Course title: Algorithms in Culture

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Overview

This course introduces students to a multidisciplinary approach for understanding algorithms and how they impact day-to-day life. It also introduces students to the new field of critical algorithmic studies. Specific algorithms analyzed include the Google PageRank algorithm, the Google autocomplete algorithm, and Facebook's advertising algorithms. Given my background as a librarian, the content will be considered through various types of literacies including metaliteracy, digital literacy, and algorithmic awareness.

No computer science background is necessary to take this course, in fact, we'll start off with learning the fundamentals of what artificial intelligence is, a history of the internet, and the difference between hardware and software. After learning how algorithms impact the creation and dissemination of content online, students will create and re-design online content and platforms to combat the inequalities algorithms magnify.

New to college life? My colleague Mike Sellers put together a really basic <u>university 101</u> slide deck (Links to an external site.)

Most of it will probably seem simplistic but use it to think through the habits you should be cultivating to ensure a **successful**, **rewarding college experience**.

ADA (Americans with Disabilities Act) statement

Every attempt will be made to accommodate students with disabilities (e.g. mental health, learning, chronic health, physical hearing, vision neurological, etc.) You must have established your eligibility for support services through IU Bloomington's Office of Disability Services for Students (DSS). Note that services are confidential, may take time to put into place and are not retroactive; captions and alternate media for print materials may take three or more weeks to get produced. Email iubdss@indiana.edu to get this process started or reach out to me if you have questions.

Course goals and learning outcomes

- 1) Understand the role of algorithms in culture.
- 1.a) Define, hardware, software, algorithm, and other foundational terms.
- 1.b) Identify key algorithms that influence daily online activities.
- 1.c) Describe the difference between traditional algorithms, machine-learning algorithms, and other Al.
- 1.d) Analyze contemporary examples of algorithms that magnify bias and oppression.
- 1.e) Learn and utilize the designs concepts of humane technology.
- 2) Increase comfort reading and analyzing different mediums including news and peer-reviewed publications from different disciplines.
- 2.a) Use techniques like RAADCAB, CRAAP, and fact-checking to analyze information online for the use of personal consumption or for school projects.
- 2.b) Find sources online that demonstrate a range of views and expertise on a subject.
- 2.c) Identify false, misleading, or poorly-researched information online.
- 3) Prepare for college writing and learning.
- 3.a) Write properly sourced content in Wikipedia.
- 3.b) Summarize and properly cite sources in MLA format.

Course resources

Students are required to purchase *Artificial Unintelligence* by Meredith Broussard. All other readings and course information will be available through the <u>IU Canvas (Links to an external site)</u> website for this class.

Day-by-day

See course site in Canvas.

Grading

Assignments overview

Daily reading quizzes. Before each day of class, an open note & open book daily reading quiz related to the previous day's assigned reading is due. 15% of total grade.

Participation. See participation & attendance section. 20% of total grade.

Humane technology group project. In a small group, you will redesign a popular application (e.g. Facebook, Snapchat, Instagram, Apple News) using humane technology design. You will be evaluated individually and as a group for the ability to analyze the application's manipulation of Human Sensitivities and the ability to communicate a cohesive redesign to minimize those manipulations and create a good user experience. 10% of total grade.

Wikipedia article assignment. Select relevant articles and contribute citations and improved content to a Wikipedia article. 15% of total grade.

Final test. A closed book, short essay-based exam will test your understanding of key concepts from the course. 15% of total grade.

Other assignments. All the miscellaneous activities that you'll turn in. 25% of total grade.

Grade	%	What it means
A	100-90	Superlative. Addresses all assignment requirements in a thoughtful, engaging way. Impeccable attention to detail to ideas and in writing about them. Contributes meaningful to the scholarly conversation of the course.

В	89-80	Excellent work. Clearly addresses assignment requirements. Almost error-free.
С	79-70	Adequately addresses assignment requirements. Writing is readable overall with occasional straying from purpose. Mostly error free.
D	69-60	Does not meet some of the basic assignment requirements. Addresses some of issues/ideas but without nuance or insight.
F	Everything else	Does not meet basic assignment requirements. Doesn't address issues or ideas central to assignment. Lack of attention to style, correctness, citation, and punctuation.

Participation & Attendance

Participation is 20% of your grade. There are two parts of your participation grade:

- 1. Showing up. If you don't show up to LG#1 or LG#2 OR are more than 10 minutes late to either, you get a *zero participation grade for the whole day*. 10 points.
- 2. What you contribute: once you show up, you have to meaningfully contribute. Mary will be tallying participation and will assign you a daily point amount from 0-10. 10 points.

