

Photo of Hannah Arendt, Fred Stein Archive

Ethical Issues in Computing

Syllabus and Course Policies for CS 377, Fall 2025

"Evil comes from a failure to think" -Hannah Arendt

Instructor Jack Bandy, Ph.D. Class Meeting Monday and Wednesday

Email jxb@uic.edu CDRLC 2411

Office CDRLC 3454 Office Hours Monday and Wednesday

10am-11:30am

Dr. Bandy's Course Description

What does it mean for Computer Scientists to be socially responsible? Billions of people interact with computational systems every day for communication, amusement, work, and more. Although many interactions appear to happen seamlessly and harmlessly, even the most mundane human-computer interaction often has ethical implications related to privacy, climate, power, inequality, public health, and more. To explore these ethical implications, this course will survey classical perspectives of ethics (i.e. Deontological Ethics, Utilitarian Ethics, Virtue Ethics, Care Ethics) and discuss how they can illuminate real-world situations involving humans and computers. Students will engage with recent scholarship about ethical issues in algorithmic decision-making, data management, user interface design, software engineering, search engines, algorithmic media feeds, large language models, and chatbots, to name some examples. To promote activate engagement, class sessions will include peer teaching, small group discussions, fish bowl discussions, games, and more.

Course Catalog Description

Communication skills for computing professionals: presentation organization, visual aides, delivery techniques, argument support. Ethical and societal issues in computing: privacy, intellectual property and ownership, crime.

Learning Priorities

Students in this course will:

- (1) Practice reading, interpreting, and discussing scholarship related to social and ethical issues in computer science
- (2) Develop an understanding of (personal and) professional responsibilities related to ethical, legal, security, and social issues in computing
- (3) Practice describing current events through classical ethical perspectives
- (4) Identify recurring ethical challenges in computer science, connecting them to classical ethics perspectives and describing their local and global stakes
- (5) Recognize the need for and an ability to engage in continuing professional development, especially for effective communication with different audiences

Course Texts and Materials

Printed copies of all readings will be provided to you. Although there are no required books for this course, I will regularly source material from three books:

- Weapons of Math Destruction by Cathy O'Neil
- Data Feminism by Catherine D'ignazio and Lauren F. Klein.
- Computing and Technology Ethics: Engaging through Science Fiction by Emanuelle Burton, Judy Goldsmith, Nicholas Mattei, Cory Siler, and Sara-Jo Swiatek

Students will also make their own selections of different research papers, case studies, and books to present and discuss in class.

Potential Topics

Value-sensitive / culturally-sensitive design	Labor displacement and deskilling
Privacy as contextual integrity	Speculative fiction as a design tool
Addiction and "dark patterns" in UI design	Methods for measuring fairness and bias
Economic bubbles and hype cycles in tech	Online safety and content moderation
Bias, discrimination in large language models	Digital rights (to repair, to be forgotten, etc.)
Ethics and emotion in data visualization	Microtargeting and behavioral manipulation
Environmental costs of computing	Facial recognition (privacy and discrimination)
Anonymity and security for data analytics	Monopoly power / the politics of "big tech"
Inequality and the "digital divide"	Algorithmic feeds and their implications
Technology's role in peace, conflict, and war	Intellectual property, licensing, open-sourcing
Inequality and the "digital divide"	Algorithmic feeds and their implications

Course Requirements and Grading

This class aims to use principles of student-centered teaching, also referred to as "non-directive teaching," which de-emphasizes quantitative grading. This style focuses on open-ended dialogue, project-based learning, and student curiosity, rather than regurgitation and examinations. Still, in order to provide a final letter grade at the end of the class, I will use the following combination of exercises:

	Proportion of Grade	
In-Class Exercises	25%	
Peer feedback on book selection	5%	
Peer feedback on 2-page book report	5%	
Peer feedback on speculative fiction	5%	
Participation and Civility	10%	
Out-of-class Exercises	25%	
Fairness definition	5%	
Speculative fiction	5%	
Automated decisions	5%	
Digital trace rag doll	5%	
Food in your feed	5%	
Pre-Class Reflections	25%	
Read a Book	25%	
Book selection	5%	
2-page book report	5%	
Peer instruction / book presentation	5%	
Public communication	5%	
Actually reading the book	5%	

Further details and rubrics for each exercise will be published on Blackboard.

You can expect the following correspondence between your percentage grade in the course and your final letter grade, and the "equivalent" description from the registrar.

F	D	С	В	Α
59% or below	60-69%	70-79%	80-89%	90-100%
Failure	Poor but passing	Average	Good	Excellent

Attendance

I make every effort to plan activities for class that are meaningful, engaging, and valuable for your learning. As a student enrolled in this course, I expect that you make every effort to attend class meetings and arrive on time.

If you need to miss class due to illness, personal emergencies, religious observances, and/or other circumstances, please notify the instructor as soon as possible so it can be recorded as an excused absence.

The Fall 2025 semester at UIC is fifteen weeks long, and we meet Mondays and Wednesdays. With no class on labor day (Monday, September 1st) and student wellness day (Wednesday, November 27), we will have 28 total class periods.

