## Topics & Perspectives - AI, Art & Society

HUM 2833, Section 27292 (3 credits)

Tuesdays 12:50-3:50 pm Professor: Dr. Heidi J. Boisvert

Location: Online

Email: hboisvert@ufl.edu

Office Hours: Tuesdays 10-12:30 pm or by appointment

Office Location: Computer Science & Engineering Building, E111

Office Phone: TBD

Course Content —> Canvas Site: https://ufl.instructure.com/courses/548658 Course Collaboration —> Slack Workspace: https://aiartsocietyfa2025.slack.com

## **Course Description:**

This course looks critically at the promise and perils of artificial intelligence. Students examine it through the lens of media studies and critical race, gender studies as well as artists who offer a shadow discourse, subversively using Al and other emerging technology.

The course provides an introduction to the study and analysis of AI and how this influences the artistic process. Students will examine how technologies have evolved historically as well as develop perspectives on how they would best be used in the future. Major topics will include computing history, human-computer interaction, computers and culture, and the ethical and social implications of AI and other emerging technologies. In the lab component of the course, students will learn to employ methods of documentation currently in use at research institutions and in private industry in order to place research being done in a wider context.

Prerequisites: None

#### **Course Goals:**

To give students an introduction to:

- current critical socio-cultural, political, environmental, ethical and economic discourses surrounding the impacts of artificial intelligence
- the history and contemporary field of artists engaging critically with artificial intelligence
- co-creation between human and non-human systems

#### **Learning Outcomes:**

By the end of the course students will be able to:

- engage in critical discussions around the impacts of artificial intelligence
- develop research methodologies to write effectively about artificial intelligence and art
- apply critical reflections around artificial intelligence to their own creative practice

#### **Course Materials:**

- Canvas
- Slack
- GitHub
- Flash drive & other portable drives or Google Drive account to back up files
- Required Readings Provided as PDFs
- Journal (Digital or Physical)
- Laptop (Mac or PC)

## **Recommended Reading List:**

Meredith Broussard, Artificial Unintelligence.

Safiya Umoja Noble, Algorithms of Oppression.

Cathy O'Neil, Weapons of Math Destruction.

Yarden Katz, Artificial Whiteness

Ruha Benjamin, Race After Technology: Abolitionist Tools for the New Jim Code.

Wendy Hui Kyong Chun, "Race And/As Technology."

Shoshana Zuboff. The Age of Surveillance Capitalism: The Fight for a Human Future at the Frontier of Power.

Virginia Eubanks. Automating Inequality: How High-Tech Tools Profile, Police, and Punish Poor People.

Kate Crawford. Atlas of Al: Power, Politics and the Planetary Costs of Artificial Intelligence.

Kat Cizek & William Ulricchio. Collective Wisdom: Co-Creating Media for Equity and Justice.

## **Industry Essentials:**

https://datasociety.net/

https://www.aiforpeople.org/

https://www.ajl.org/

https://ainowinstitute.org/

https://hai.stanford.edu/

https://www.ssrc.org/

https://grayarea.org/

https://leonardo.info/

https://eyebeam.org/

https://pioneerworks.org/

https://www.lacma.org/lab

# **Grading Policy\*:**

- 25% reading/experience responses
- 25% mid-term paper
- 40% final project
- 10% participation
- \* University grading policy can be found here: https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/.

