# Artificial Intelligence and Law Fall 2023

### Professor Paul Ohm Syllabus Version 1,1

#### Course Description

Machine Learning (ML) and other forms of Artificial Intelligence (AI) are rapidly transforming the way we make decisions, conduct business, and express ourselves. Our legal institutions are struggling to respond, and policymakers around the world are tweaking, overhauling, or remaking just about every area of law. This course will investigate the emerging legal frameworks being created to address the way ML and AI are reshaping society. Students will survey laws at the local, state, and federal levels from the United States as well as engage in comparative analyses of approaches in other countries.

The course will cover how AI is reshaping venerable common law doctrines—how should tort law treat autonomous vehicles?—Constitutional Law—do large language models produce protected speech under the First Amendment?—statutory protections—when do algorithmic hiring practices violate the Civil Rights Act?—and regulatory approaches—does high-frequency trading raise risks not currently accounted for in Securities Law? The course will investigate the use of AI by private parties and by public actors alike.

A core premise of this course is that students must deeply understand the technological advances that are spurring the rapid development of AI. Although no prior technical knowledge is required, students should expect to devote several dedicated class hours training neural networks and delving into the internals of recent advances in AI to understand the legal developments in a deeper manner.

#### **Course Expectations**

<u>Course Credits and Meeting Times.</u> This three-credit lecture course meets twice each week, every Monday and Wednesday, 9:35 - 11:00 AM in McDonough 205.

Office Hours. I am available for office hours every Monday, immediately after our class, from 11:00 AM - Noon. Come talk to me at the podium, or find me in my office in Room 822 of the 500 First Street building, on the eighth floor.

<u>Grading.</u> Grades for the course will be based on a final exam, a short written assignment, and class participation. The amount each component contributes to the final grade is described below.

<u>Final Exam.</u> The final exam is a *three-and-one-half-hour, word-limited, take-home final* containing a mix of issue spotting and policy questions, including the possibility of some short-answer questions. The grade on the final exam is **worth 70% of the overall course grade**.

The final exam is self-scheduled, meaning students may take it at any point during the final exam period (subject to additional constraints the registrar's office may impose). As a consequence, all questions about the class or exam (including at any potential review session we may hold) must be asked of the professor no later than Sunday, December 3, 2023. Take this into consideration as you plan your exam schedule.

<u>Open Book Policy.</u> On the final exam, students may consult any written materials and any materials posted to or linked directly from the class web page and Canvas page, but students must be careful to abide by the Student Disciplinary Code. Students may not access any other website or online resource.

<u>Use of AI Policy.</u> A class on artificial intelligence deserves a well thought out artificial intelligence policy! For **nongraded** work, AI is completely fair game! Ask ChatGPT to explain concepts to you. Have MidJourney illustrate concepts. Any of this is permitted, but please have a healthy skepticism about anything you learn from an AI tool!

For all **graded** work, the rules are different. The baseline expectation is that you must **not** use any artificial intelligence tool that generates text to assist in any way in the production of graded work for this class. But to help you explore the power and potential of these tools for law school work, the final exam will contain "robot starting point" answers generated using a large language model (probably ChatGPT) in response to the exam questions, which you can use as you see fit.

<u>Short Written Assignment.</u> Students will be required to complete a short written assignment designed to allow them to engage with and demonstrate mastery of the material in a less time-pressured setting. Students will be given at least one month from the date the full details of the short written assignment are released to complete the work.

Although the details are still being developed, the short written assignment will give you an opportunity to demonstrate your understanding of some of the technical concepts you will be learning about this semester. Some example topics are machine learning, neural networks, and generative AI. Emphasis will be placed on applying technical know-how to law and policy questions, rather than simple regurgitating technical facts. The tentative due date for this assignment is the beginning of class on Wednesday, November 15, 2023.

The grade on this assignment is **worth 30% of the final grade**. Be aware that, given the large number of students enrolled in this class, Professor Ohm may not be able to share your grade on this assignment with you before you sit for the final exam.

<u>Participation.</u> Grades may be *increased or decreased up to five points* to reflect class participation. I expect you to be prepared to talk every class. I will also announce panels of students who will be on-call

on specific days. I will primarily call on students who are on the day's panel, although I reserve the right to call on anyone without prior notice.

If you find yourself especially prepared for class after finishing the reading, you can volunteer for the day's panel. To do so, send me an e-mail at least one hour before we begin with the word "Panel" in the subject line, or leave me a note on the podium at the front of the room before class starts, and I will do my best to call on you at some point during the class. I strongly encourage voluntary participation as well.

