

CS 330 Societal and Ethical Issues in Computing

James Madison University, Fall 2026

Should web site designers be legally required to accommodate blind users? Who has to pay for accidents caused by self-driving cars? Can countries use military force to retaliate against cyberwar attacks? Should AI companies have to pay artists or musicians to train their models? Should social media companies ban users for posting hate speech? Should there be age requirements to access adult content online? Should posting revenge porn be a crime? Should bots have free speech rights? Should the government use facial recognition apps to determine if someone is a citizen?

Computing has changed all facets of our lives, allowing us to maintain interpersonal connections with distant family and friends, adjust our workplace to our individual preferences, and share information that challenges the balance of power with authority figures. Many of these changes create a great benefit for some people while extracting a great cost for others.

In this course, we will use the tools of critical inquiry and ethical frameworks to assess how computing has and will change your life and the lives of people around the world. We will also examine current and proposed laws and policies that shape these effects. After introducing the foundations of computing ethics, we will discuss a range of topics including intellectual property, software liability, security & crime, privacy, online identity, free expression, autonomous systems, and life in an algorithmic society.

Course & Instructor Information

Website:	https://w3.cs.jmu.edu/kirkpams/330/	
Time/Place:	M/W/F 9:10 – 10:00 AM, King Hall 236 (Section 1) M/W/F 10:20 – 11:10 AM, King Hall 236 (Section 2)	
Textbooks:	Brinkman, B., Sanders, A. F. (2013). <i>Ethics in a Computing Culture</i> .	
Instructor:	Prof. Michael S. Kirkpatrick	Email: kirkpams@jmu.edu
Office:	King 223	Phone: (540) 568-3371
Office Hours:	M 2:00 – 4:00, W 1:00 - 3:00, F 1:00 – 2:00	

This course is primarily focused on in-class discussions. Understanding how the course works is important to make sure you to get the most out of it.

Participation is Required

The purpose of this class is to *discuss* the relative merits of different viewpoints in relation to issues raised by computing. You cannot discuss these things if you are not in class. **This means that attendance is required, but it is not sufficient.** You will be expected to contribute to both small-group and full-class discussions.

Module Structure

The course is structured as five modules, each of which is centered on a core theme (Ethical Frameworks; IP, Liability, and Crime; Privacy and Identity; Free Expression; Autonomous Systems). Each module will start with a set of required readings that must be completed *before the first day of the module*. Class meetings will include small-group discussions and mini-lectures, as well as the following specific activities:

- Readiness Assessment Tests (RAT): On the first day of each module, you will take both an *individual* and a *team* test (iRAT and tRAT). These tests focus on establishing shared language and basic concepts so that we can devote our class time to more open-ended (and interesting) discussions using this material.
- Warm-ups: Other class meetings will begin with a short warm-up question to practice recalling information from the readings or previous classes.
- Fishbowls: Class meetings on Friday will feature “fishbowl discussions” in which you will talk about some topic in an extended format with your peers. Fishbowls start with a small group of assigned leaders for that discussion. All other students sit around this group, observing and reflecting. After a certain amount of time, a seat is added to the fishbowl, allowing someone new to join. However, that new person cannot join in the discussion until one of the prior participants leaves.
- Metacognitive Reflections: Each Thursday, you will respond to two questions on Canvas: *What were the most important points this week?* and *What question would you like to ask?* These are graded on completeness, not correctness. (Note that “I don’t know” or “I have no question” responses are considered incomplete.) While I cannot respond to all submitted questions, I look for general themes and common issues to address in class on Fridays.
- Slido: In class, I use the Slido web-based platform to ask individual questions. Some of these are ungraded polls while others are graded “ConcepTests.” In a ConcepTest, you first answer individually, then discuss with your table, then answer again after trying to come to a consensus.

Personal Values Assessment and Reflection

A key first step in ethical analysis is to consider your own values and biases. (Note that a “bias” is not necessarily a bad thing; it just reflects what you consider important, consciously or not.) Early in the course, you will complete a Canvas quiz asking you to rate your agreement with a number of statements that address many course topics. After completing the quiz, you will write a short (1-2 page) paper reflecting on your responses and identifying your own key values. At the end of the semester, you will submit an updated version describing how your views have changed (or not).

