MDS 320 Maymester 2025

CRN: YYYYY
Ethics, Technology and Artificial Intelligence

Course Introduction

Credit Hours: 3 non-repeatable

Prerequisite Courses: None

Instructor: Dr. Thaddeus Herman, Teaching Assistant Professor of Multidisciplinary Studies

Class Meets: 3 weeks Asynchronous

Course Introduction:
This course explores recent developments in technology, specifically in artificial intelligence, through the ethical framework outlined in UNESCO's Recommendations on the Ethics of Artificial Intelligence, itself grounded within the Universal Declaration of Human Rights. Students will explore the value-embedded nature of technology, machine learning biases, legal challenges brought about by A.I., the environmental impact of A.I., how A.I. contributes to misinformation, the need for cognitive liberty in the face of A.I. advancements in the ability to interpret brain activity and consider possible ways to move forward. Overall, the course seeks to advance the capacity of its students to be able to engage critically with technology – A.I. in particular – within an ethical framework.

Faculty Contact Information

Instructor Office Location: 414DD Hodges Hall

Office Hours: Available by appointment.

Instructor Email and/or Phone: thaddeus.herman@mail.wvu.edu

Instructional Materials

Required Instructional Materials:
All materials will be provided via e-campus. No purchases necessary

Course Learning Outcomes

Course Learning Outcomes:

- Students will become familiar with the UNESCO recommendations on the Ethics of Artificial Intelligence.
- Students will be able to connect main points of the recommendations to technology they use, in particular systems of artificial intelligence.

- Students will approach the study of the content through multiple disciplines, including: criminology, sociology, legal studies, history, computer science, media studies and neuroscience.
- Students will apply the UNESCO recommendations on the Ethics of Artificial Intelligence as a framework through which they will analyze technology and artificial intelligence systems.

Assessment

Short Descriptions of and Grading Criteria for Major Assignments/Assessments: see detailed section on assessment below.

Weight/Distribution of Course Points:

Weekly Forum Posts and Participation (6 posts worth 100 points, 5 posts worth 16 points, 1 worth 20; 50% of grade).

AI Visual Misinformation Assignment – Due May 30th (100 points; 50% of grade)

Final Grading Scale:

Grade	Points	Percentage
A	180-200	100-90%
B	160-179	89-80%
C	140-159	79-70%
D	120-139	69-60%
F	0-119	59-0%

Course and Institutional Policies

Attendance Policy:
Attendance is required. If a student cannot make a class, the instructor may work with the student to find a way to make up the absence.

In a physical class, attendance in the classroom is a factor of the weekly post/participation grade. Not attending class will automatically drop that week's post grade by 20%. In an online asynchronous class, attendance is counted as participation in the weekly forum.

Participation Policy:
Participation is graded through attendance and completion of the weekly forum posts.

Late Assignment and Missed Exam Policy:
Assignments are expected to be turned in on time. If for some reason this is not possible, the student is responsible for being in touch with the instructor to discuss alternatives. If you anticipated difficulties in turning an assignment in on time, please do be in touch.

Generally, a grace period of 24-48 hours will be applied for late work. Following the grace period there will be a 5% reduction in the grade per each additional day that the assignment is late.

Institutional Policies:
Students are responsible for reviewing policies on inclusivity, academic integrity, incompletes, sale of course materials, sexual misconduct, adverse weather, as well as student evaluation of instruction, and days of special concern/religious holiday statements.

Inclusivity Statement

The West Virginia University community is committed to creating and fostering a positive learning and working environment based on open communication, mutual respect, and inclusion.

If you are a person with a disability and anticipate needing any type of accommodation in order to participate in your classes, please advise your instructors and make appropriate arrangements with the Office of Accessibility Services.

Academic Integrity Statement

The integrity of the classes offered by any academic institution solidifies the foundation of its mission and cannot be sacrificed to expediency, ignorance, or blatant fraud. Therefore, instructors will enforce rigorous standards of academic integrity in all aspects and assignments of their courses. For the detailed policy of West Virginia University regarding the definitions of acts considered to fall under academic dishonesty and possible ensuing sanctions, please see the

West Virginia University [Academic Standards Policy](). Should you have any questions about possibly improper research citations or references, or any other activity that may be interpreted as an attempt at academic dishonesty, please see your instructor before the assignment is due to discuss the matter.

Patchwriting/AI

Please familiarize yourself with the concept of *patchwriting* a phenomenon that is somewhere between plagiarizing and paraphrasing – but still a serious academic offense if done intentionally. [Merriam-Webster have an interesting article on it](), and this [flow chart]() might also be helpful. Please be very conscious and responsible in using other people's thoughts and ideas. Also, although recent developments in AI technology allow for the generation of an essay on any topic in only a few seconds, this class appreciates the capacity for original thought. Submissions written by an AI do *not* count as original. You can use AI in this class to consult on ideas, but any use of the AI needs to be documented (your prompts, and its outputs) and submitted along with your final contribution. Any text of an assignment generated by AI will not be accepted.