# **Grading Rubric:**

VALUES	Excellent (90-100)	Good (80-89)	Fair (70-79)	Poor (60-69)	Unsatisfactor y (0-59)
Concept	Core concept is intriguing, original, and well- explored	Core concept is intriguing but lacking in examination	Core concept is present and supported by the work	Core ideas are scattered without consideration	No clear concept, or work doesn't reflect it
Progress	Clear and consistent progress from ideation to execution	Progress was made, but was not consistent	Evidence of procrastinatio n, "last minute" pushes or crunch	Lack of progress in 1-2 areas resulting in project deficiencies	Little to no progress shown on the project
Presentation	Concept is clearly presented and strongly supported through audio, visuals, interaction, and narrative (if applicable)	Concept is supported through presentation, but 2 or more areas of the design are lacking or distracting	Concept is weakly supported through presentation, project requirements met at a "bare minimum" level	1-2 presentation requirements are not met.	3+ presentation requirements are not met.
Skills	Clear demonstration of skills in all development areas (visual, text, audio, interaction, programming)	Clear demonstration of skill in 2+ development areas	Demonstrates skills, but omits topics covered in class.	Evidence of skills, but underutilizatio n of techniques learned in class	Does not use any techniques learned in class.

VALUES	Excellent (90-100)	Good (80-89)	Fair (70-79)	Poor (60-69)	Unsatisfactor y (0-59)
Collaboration	Consistently provides honest, supportive feedback to peers, responsible in meeting team goals, communicates effectively.	Generally supportive, responsible, and good communicatio n, with a few issues	Multiple issues/ problems with collaboration, meeting goals, or communicatin g	Little to no evidence of communicatio n, goal setting, and collaboration in a team setting.	Disrespectful to fellow students work, with negative impacts to class/team dynamics.

## **Expectations:**

- Arrive on time and attend all classes— see below for attendance policy.
- Spend at least **2-4 additional hours a week** (outside of class) on class projects, readings, experimenting with tech & writing in journal.
- Check Canvas for assignments and materials (typically announced and posted at the end of class on Tuesday & Thursday).
- Check Slack regularly for group and private messages.
- Post weekly reading responses to Canvas by midnight on Mondays unless otherwise specified in the assignment.
- Actively participate in class discussions & group critiques.
- Back up your work regularly.
- Follow good device etiquette: No cell phone use during class. Laptops only used for lecture note-taking and related class activities.
- Thoughtfully contribute to a positive classroom environment, while actively supporting and challenging your classmates' ideas.
- Push yourself creatively and technically. Be ambitious. Work hard. Stay open and curious!

#### Communication:

- To contact your instructor with a brief, private question or message, **send a DM** (Direct Message) through Slack.
- If you have a question that may be relevant to the group (about homework, etc.), **post** in the #general channel on Slack for all to see and comment on.
- Use Slack for easy communications with your classmates as well—you can DM individuals or selected groups.
- To discuss a longer matter with your instructor, DM to set up an appointment for office hours.

## **Attendance Policy:**

- Students are expected to attend every class, arrive on time, and actively engage/ participate.
- If you will be absent, or if you are running late, DM your instructor ASAP.
- In the case of an absence, contact a classmate for notes and what you missed, check Canvas for assignments, and contact the instructor if you have additional questions.
- Lateness and absences will impact your grade. Worse, not showing up will impact everyone else in the class. As most of our projects are collaborative, we are dependent on everyone's presence and full participation.
- All in-class activities are graded for participation. Unexcused absences will result in a 0 for participation for the day. Students with excused absences can make up missed in-class activities.
- Unexcused lateness counts as 1/3 absence when up to 25 minutes late, 1/2 absence when 26-50 minutes late, and a full absence beyond that point.
- Absences may be excused in the following cases: documentation of illness provided by a doctor, religious observance with advance notice, official school-related activity (with documentation and advanced notice), and on a case-by-case basis for other critical events. Religious observations do not require documentation.
- You are allowed 2 "unexcused absences." Each additional unexcused absence will result in a penalty of a full letter grade (10%) from the final grade per "unexcused" absence.
- Project critiques are mandatory. Missing a critique will result in a deduction of one letter grade for the corresponding project. Critiques can be made up or credit for a similar exercise can be provided for students with excused absences.
- For University Attendance Policy, please refer to this link for acceptable reasons for excused absences: <a href="https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/">https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/</a>.