Ethical Analysis Assignment

Computing impacts people, and these impacts can be influenced by policies, design choices, or implementation trade-offs. Throughout the semester, you and a partner will work on a proposal or statement of some sort that you will present to the class. Your final deliverable may be policy (e.g., for a university, company, etc.), a legal framework (e.g., a state or federal law that people must abide by), a position statement (e.g., an advisory document advocating a non-government organization's response to law or policy), or an ethical analysis (e.g., whether some use of technology should be acceptable). You may also consider proposing and designing a new app or technology.

While you have some flexibility in your deliverable, your choice must be approved and must integrate the tools of ethical analysis. For instance, you will need to identify and document stakeholders and their interests, what options should be considered, and what impacts this proposal will have if implemented. Throughout the semester, you will meet with me at various points to talk about your work. You will then present your work to the class during the designated final exam time.

Office Hours and How to Contact Me

I will hold office hours in my office (King 223) on Mondays, Wednesdays, and Fridays. I will also hold virtual office hours via Zoom on Thursdays. Office hours are first-come, first-served. You're welcome to visit on your own or as a group.

I cannot stress enough how important office hours are, both in this class and your other classes. Depending on how long you've been at JMU or in this department, you may or may not understand the purpose of office hours. Simply put, office hours are your opportunity to talk to me outside of class. You might have questions about how grades work in this class, you might want to know more about something we talked about in class, you might want to get a reference for a job or grad school, or you might have a personal concern that may interfere with your engagement with the class. *That's what office hours are for!* You don't need to have a perfectly formed question and you shouldn't be nervous or embarrassed about asking.

Other than office hours, communication outside of class should primarily be limited to the Canvas discussion forum. All questions about course material, due dates, schedule issues, or other logistics need to be posted there so that that I can answer the question once for all students' benefit. Email should only be used for documenting special circumstances so that I have a record. If I can respond with a short message, I will do so. If I do not or you need more information, please see me in office hours or at class, or post your question to Canvas.

Assessments and Grading

This course uses a specifications-based grading approach that differs from the typical numeric scale that you may be used to. Your grade will be based on three areas:

- Participation: This area combines attendance, warm-ups, metacognitive reflections, and fishbowl responses (when not leading). Components in this area are based primarily on completion and making a good-faith effort. Warm-ups are worth two points each (one for submitting). Fishbowl responses will be an index card of notes you took along with a brief summary of your view. Reflections are two points each.
- Contributions: This area consists of your values assessment, fishbowl leadership, and ethical analysis assignment. These components are graded based on a rubric that will be posted as part of the assignment. The values assessment is one point for completing the initial survey and three points each for the reflection papers. Fishbowl leads are based on one point for attendance, two for preparation, and two for the discussion. More information for all are on the assignment pages.
- Understanding: This area consists of the iRAT, tRAT, and module tests.

Each of these components will be graded based on the criteria of “Excellent,” “Satisfactory,” or “Incomplete” according to the following table (components that do not meet the “Satisfactory” criteria are considered “Incomplete”):

	Excellent	Satisfactory
Attendance	No more than three absences	No more than five absences
Warm-ups	At least 50 points	At least 40 points
Fishbowl Responses	Submit at least 8/10	Submit at least 7/10
Metacognitive Reflections	At least 20/24 points	At least 16/24 points
Values Assessment	At least 6/7 points	At least 5/7 points
Fishbowl Leads	At least 12 points with none below 3/5	At least 10 points with none below 3/5
Analysis Assignment	See assignment rubric	See assignment rubric
iRAT	80% or higher	70% or higher
tRAT	90% or higher	80% or higher
Module Tests	85% or higher	75% or higher

Given those descriptions, course letter grades will be determined based on the following specifications:

A requirements	
Participation:	"Excellent" on at least 3 with no "Incomplete"
Contributions:	"Excellent" on at least 2 with no "Incomplete"
Understanding:	"Excellent" on at least 2 with no "Incomplete"
B requirements	
Participation:	"Excellent" on at least 2 and at least 1 "Satisfactory"
Contributions:	"Excellent" on at least 1 with no "Incomplete"
Understanding:	"Excellent" on at least 1 with no "Incomplete"
C requirements	
Participation:	At least "Satisfactory" on 3
Contributions:	At least "Satisfactory" on all 3
Understanding:	At least "Satisfactory" on at least 2

Many students fall between the requirements of meeting all specifications for a single letter grade. For instance, someone might satisfy the A requirements for labs and projects but get a B on the exams. Split grades will be determined as follows:

- If all grades are a mix of As and Bs:
 - If the Contributions and Understanding grades meet the A criteria, then the course grade will be A-.
 - If the Understanding grade meets the A criteria, then the course grade will be a B+.
 - Otherwise the course grade will be B.
- If all grades are a mix of As, Bs, and Cs:
 - If two grades meet the A criteria, then the course grade will be B-.
 - If one meets the A criteria or two meet the B criteria, then the course grade will be C+.
 - Otherwise the course grade will be C.
- If any component falls below the C requirements, course grades will use a traditional 4.0 scale with each component weighted equally but **with a maximum grade of C-**.