Notice of Class Recording Policy

Meetings of a course at West Virginia University (WVU), whether online or in-person, may be recorded. Recordings are not guaranteed and are intended to supplement the planned class session. Recordings will be made available to class participants, which may include students, assistants, guest lecturers, and co-facilitators. Recordings may be shared by the instructor or institution in accordance with WVU Rules and policies. The Recordings are owned by and contain intellectual property of WVU. The Recordings may not be shared, copied, reproduced, redistributed, transferred, or disseminated in any form or by any means without the prior written consent of authorized officials of WVU.

Grading and Assignments

Rubric for all writing forum posts:
Content (50 %):
(0-29%) Unsatisfactory: Response lacks substance or relevant content.
(30-39 %) Satisfactory: Response is mostly relevant and demonstrates some depth of though
(40-50 %) Excellent: Response is highly relevant, thoughtful, and provides insightful content
Engagement (50 %)
(0-29 %) Unsatisfactory: Response lacks engagement and does not stimulate further discussion.
(30-39 %) Satisfactory: Response shows some engagement but may be somewhat passive
(40-50 %) Excellent: Response actively engages with the question, encouraging discussion

Rubric for all other assignments

Content (40 %)
(0-23 %) Unsatisfactory: Content is unclear, lacks depth, or is minimally relevant
(24-27 %) Satisfactory: Content is somewhat relevant and demonstrates some depth of thought
(28-31 %) Competent: Content is generally relevant, demonstrates depth, and shows some originality
(32-35 %) Good: Content is highly relevant, demonstrates significant depth, and shows originality and creativity
(36-40 %) Excellent: Exceptional content that is highly relevant, demonstrates profound depth, and showcases exceptional originality and creativity.

Engagement and Thoughtfulness (30 %)
(0-17 %) Unsatisfactory: Response lacks engagement, thoughtfulness, or critical thinking
(18-20 %) Satisfactory: Response shows some engagement and thoughtfulness but may lack depth or critical analysis
(21-23 %) Competent: Response demonstrates engagement, thoughtfulness, and some critical analysis
(24-26 %) Good: Response actively engages with the topic, displays thoughtfulness, and includes critical analysis.
(27-30 %) Excellent: Response is highly engaging, exceptionally thoughtful, and includes profound critical analysis
Organization and Clarity (30 %)
(0-7 %) Unsatisfactory: Response is disorganized, unclear, or lacks structure
(8-15 %) Satisfactory: Response is somewhat organized and clear but may have minor issues
(16-22 %) Competent: Response is generally organized and clear, with good structure
(23-27 %) Good: Response is well-organized, clear and structured effectively
(28-30 %) Outstanding: Response is exceptionally organized, crystal clear, and structured perfectly

Assignments will be returned and graded within one week after submission.

Weekly Forum Posts and Participation – **Forum posts are due every Six Days from the beginning of the course at 11:59 pm (6 total posts, 100 points; 50% of grade).**
You will be given a question or task to accomplishment for each forum post. You will be required to post twice a week, for a total of 6 posts.

AI Visual Misinformation Assignment – **100 points; 50% of grade Due May 30**

You will be given 10 images. You need to determine if they are real, or were generated/manipulated by A.I. For each image, you need to document what tools you used to determine if the image was generated/manipulated by A.I.

Some tools you may wish to consider using are:
Microsoft Co-Pilot (included in the Edge browser, or other Microsoft Applications)
Google Image Search (Reverse Image Search)
https://aiimagedetector.org/
https://tineye.com/

You should include your determination for each image, as well as the path you took to reach that determination, and your reasoning behind making such a determination for each image. If you consulted A.I. technology such as Microsoft Co-Pilot, Chat GPT, Claude, or any other LLM, please include that conversation as well.

Please write this up in a word document in a report style. Use complete paragraphs, avoid bullet points and use a coherent narrative style in writing. Please do not use LLMs to generate the text of the assignment, I want to hear your voice, not that of the A.I.