## **Academic Integrity Policy:**

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Conduct Code specifies a number of behaviors that are in

violation of this code and the possible sanctions. Click here to read the Conduct Code. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Instructor Note: Code borrowed from another source at more than four lines in length must be attributed as a //comment within the code itself. If you are unsure of whether or not your work may constitute plagiarism, please check with your instructor before submitting.

## In-Class Recording:

• Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

#### Course Accommodations for Students with Disabilities:

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center here: <a href="https://disability.ufl.edu/get-started/">https://disability.ufl.edu/get-started/</a>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

## **Student Evaluation Requirements:**

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <a href="https://ufl.bluera.com/ufl/">https://ufl.bluera.com/ufl/</a>. Summaries of course evaluation results are available to students at <a href="https://gatorevals.aa.ufl.edu/public-results/">https://gatorevals.aa.ufl.edu/public-results/</a>.

## Course Structure (Lecture, Lab & Demos):

Lecture/Demo - Context setting and introducing tools & techniques

Lab/In Class Exercise - Scaffold development pipeline and experimentation

Read/Respond - Critically engage with readings/videos by writing up a short reaction to key points in preparation for discussion

Experience/De-construct - Research new immersive works & identify narrative devices, experience design strategies and technology employed to build a collective toolbox

Workshops - Hands-on, collaborative project development

#### Course Schedule\*:

\* The schedule and thematic course content is subject to change as the technology evolves.

#### // Week 1 - Tuesday, August 26th - INTRO - Overview of Al, Art & Society

Lecture/Discussion: Overview of Course, Structure & Ideas

#### Read/Respond:

Mimi Onuoha and Diana Nucera, <u>The People's Guide to Al</u> (excerpt) Şerife Wong, "<u>Why Al Policy Needs Artists</u>" Stephanie Dinkins, "¿Human ÷ (Automation + Culture) = Partner?" Meredith Broussard, *Artificial Unintelligence* (excerpt)

## Experience/Deconstruct:

Şerife Wong, Fluxus Landscape: An Expansive View of Al Ethics and Governance, 2019 Stephanie Dinkins, Conversations with Bina48, 2014-Present Zach Blas and Jemima Wyman, im here to learn so :))))), 2017

#### // Week 2 - Tuesday, September 2nd - Algorithms of Oppression

## Lecture/Discussion - Algorithms of Oppression

## Read/Respond:

Safiya Umoja Noble, *Algorithms of Oppression* (excerpt) Cathy O'Neil, Weapons of Math Destruction (excerpt) Yarden Katz, *Artificial Whiteness* (excerpt)

## Experience/Deconstruct:

Algorithmic Justice League, *Voicing Erasure* (2020) Martine Syms, *Mythiccbeing* (2018) Karen Palmer, Perception I/O (2020)

## // Week 3 - Tuesday, September 9th - AI & Race

Lecture & Discussion - Al & Race

#### Read/Respond:

Ruha Benjamin, Race After Technology: Abolitionist Tools for the New Jim Code (excerpt)

Stop LAPD Spying Coalition, "Before the Bullet Hits the Body: Dismantling Predictive Policing in Los Angeles"

Allison Koenecke et al., "Racial Disparities in Automated Speech Recognition" Nora Khan, <u>Seeing, Naming, Knowing</u>

Michelle Elam, "Signs Taken for Wonders: Al, Art & the Matter of Race"

#### Experience/Deconstruct:

Lynn Hershman Leeson, <u>Shadow Stalker</u> (2018-2021) Stephanie Dinkins, Conversations with Bina48 (2014-2020) Memo Atkens, Learning to See (2017)

View (Optional): Algorithmic Justice League, Coded Bias

## // Week 4 - Tuesday, September 16th - Data Feminism & Queering Al

Lecture & Discussion - Data Feminism & Queering Machines

#### Read/Respond:

Lauren F. Klein, "Collect, Analyze, Imagine, Teach," in <u>Data Feminism</u> Legacy Russell, <u>Glitch Feminism</u> Adam Poulsen, Eduard Fosch-Villaronga & Roger Andre Soraa. <u>Queering Machines</u>