Participation encompasses chat, activities in smaller groups, or verbal contributions.

0 points	10 points
Didn't hear from that person at all today	At least three interactions during LG#1 or

during either LG#1 or LG#2 and if called upon the response/participation was inappropriate or demonstrated a lack of attention. LG#2 and contributed insightfully and in a way that demonstrated engagement with the materials, the instructor, and peers.

Absences

This is all about communication. If you reach out to me about a planned absence for a medical or family situation that is completely unavoidable, we can work something out to make sure those missed participation points can be offset in some way. Similarly, if you have an unplanned emergency, also reach out to me after the fact and, again, we can discuss what you missed and work something out to make sure those missed participation points can be offset in some way. Life happens and the most important part of the participation and attendance grade is about demonstrating to me, the instructor, that you know how to prioritize this class (especially since you don't have any other classes going on right now).

Classroom Etiquette

We will discuss and establish an etiquette for our class in the early days and hold each other accountable for our words and actions. As you start to think about the classroom environment you will be most productive in, consider how you can do your part to foster a brave space (Links to an external site) for yourself and your fellow students. If there is ever course material that causes you mental distress, please consider your health to be your first priority and leave class if necessary. But if you do leave class for any reason, I will expect you to reach out to me afterwards to discuss what happened and if there's anything we can do to prevent a situation like that from happening in the future.

Rules for class discussion

If this was a semester-long course, we would develop these collaboratively but we don't have time in IFS! I am open to revising these, please contact me if you have feedback.

- No interrupting
- Do not raise your voice
- Minimal swearing
- Use ARE (argument reasoning evidence) not personal stories or anecdotes
- Raise hand in Zoom
- No secondary convo in Zoom chat

- Do not meander into "rabbit holes": make sure contributions relate directly to discussion prompt
- Quality contributions will get you a good participation grade, not quantity
- I might call you out for breaking these rules in real time not to shame you but to help us all learn

COVID19 Requirements

In recognition of what all IU community members owe to each other all students, staff, and faculty signed an acknowledgement of their responsibility to follow public health measures as a condition returning to the campus this fall. Included in that commitment were requirements for wearing masks in all IU buildings and maintaining physical distancing in all IU buildings. Both are classroom requirements.

Both requirements are necessary for us to protect each other from transmission of COVID-19.

- Therefore, if a student is present in class without a mask, the instructor will ask the student to put a mask on immediately or leave the class.
 - If a student comes to class a second time without a mask, the student's final grade will be reduced by one letter (e.g., from an A to a B, for instance), and the instructor will report the student to the Office of Student Conduct of the Division of Student Affairs.
 - If a student refuses to put a mask on after being instructed to do so, the instructor may end the class immediately, and report the student to the Office of Student Conduct. The student will be summarily suspended from the university pursuant to IU's Summary Suspension Policy (Links to an external site.)
- If Student Conduct receives three cumulative reports from any combination of instructors or staff members that a student is not complying with the requirements of masking and physical distancing, the student will be summarily suspended
- (Links to an external site.)
- from the university for the semester.

Summary Suspension Policy

"A student may be summarily suspended from the university and summarily excluded from university property and programs by the Provost or designee of a university

campus. The Provost or designee may act summarily without following the hearing procedures established by this section if the officer is satisfied that the student's continued presence on the campus constitutes a serious threat of harm to the student or to any other person on the campus or to the property of the university or property of other persons on the university campus."

The Provost has determined that refusal to comply with the public health requirements specified in the Student Commitment form, including the requirement of wearing a mask in all IU buildings, constitutes "a serious threat of harm to other persons" within the meaning of the summary suspension policy. In addition, the Provost has determined that a person who does not comply with these requirements, as evidenced by three credible violations of the policy reported to the campus from any source, constitutes "a serious threat of harm to other persons" within the meaning of the summary suspension policy.

Student Rights

Any student who believes another person in a class is threatening the safety of the class by not wearing a mask or observing physical distancing requirements may leave the class without consequence.

Attendance

The student commitment form requires that you take your temperature every morning and that you refrain from attending class if you have a temperature of 100.4 or other symptoms of illness. In order to ensure that you can do this, attendance will not be a factor in the final grade. Attendance may still be taken to comply with accreditation requirements.

Assigned Seating

In order to ensure we can contact you in the event you are exposed to COVID-19, you must remain in your assigned seat for the entire semester.