Attendance will be checked each class period. You are allowed three "free" absences without penalty, which do not have to be explicitly excused. If you miss a fourth class without notifying the instructor, there will be a grading penalty and you will be contacted by the instructor or a TA.

Participation and Civility

Active participation is one of the most important ways you will learn in this course. I am very aware that participation looks a little different for everyone, and will evaluate your participation accordingly. Still, in general, an engaged student will:

- come to class prepared
- contribute regularly to class activities/discussions
- listen attentively to peers
- stay on-task during class
- complete their work in a timely manner
- reach out to the instructor if they start to fall behind.

To promote engagement and alertness in class, most class periods will follow a **no phone, no laptop policy**. I will check in throughout the semester to discuss the effectiveness of this policy and the potential to revise it based on student needs.

Academic Integrity

My job and my goal in this course is to help you as you learn skills and knowledge that will be valuable to you in your future courses, your career, and other areas of your life. In line with UIC's mission to provide "an environment in which research, learning, and scholarship can flourish and in which all endeavors are guided by academic and professional integrity," the work you turn in for this class must be your own work.

This does not mean that you need to complete all your work in an isolated bunker. Rather, you are encouraged to discuss your ideas with friends and classmates, and to explore previous work (i.e. academic papers, blogs, video essays, forums, etc.) related to your ideas. An important part of scholarship is standing on the shoulders of giants, (after all, we are in the City of the Big Shoulders²) and acknowledging whose shoulders we stand upon. In other words, cite your sources!

Please ask the instructor if you need any clarity about academic integrity for specific assignments or exercises. When in doubt, it is always better to check with the instructor before proceeding. We will discuss Al policies in class.

I will reach out to you personally before submitting a report of academic misconduct.

I'm New Here

This is my first semester at UIC! I am ecstatic to be here and to get to work with you all. I also have a lot to learn in order to do my job effectively. There will be structured opportunities for feedback throughout the course, but please do reach out directly with any additional feedback or suggestions about how I might improve the course.

Visitors

This class may welcome visitors (i.e. prospective students, guest speakers, etc.) during the semester. When possible, students will be notified in advance of guest attendance.

FERPA

Federal law (FERPA) prohibits me from disclosing or discussing your grades over e-mail. Please come see me during office hours if you want to talk about your work.

Support for Parenting Students

UIC supports parenting students by providing affordable, high-quality childcare for infants, toddlers, and young children, along with a comprehensive wraparound care system, study-play areas across campus, accessible lactation rooms, year-round family events, and more. For more information, contact Melinda Young (mmcghe2@uic.edu) or visit the Little Sparks website: https://littlesparks.uic.edu

¹ Ironically, while this phrase is often attributed to Isaac Newton in a letter from 1676, it was first recorded in John of Salisbury's book *Metalogicon* from 1159. I learned this from a blog post on BookBrowse.com

² Sandburg, Carl. "Chicago." *Poetry* (March 1914).

Tests

There will be no tests or examinations in this class. I agree with Carl Rogers³ that life itself offers enough examinations, and I hope the resources from this class help you meet life's tests with more confidence and satisfaction. See above for details regarding your final grade in the class.

Schedule

In the first week of class I will be collecting information about student interest around potential topics. I plan to finalize the schedule and publish it to blackboard

Student Wellbeing

As a student at UIC, I hope you have come to enjoy the learning process and the life of the mind, and I hope you enjoy this particular course. I also understand that life as a college student can sometimes become distressing and overwhelming, which can make it difficult to engage in class.

So, to help you succeed in this course (and in life), I encourage you to proactively care for your body and mind. If you are struggling or anticipate any trouble attending class or turning in assignments on time, please let me know as early as possible and I will do whatever I can to help you prioritize your wellbeing. Below are some of the many support services and resources available to all UIC students:

- <u>Current Student Resources</u> a one-stop shop for links to resources in the following categories: General, Academic, Student Support, Student Life, Technology, Health and Safety, and Getting Around Campus
- UIC Tutoring Resources
- Programs and initiatives supporting the UIC undergraduate experience and academic programs through the <u>Student Success Initiative</u>
- If you are experiencing personal hardships (including but not limited to: personal and family emergencies, academics, interpersonal conflicts, personal safety, physical and mental health concerns, food or housing insecurity) and need resources and assistance, please reach out to the <u>Student Assistance</u> division, supported by UIC's Office of the Dean of Students.
- <u>Student Guide for Information Technology</u> a comprehensive resource for UIC students describing the most commonly used IT services and tools supporting your success
- <u>Navigating Health Resources at UIC</u> explore the many resources that are on campus to support students' health and wellbeing and learn about how you can access them.

³ On Becoming a Person, Chapter 14

Importantly, **if you are in immediate distress**, please know the UIC Counseling Center has crisis intervention services available 24 hours a day, 7 days a week. You can walk into the Counseling Center during business hours to request to talk to a crisis counselor, or you can call the Counseling Center main line at (312) 996-3490. If you are calling outside of business hours, select "2" during the automated greeting to be connected to a crisis counselor. You can find additional mental health resources and services on the Counseling Center Website and the Student's Guide to Accessing Behavioral Health Services at UIC.