#### Experience/Deconstruct:

Mimi Onuoha, <u>The Library of Missing Datasets</u> (2016) Caroline Sinders, <u>Feminist Dataset</u> (2017-Present) Stephanie Lepp, <u>Deep Reckonings</u> (2020) Jake Elwes, <u>The Zizi Project</u> (2021)

## // Week 5 - Tuesday, September 23rd - Techno-Orientalism

Lecture & Discussion - Techno-Orientalism

#### Read/Respond:

Margaret Rhee, "In Search of My Robot: Race, Technology, and the Asian American Body"

Wendy Hui Kyong Chun, "Race And/As Technology" (excerpt)

## Experience/Deconstruct:

Astria Suparak, "Virtually Asian" (2021) Pearlyn Lii - "Real Girlfriend" (2021)

## // Week 6 - Tuesday, September 30th - Critical & Human-Centered Al

Lecture/Discussion - Critical & Human-Centered Al

## Read/Respond:

<u>A New Al Lexicon</u> selections, Al Now Institute, eds. Noopur Raval and Amba Kak Rita Raley, Jennifer Rhee, Critical Al: A Field in Formation, Sasha Costanza-Chock, *Design Justice: Community-Led Practices to Build the Worlds We Need* (excerpt)

#### Experience/Deconstruct:

Feminist AI, <u>Thoughtful Voice Design</u> (2016) Lauren Lee McCarthy, <u>LAUREN</u> (2017-Present) Stephanie Dinkins, <u>Not the Only One (N'TOO)</u> (2018-Present) Maya Ganesh, <u>A Is For Another</u> (2020) Anna Riddler, <u>Myriad (Tulips)</u> (2019)

#### // Week 7 - Tuesday, October 7th - Decolonial Al

Lecture & Discussion - Decolonial Al

#### Read/Respond:

Shakir Mohamed, Marie-Therese Png, William Isaac, "<u>Decolonial AI: Decolonial Theory as Sociotechnical Foresight in Artificial Intelligence</u>"

Mimi Onuoha, "<u>Notes on Algorithmic Violence</u>"

Jason Lewis, "Indigenous Protocol & Artificial Intelligence."

#### Experience/Deconstruct:

Morehshin Allahyari, *Digital Colonialism* (2016-2019) Skawennati, Aboriginal Territories in Cyberspace (2005-Present) Amelia Winger-Bearskin, Sky/Death/World (2022)

## // Week 8 - Tuesday, October 14th - Disability & Al

Lecture/Discussion - Disability & Al

## Read/Respond:

Os Keyes, "Automating Ableism"
Ashley Shew, "Ableism, Techno-ableism and Al"
Lindsey Felt, "Art, Al & Disability Futures"

Experience/Deconstruct
M Eifler, Prosthetic Memory (2020)
Paolo Prestini, Sensorium Ex (2022)
CripTech Incubator, E.A.A.T. Exhibition (2022)
Marco Donnaumma, Ex Silens (2023)

## // Week 9 - Tuesday, October 21st - Environmentalism and Al

Lecture/Discussion - Environmentalism and Al

#### Read/Respond:

## Readings:

Ligozat, A., Lefèvre, J., Bugeau, A., & Combaz, J. *Unraveling the Hidden Environmental Impacts of AI Solutions for Environment.* 

Kak, Amba, Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society. 2020. *Use and Impact of Artificial Intelligence on Climate Change Adaptation in Africa*. Rutenberg, Isaac, Arthur Gwagwa, and Melissa Omino.

Nandutu, Irene, Marcellin Atemkeng, and Patrice Okouma. Integrating AI Ethics in Wildlife Conservation AI Systems in South Africa: A review, Challenges & Future Research Agenda.