No Prior Technical Knowledge Needed. Although this class will delve deeply into the technical details of artificial intelligence, no prior technical knowledge, training, or experience is necessary! Students are encouraged to raise their hand and ask for clarification any time a technical term, concept, abbreviation, etc, is used that they do not understand. I will try to minimize the extent to which a lack of prior technical training will matter on the written assignment and final exam.

<u>In-Class Technology.</u> I do not use the chalkboard in this class. Instead, I project a computer's display onto the screen for use as a "virtual blackboard" Following each class, I will upload a copy of the blackboard to the course Canvas page. I will also occasionally use slides in class, and I will post these to the Canvas page as well.

#### Learning Outcomes.

At the end of the semester, students will have gained or enhanced the ability to:

- Understand the technological advances that have led to the rapid advance of AI technology and develop a foundation of technical knowledge to better understand future advances;
- Apply the emerging legal frameworks for regulating AI surveyed in the course and anticipate and understand future developments in this area of law;
- Articulate moral, ethical, and policy-focused positions underpinning AI regulation;
- Place the current developments and approaches in AI regulation into longer historical arcs of regulating technology and other complex systems; and
- Diagnose the way AI and related technologies can exacerbate or alleviate pre-existing disparities such as in the differential treatment of individuals and groups based on race, ethnicity, gender, and disability.

#### **Course Materials**

<u>Course Reader.</u> AI & Law is a new and rapidly developing field and, as such, has not yet spawned a large selection of casebooks or other comprehensive texts. We will be using a course reader assembled by Professor Ohm.

<u>Canvas</u>. Information for this class will be posted on our course Canvas page. There you will find important announcements, supplemental readings, changes to the reading, and links to other resources. I will make supplemental readings and changes to the reading available at least two classes prior to the assigned date. To make it quick and easy for you to see what is new, the main Canvas home page will note any changes or updates to these sites. Students must consult Canvas before every class.

## **Assigned Topics and Reading**

 $Readings \ for \ each \ class \ will \ be \ distributed \ as \ PDF \ files \ on \ Canvas.$ 

## **Preliminaries**

#	Date	Topic
1	M8/28	Overview, Themes, and Vocabulary
2	W8/30	Tech Day #1: Machine Learning 101 (Good Old Fashioned AI)
	M9/4	No Class: Labor Day

## How AI Disrupts Traditional Legal Concepts

#	Date	Topic
3	W9/6	Tort, Fault, Liability, and Product Safety: Who is Liable when Self-Driving Cars Collide?
4	M9/11	Tech Day #2: Competing Definitions of Algorithmic Bias and Fairness (The COMPAS study)
5	W9/13	Bias and Discrimination: Algorithms in Employment under Title VII
6	M9/18	Technological Due Process: Government use of algorithms in benefits administration
7	W9/20	Algorithms and Government Surveillance I: Facial Recognition Technology
8	M9/25	Algorithms and Government Surveillance II: AI and Criminal Procedure: The Mosaic Theory and the Trial by Math debate
9	W9/27	AI, Privacy, and Data Protection: Responding to the Increasing Power of Inference

AI in Context

This class is a work in progress, and everything from this point is still tentative. Expect changes!

#	Date	Торіс
10	M10/2	Tech Day #3: Neural Nets and Generative AI
11	W10/4	Tech Day #4: Generative AI / Large Language Models
12	<b>Tu</b> 10/10	AI and Speech I: Large Libel Models and Other Speech Harms (Note class meets on Tuesday due to law school calendar)
13	W10/11	AI and Speech II: Section 230, Content Moderation, Misinformation, and Disinformation
14	M10/16	Generative AI as Author
15	W10/18	Copyright Fair Use and AI Model training data
16	M10/23	AI, Markets, and Financial Regulation
17	W10/25	AI and the Future of Lawyering
18	M10/30	Medical Malpractice and Tort Liability Redux
19	W11/1	Prompt Engineering and Model Fine-Tuning

## Regulating and Controlling AI

#	Date	Topic
20	M11/6	ReGovernance Strategies: Bans and Pauses, Agenda Setting and Trustworthy AI, Collaborative Governance vs Managerialism
21	W11/8	Consumer Protection and Data Protection Approaches
22	M11/13	Risk-Based Regulation: Safety Thresholds; Risk Assessments; Audits
23	W11/15	Humans in the Loop, The Right to Explanation, and Premarket Clearance
24	M11/20	China's Use and Regulation of AI; Human Rights Law as AI Regulation
	W11/22	No class: Thanksgiving Break

25	M11/27	AGI and other Science Fiction Stories
26	W11/29	Review Session