, patent, and trademark infringement

Description

The use of generative AI and the possibility of copyright, patent, and trademark infringement due to the use of copyrighted training datasets that may also include trademarked and patented process. Students will play the role of an executive in a media company that is considering using generative AI for some of its content.

Goals

- To introduce students to the legal and philosophical issues related to training sets for generative AI as well as whether these training sets qualify as “fair use” under the copyright act when the training material is copyrighted

Tags

- Principle of Well-Being
- Principle of Solidarity
- Virtue Ethics*
- Consequentialist Ethics*
- Deontological Ethics*

Assigned Readings

[More Writers Sue OpenAI for Copyright Infringement Over AI Training \(usnews.com\)](https://www.usnews.com/story/news/ai/2023/03/23/more-writers-sue-openai-for-copyright-infringement-over-ai-training)

[Generative AI Has an Intellectual Property Problem \(hbr.org\)](https://hbr.org/2023/03/generative-ai-has-an-intellectual-property-problem)

[Should CC-Licensed Content be Used to Train AI? It Depends. - Creative Commons](https://creativecommons.org/licenses/by/4.0/)

[Is the Use of Copyrighted Works to Train AI Qualified as a Fair Use \(copyrightalliance.org\)](https://copyrightalliance.org/2023/03/23/is-the-use-of-copyrighted-works-to-train-ai-qualified-as-a-fair-use/)

[Making music with AI? Start with these ethical guidelines - Water & Music \(waterandmusic.com\)](https://waterandmusic.com/2023/03/23/making-music-with-ai-start-with-these-ethical-guidelines/)

Implementation and Assessment

This topic will be covered in two days, within one week . 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 each of the three key philosophical questions:

- Should copyrighted, patented, or trademarked works be used to train generative AI?
- Should generative AI be used even if those works are creative commons works?

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 debate the question:

- Does generative AI qualify as “fair use” under the copyright act when the material is copyrighted?

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. Note that the first question on whether “Should copyrighted, patented, or trademarked works be used to train generative AI” is the same question as the pre-question for this module.

Part 7: Case Study 4: The Ethical Use of Deepfakes

Description

The ethical use of deepfakes: when it is appropriate and when it is not appropriate looking at both the case study of Disney's use of deepfakes for bringing actor back to life for Star Wars as well as the various deepfakes that have been used to create a post-truth society through political ad manipulation. Students will play the role of executives at Disney who have to decide whether to allow for deepfakes in their own movies as well as whether to allow them in TV advertisements that are broadcast on ABC, Disney's wholly-owned broadcast network.

Goals

- To introduce students to the legal and philosophical issues related to deepfakes

Tags

- Principle of Well-Being
- Respect for Autonomy
- Principle of Solidarity
- Principle of Prudence
- Principle of Protection of Privacy and Intimacy
- Virtue Ethics*
- Consequentialist Ethics*
- Deontological Ethics*

Assigned Readings

[Debating the ethics of deepfakes | ORF \(orfonline.org\)](#)

[Deepfakes and the Dangers of AI | Deloitte US](#)

prindleinstitute.org/2020/12/ethical-considerations-of-deepfakes/

[Deepfakes – The Good, The Bad, And The Ugly \(forbes.com\)](#)

[Disney makes face swapping more believable \(techxplore.com\)](#)

[Rogue One Deepfake Makes Star Wars' Leia And Grand Moff Tarkin Look Even More Lifelike | Cinemablend](#)

[Lawmakers push forward on package addressing deepfakes in political ads ★ Michigan Advance](#)

Implementation and Assessment

This topic will be covered in two days, within one week. 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 each of the three key philosophical questions:

- Should deepfakes be allowed in movies when actors or the estate of actors provide permission and are compensated?
- Should deepfakes be allowed in TV advertisements?

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 debate the question:

- “To what extent do deepfakes erode trust in the information and entertainment industries?”

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.

Note that the first question on whether deepfakes should be allowed in movies when actors or the estate of actors provide permission and are compensated is the same question as the pre-question for this module.

Part 8: Case Study 5: The Implementation of Universal Basic Income (UBI)

Description

Do we need to have a Universal Basic Income to deal with the societal implications of AI replacing jobs? Students will play the role of a member of Congress debating the implementation of UBI.

Goal

- To make students aware of the job displacement that AI can have and discuss possible mitigation strategies to deal with the economic and societal fallout

Tags

- Principle of Well-Being
- Principle of Respect for Autonomy
- Principle of Protection of Privacy and Intimacy
- Principle of Solidarity
- Principle of Democratic Participation
- Principle of Equity
- Principle of Diversity Inclusion
- Principle of Prudence
- Principle of Responsibility
- Principle of Sustainable Development

Assigned Readings and Videos

[The Inevitable Need for Universal Basic Income in the Age of Artificial Intelligence \(ceo.com\)](#)

[AI Is About to Decimate Millions of Jobs. It's Time for Universal Basic Income | Opinion \(newsweek.com\)](#)

<https://youtu.be/7Pq-S557XQU?si=HhEge3GrspObUS95> (Humans Need Not Apply – CGP Grey video)

<https://www.youtube.com/watch?v=xEwtM0pKOV0> (Humans Need Not Apply – Stanford Ethics and AI Professor Jerry Kaplan Ethics)

[What Is Technofeudalism? \(nymag.com\)](#)

[‘Capitalism is dead. Now we have something much worse’: Yanis Varoufakis on extremism, Starmer, and the tyranny of big tech | Yanis Varoufakis | The Guardian](#)

Implementation and Assessment

This topic will be covered in two days, within one week. 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 that answers the question:

- Should we make everyone a shareholder in the new economy or will we become a technofeudal society?

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. Note that the first question on whether we should make everyone a shareholder in the new economy or will we become a technofeudal society is the same question as the pre-question for this module.

Part 9: Assessment of the Student Learning Experience

Two different mechanisms will be utilized in assessing the student learning experience. First, a before/after assessment will be used to simply gauge the degree to which students have thought about these issues in advance, and the second will be to use the same mechanisms that are currently used in the business ethics course to assess student learning. For the before/after assessment, prior to the first day of each case study in the module, students will be asked to simply conceptualize whether it is ethical to utilize AI in each of the above cases and why, and to bring in a written assessment of each of these items. On the last day of each case study in the module, in addition to other questions that are being asked, students will be asked to answer the exact same question, and then the two answers will be compared to see if students changed their perspectives and, if so, how their perspectives changed. The assessment will focus on the following:

1. To what degree is a consistent ethical framework utilized by the student to devise a solution to the issue at hand, and to what degree is it not utilized, and where can the student better incorporate ethical frameworks (consequentialist ethics, deontological ethics, virtue ethics) to answer these questions?
2. To what degree is the analysis given by the student based on facts that are consistent with the issues that are raised in the case study or question?
3. To what extent are all of the issues raised in the case study addressed by the student with a cogent argument that is informed by moral and ethical theories?

For this course, all five evaluation criteria of the Ethical Reasoning Value Rubric developed by AACU were utilized. This rubric can be downloaded from [here](#). 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 (all 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.