Experience/Deconstruct:

Sofia Crespo, Critically Extant (2022)

Drew Hemment - AWEN (2021)

Sougwen Chung, F.R.A.N. (2020)

Refik Anandol, Machine Hallucinations (2023)

#### // Week 10 - Tuesday, October 28th - Surveillance & PSYOPS Capitalism

Lecture/Discussion: Surveillance Capitalism & PSYOPS

#### Read/Respond

Shoshana Zuboff. The Age of Surveillance Capitalism: The Fight for a Human Future at the Frontier of Power (excerpt)

Virginia Eubanks. Automating Inequality: How High-Tech Tools Profile, Police, and Punish Poor People (excerpt)

Kate Crawford. Atlas of AI: Power, Politics and the Planetary Costs of Artificial Intelligence (excerpt)

Shawn Shane, Wenxin Ding, Josephine Passananti, Haitao Zheng, Ben Y. Zhao.

"Prompt-Specific Poisoning Attacks on Text-to-Image Generative Models"

#### Experience/Deconstruct:

Simon Weckert, Google Map Hacks (2020)

Nightshade, Data Poisoning Tool (2023)

Trevor Paglen, You've Just Been F\*cked by PSYOPS (2023)

# // Week 11 - Tuesday, November 4th - Journalism, Science & Communication around Al

Lecture/Discussion: Journalism, Science & Communication around Al

#### Read/Respond:

David Caswell. "AI & Journalism, What's Next?"

Mike S. Schafer. "The Notorious GPT: science communication in the age of artificial intelligence."

Tal August, Lauren Kim, Katharina Reinecke, and Noah A. Smith. "Writing strategies for science communication: Data and computational analysis."

Luye Bao, Nicole M. Krause, Mikhaila N. Calice, Dietram A. Scheufele, Christopher D Wirz, Dominique Brossard, Todd P. Newman, and Michael A. Xenos. "Whose AI? How Different Publics Think About AI and its Social Impacts."

Danah Boyd and Kate Crawford. "Critical questions for big data: Provocations for a cultural, technological, and scholarly phenomenon."

## // Week 12 - Tuesday, November 11th - Al & Intellectual Property

Lecture/Discussion: Al & Intellectual Property

#### Read/Respond:

Court Case - OpenAI, Section 230 (Protects Algorithmic Curation & Augmentation of 3rd Party Content)

Gil Appel, Juliana Neelbauer & David A. Sweidel. "Generative Al Has an Intellectual Property Problem."

Richard Assmus & Emily A. Nash. "Generative Artificial Intelligence and Intellectual Property."

## // Week 13 - Workshop - Tuesday, November 18th- Speculative Design Co-Creation Process

```
// Week 14 - Workshop - Tuesday, November 25th - Proposal Development
```

- // Week 15 Workshop Tuesday, December 2nd In-Progress Feedback
- // Week 16 Final Exam Tuesday, December 9th Digital Showcase & Crits

#### PROJECTS:

**MID-TERM PAPER** - Based readings and discussions, students will craft a 10-page paper exploring the ethical dimensions of AI, machine learning and robotics. Students will be expected to examine issues of bias and inequity in training data, accuracy of models, surveillance and privacy concerns, behavior manipulation, effects of autonomy, transparency and public trust. Using theoretical insights from design justice, universal design and emergent strategy, students devise principles to redefine the future of machine ethics and artificial moral agents.

**FINAL PROJECT** - Using speculative co-design strategies as a critical thinking tool for prototyping the future, students conceptualize a series of subversive technologies employing AI, machine learning and other intelligent machines to address complex societal issues and reimagine alternatives. The process encourages students to challenge prevailing cultural, social, political, economic and ethical implications of new technologies.

## **Additional Campus Resources:**

#### **Health and Wellness**

*U Matter, We Care*: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: Visit the Counseling and Wellness Center website or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.

*University Police Department*: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).

*UF Health Shands Emergency Room / Trauma Center:* For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website.

GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website or call 352-273-4450.

#### **Academic Resources**

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or

via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

*Library Support*: Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage for more information.

On-Line Students Complaints: View the Distance Learning Student Complaint Process.