Adjustments or extensions will be granted based on extraordinary circumstances at the instructor's discretion. If you are sick, please do not come to class; let me know via email (in advance if possible) so that I can document it for later consideration.

Course Policies and Information

- **Our classroom environment** - Learning environments should be built on mutual respect and support a diversity of thoughts, perspectives, experiences, and identities. Please advise me regarding any concerns or personal circumstances (including your name's proper pronunciation, any name or gender pronouns not reflected on MyMadison, or significant extracurricular commitments) that may be relevant to your full participation in class.

Content warning: Computing ethics often involves discussions around how technology is (mis)used to harm other people. These harms can involve content that you might consider offense or personally troubling. I will do my best to limit unnecessary exposure to graphic content, though there are times where upsetting details are important; I will give advance warning. You should feel free to step away from class if any topic becomes too heavy. If possible, I encourage you to speak to me about any concern so we can find alternative approaches for you.

- **Late arrivals and late submissions** - I will start each warm-up or iRAT at the designated start time on the clock in the room and collect them on time accordingly. While you should try to arrive for these activities every time, that doesn't always happen. Life happens. Although I'm sympathetic, I don't allow make-ups or extra time for late arrivals. Similarly, I do not allow make-ups for metacognitive reflections. It's not that I'm a stickler for time management or deadlines. Instead, I use all of these for specific pedagogical purposes, which includes the timing of when they happen. If you miss the warm-up and want to make sure your attendance gets counted, check in with me at the end of class to make sure I record it.

Generally speaking, an occasional late arrival probably will not matter or impact your grade. If you have another commitment that will make this a regular occurrence, please see me to discuss how to deal with this. In extreme cases, I reserve the right to consider significant late arrivals as absences, particularly if this happens on a regular basis.

- **Free expression and professional demeanor** - We will adhere to the ACM Code of Ethics and Professional Conduct (<https://www.acm.org/code-of-ethics>). Note that the ACM Code explicitly forbids discrimination and harassment of all types. If you feel someone is violating these principles (including inappropriate or demeaning jokes), it is your right and your responsibility to take action by informing me or (if you feel comfortable doing so) addressing the individual directly. I will do my best to preserve your confidentiality while addressing the issue. Note that you do not have to be the intended or impacted person to report such issues.

At the same time, we will be discussing topics that are likely to be uncomfortable and controversial. I would add that there is no such thing as a politically

neutral technology; computing determines how power may be exercised in society, imposes obligations and restrictions, and impacts the free exercise of rights. I encourage you to recognize that reality and become comfortable navigating it. Maintaining respect and professional communication in discussions, even in the face of strenuous disagreement, is expected.

In short, I encourage you to be kind. College is hard. Grappling with the issues in this class can be uncomfortable. Plus, you never know what someone might be going through. Don't be the person who makes it harder for someone else.

- **Use of technology in class** - This course is structured to use class time for discussion as much as possible. Our devices demand an extraordinary amount of our attention, which interferes with this goal. I'd also point out that there is extensive research showing better learning happens when you are fully engaged or taking hand-written notes.

While I encourage you to go low-tech or even no-tech during class, you might feel more comfortable taking notes on a device. As long as you are staying on task, that's allowed with two exceptions: **no devices may be used during fishbowls or activities designated as discussions**. If your device use becomes a distraction, whether to your peers, yourself, or to me, you will no longer be able to use it in class. **In extreme cases where this problem becomes persistent, I reserve the right to ask you to leave or to reduce your participation grade accordingly.**

- **Use of generative AI** - This course is specifically structured to give you an opportunity to think and discuss these topics with your peers. We want to hear *your* thoughts based on *your* experiences, not machine-generated answers derived from others. Outside of class, you are permitted to use generative AI tools to clarify a concept or to think through an idea (similar to "rubber duck coding").