For immediate crisis support outside of UIC, call or text "9-8-8" any time, 24 hours a day, 7 days a week. Dialing 988 will connect you to a trained crisis professional. 988 offers services in Spanish, American Sign Language, and over 240 languages through tele-interpretation services. The 988 website has an online chat feature, too.

The Writing Center offers friendly and supportive tutors who can help you with reading and writing in any of your courses, not just English. Tutors are ready to help with other writing as well, such as job applications, personal statements, and resumes. The tutor and you will work together to decide how to improve your writing. If you have not started your assignment, that is OK. A tutor can help you brainstorm or make an outline. Tutors understand that you might be using the Writing Center for the first time. They are ready to guide you through your first session. You can choose to work with a tutor in person or in real time over the internet using video, audio, or chat and a whiteboard. For more information and to schedule an appointment, visit the Writing Center website.

The Math and Science Learning Center, located in the Science and Engineering South Building (SES) at 845 W. Taylor St. 3rd Floor, Room 247, is a meeting place for students in Math, Biological Sciences, Chemistry, Earth and Environmental Sciences, and Physics. At the MSLC, students can meet with graduate teaching assistants for tutoring in 100-level courses, attend informal group study sessions with other students, or meet up with friends to attend one of the workshops, seminars, or other activities sponsored by the MSLC during the semester. Visit the MSLC website, call 312-355-4900, or email at mslc@uic.edu.

The UIC Library is located both on east and west campus, provides access to resources, study rooms, and research support both online via chat and in person. At Daley Library on the east side of campus, stop by the reference desk in the IDEA Commons, or make an appointment for research help on either side of campus. Learn more about <u>library services and resources</u>, and to find research materials in specific subject areas view the Research Guides.

The Academic Center for Excellence (ACE) can help if you feel you need more individualized instruction in reading and/or writing, study skills, time management, etc. Please call (312) 413-0031 or visit the <u>Academic Center for Excellence (ACE)</u> website for more information.

UIC Counseling Center - Counseling services are available for UIC students who pay the student health services fee. You may seek a free and confidential intake with a

trained therapist from the Counseling Center, who will work with you to create a clinically appropriate treatment plan. Treatment options may include Brief Individual Therapy or Group Therapy at the Counseling Center, referral to Psychiatry services, or Care Coordination to be connected to a community provider who meets your clinical needs. The Counseling Center is located in the Student Services Building. You may contact them at (312) 996-3490 during business hours to learn more about services, set up an intake, or for crisis intervention. Crisis intervention services are available 24/7 by walking into the Counseling Center during business hours or by calling. If you are calling after business hours, please select "2" when the automated voice message begins. For more information about the Counseling Center or accessing the Counseling Center and other mental and emotional health services on campus, check out the Student's Guide to Accessing Behavioral Health Services at UIC. For more information about services in the community, check out our Community Provider Database.

The Campus Advocacy Network provides information and offers resources to all UIC students, faculty, and staff. Under the Title IX law, you have the right to an education that is free from any form of gender-based violence and discrimination. Crimes of sexual assault, domestic violence, sexual harassment, and stalking are against the law and can be prevented. For more information or for confidential victim services and advocacy, contact <u>UIC's Campus Advocacy Network</u> at 312-413-8206. To make a report to UIC's Title IX office, email <u>TitleIX@uic.edu</u> or call (312) 996-8670.

Campus Security - As a UIC student, you've chosen to live in one of the nation's largest cities. But, as at any university, crime is a reality. At UIC, we are strongly committed to our public safety programs, and we encourage students to be proactive in learning what programs and services are available in case of an emergency. You are discouraged from staying in university buildings alone, including lab rooms, after hours and are encouraged to use the Walking Safety Escort and/or Night Ride if you are uncomfortable traveling anywhere on campus. Also, you can download the UIC SAFE app, a free personal security tool for students, faculty, and staff. It allows you easy contact with dispatchers and first responders in case of an emergency. Finally, by dialing 5-5555 from a campus phone, you can summon Police or Fire for any oncampus emergency. You may also program the complete number, (312) 355-5555, on speed dial on your phone.

Emergency Response Systems and Guides - The emergency response guides can be found at the <u>Office of Preparedness and Response</u>. Please review and acquaint yourself with the guide and recommendations for various emergency situations.

Student Health Services – If you get sick during the semester, please be aware that there are resources on campus that can support you. The Family Medicine Center is committed to providing high-quality, student centered care and services. It has attending physicians, residents, and nurse practitioners on staff to provide the full range of primary health care services. The Family Medicine Center also offers a limited set of health services at no additional cost to students who pay the Student Health Service Fee (SHSF). Services include caring for an acute or urgent illness (e.g., cold, strep throat, asthma attack, flu) or an injury. More information can be found on the Family Medicine Center's Student Health webpage.