Weekly Schedule (2 Modules Per Week)
(There may be minor differences between e-campus and this schedule. If there is a discrepancy, please defer to e-campus)

Week 1 (May 12-17)

Module 1: Introduction: Introduction to the themes of the course: ethics, tech and AI

Read:

UNESCO. (2023). *Key facts: UNESCO's recommendation on the ethics of artificial intelligence*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000385082.page=12

Watch:

NOVA. (2024, March 27). *A.I. revolution* [Video]. PBS. https://www.pbs.org/video/ai-revolution-umwwlt/

Due This Week:

Forum Post by December 28, 11:59pm

Module 2: Values Embedded in Technology

Read:

Srinivasan, R. (2018). *Whose global village?: Rethinking how technology shapes our world*. NYU Press: Introduction

Watch:

Baha'i World News Service. (2023, December 11). *Insights from the field: Technology, values, and society* [Video]. Mediasite. https://wvu.mediasite.com/Mediasite/Play/b5c57dc680b342fbb299b21e1b30f5ec1d

Orlowski, J. (Director). (2020). *The social dilemma* [Film]. Netflix.

Listen:

Kurtz, J. (Host). (2022, March 21). *The Wubi effect* (No. 671) [Audio podcast episode]. In *Radiolab*. WNYC Studios. https://www.wnycstudios.org/podcasts/radiolab/episodes/wubi-effect

Higgins, S. (Host). (2023, June 21). *Why do doctors still use pagers?* (No. 964) [Audio podcast episode]. In *Planet Money*. NPR. https://www.npr.org/2023/06/21/why-do-doctors-still-use-pagers

Due This Week:

Forum Post by December 28, 11:59pm

Week 2 (May 18 - 23)

Module 3: A.I., Algorithms, Machine Learning and Bias

Read:

Ferrara, E. (2023). Should ChatGPT be biased? challenges and risks of bias in large language models. *arXiv preprint arXiv:2304.03738*.

Watch:

Veritasium. (2022, March 1). *Future computers will be radically different* [Video]. YouTube.
https://www.youtube.com/watch?v=GVsUOuSjvcg

NOVA. (2022, October 12). *Computers vs. crime* [Video]. PBS. https://www.pbs.org/video/computers-v-crime-um7cco/

Due This Week:

Forum Post by January 3, 11:59pm

Module 4: A.I. Accuracy, Botsh*t, and Misinformation

Read:

McCarthy, I. P., Hannigan, T. R., & Spicer, A. (2024). Managing the risks of botshit: How to leverage chatbots while mitigating risks. *Harvard Business Review*

Listen:

Klein, E. (Host). (2023, February 17). *A Skeptical Take on the A.I. Revolution* [Video]. YouTube.
https://www.youtube.com/watch?v=3KwAIdK9J1A

Watch:

Evon, D. (2024, April 30). *Detect and debunk misinformation* [Webinar]. News Literacy Project. YouTube.
https://www.youtube.com/watch?v=T6aSU76ZlRQ

Harris, T., & Raskin, A. (2023, April 5). *The A.I. Dilemma*. YouTube.
https://www.youtube.com/watch?v=xoVJKj8lcNQ

Due This Week:

Forum Post by January 3, 11:59pm

Week 3 (May 24-30)

Module 5: A.I. and Cognitive Liberty

Read:

Farahany, N. A. (2023, June 26) *'Cognitive Liberty' Is the Human Right We Need to Talk About*. Time. Retrieved August 17, 2024, from https://time.com/6289229/cognitive-liberty-human-right/

Ligthart, S., Ienca, M., Meynen, G., Molnar-Gabor, F., Andorno, R., Bublitz, C., ... & Kellmeyer, P. (2023). Minding rights: Mapping ethical and legal foundations of 'neurorights'. *Cambridge quarterly of healthcare ethics*, *32*(4), 461-481.

Watch:

NBC News. (2023, May 24). *AI technology may be able to generate our mind's images* [Video]. YouTube. https://www.youtube.com/watch?v=TYbRNQ3LxwU

CNN. (2023, May 25). *Can AI read your mind?* [Video]. YouTube. https://www.youtube.com/watch?v=SE34gdRdrDU&t=175s

Azhar, A. (2024, August 17). *Inside Mind-Reading AI | Exponentially with Azeem Azhar*. YouTube. https://www.youtube.com/watch?v=PP_7FOnMRF0

Due This Week:

Forum Post by January 9, 11:59pm

Module 6: Where to go from here?

Read:

Current and Former Employees at Frontier AI Companies. (2024, June 4). *Open Letter on AI Risks and Governance*. Retrieved from https://righttowarn.ai/

Watch:

Raji, D. (2024). *Audits and Accountability in the Age of 'AI'*. [Video]. YouTube. https://www.youtube.com/watch?v=IhoTb87gqHM

Listen:

Center for Humane Technology. (2024). *Former OpenAI Engineer William Saunders on Silence, Safety, and the Right to Warn*. Your Undivided Attention. Retrieved from https://www.humanetech.com/podcast/former-open-ai-engineer-william-saunders-on-silence-safety-and-the-right-to-warn

Due This Week:

Forum Post by January 9, 11:59pm

Final Assignment: A.I. Visual Misinformation Project