BUT you may not use these tools to generate large pieces of your written work (*no one* wants to read AI slop) and you may not copy and paste any assignment text, reading, or other course material into these systems. The concern is not just that these tools will get the facts wrong (though that can and does happen!). Rather, the more immediate issue is that our discussions are more interesting and enlightening when everyone contributes their own unique perspectives, values, and experiences instead of the average experience computed from statistics. Also, you are most likely using a system that will store all of that data, which you have provided without the permission or consent of the author or copyright holder.

Lastly, the bigger concern for you personally is that these tools facilitate *cognitive outsourcing*. Essentially that means the machine is doing the learning and you are not. If that's the case, *then why are you even here?!?* Try this for yourself. Open your favorite chatbot and ask it about a subject you know extremely well and have

personal experience with. Do you find yourself wanting to say, “Well, actually...”? You also may know what questions you might ask to get it to reconsider its answer. That’s the problem. When you are in the process of learning some new material, you don’t yet know the “well, actually...” issues that need to be addressed or what nuances the answer missed.

Additional University Policies and Information

- **Academic integrity** - Students are expected to comply with the JMU Honor Code as stated in the Student Handbook and available from the Honor Council Web site at <http://www.jmu.edu/honor/code.shtml>. All quizzes, writings, and exams are to be completed individually and must clearly and honestly represent your own work. Violations of the Honor Code, including plagiarism or cheating, will be referred to the Honor Council.
- **Adding/dropping classes** - You are responsible for registering for classes and for verifying your schedule on MyMadison. Deadlines for adding or dropping classes are available from the JMU Registrar.
- **Cancellations** - JMU’s cancellation policy provides details regarding inclement weather and other emergencies (<http://www.jmu.edu/JMUpolicy/1309.shtml>).
- **Religious observance accommodations** - All faculty are required to give reasonable and appropriate accommodations to students requesting them on grounds of religious observation. If you need to request accommodations, you must let me know at least 2 weeks in advance.
- **Disability accommodations** - JMU abides by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act, which mandate reasonable accommodations be provided for students with documented disabilities. If you have a disability and may require some type of instructional and/or examination accommodations, please contact me early in the semester so that I can provide or facilitate provision of accommodations you may need. If you have not already done so, you will need to register with the Office of Disability Services, the designated office on campus to provide services for students with disabilities. The office is located in Wilson Hall, Room 107 and you may call 540-568-6705 for more information.

About Me

At some point, you may be wondering why you should take an “ethics course” from a computer scientist. In practice, I have been working in various areas addressing ethical issues in computing for more than two decades. My research interests originated in security & privacy. That background influenced my contributions to the ACM Code of Ethics and Professional Conduct (<https://www.acm.org/code-of-ethics>), which I helped to write. I’ve also been an officer of ACM’s Committee on Professional Ethics (COPE) for a decade and have spent most of that time on ACM’s Ethics & Plagiarism Committee, which I have chaired for four years. So I’ve been doing this for a while.

I'm including this section because it will help you to understand the context of this class and what to expect. These experiences have shaped my views on these topics and that, in turn, influences what I emphasize. As much as possible, I tend to resist left-versus-right framings. Instead, I try to focus more on "up-versus-down" to engage with questions of how individuals can thrive in society, given the presence of various policies, power differentials, and historical inequities.

Throughout the semester, you may find yourself agreeing or disagreeing with me at various points. As your professor, I am committed to presenting and considering a range of perspectives, including those with which I personally disagree. I encourage you to keep an open mind and develop your own principles, values, and beliefs, regardless of my views on the matter.

Course Catalog Description

Critical inquiry into the social, professional, legal, and ethical concerns of computing and technology. The course will emphasize the application of logical and ethical reasoning, as well as placing topics within the appropriate legal and social context. Topics include history of computing, codes of ethics, security & privacy, political issues, intellectual property, economic issues, professional responsibilities. *Prerequisites: CS 345, WRTC 210, and junior standing.*

Detailed Course Objectives

Following the successful completion of this course, students will be able to:

- Articulate the need for computer scientists to cultivate ethical reasoning skills.
- Analyze a computing-related ethical dilemma through the lens of common normative ethical frameworks.
- Identify and evaluate technical, ethical, and sociological resources used as evidence in support of debates about computing.
- Summarize key relevant legal concepts and historical developments relating to intellectual property, security, privacy, and speech.
- Express and critique multiple perspectives related to ethical dilemmas in computing.
- Explain the variety of barriers to equal access in computing.
- Identify the benefits and harms of computing.
- Articulate and embody the moral obligations of computing professionals.
- Reflect on and critique the norms and values that are common in the computing profession.