

**LAW 276.46-LEC-001 – IP and Human Creativity in the “AI Age”**  
Spring, 2025

**Instructors**

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Office Hours: 2-3pm, Fridays (zoom - by email appointment)

**Course Information**

Meetings: Wednesdays 6:15 – 8:25pm  
LAW 244

Prerequisites: Introduction to Intellectual Property Law (recommended)  
Units: 2

**Welcome and Course Description**

Greetings!

Welcome to our course of *IP and Human Creativity in the “AI Age”*<sup>1</sup>. While the concept of artificial intelligence (“AI”) goes back to the 1950’s, its current widespread implementation is largely due to the recent exponential increase in training data and computing power that undergirded one specific school of AI – machine learning. Remarkably, during the past few years AI has started to permeate creative activities, which were always perceived to be human beings’ sole remit. For the very first time in history, a “tool” *appears* to be capable of generating its own ideas and expressions. Consequently, we may be witnessing a paradigm shift in the creative process, as the shockwaves of Generative AI and AlphaFold inspire us. Ideally in this new creative paradigm, human being and AI each utilize their own comparative advantages, constituting a “1+1 >> 2” effect. In the longer term, it may have profound impacts on the

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<sup>1</sup> We put quotation marks around the phrase “AI age” because we have certain reservation regarding the accuracy of this often-used characterization of the dawning age, which implies, to some degree at least, that the new age may be dominated by AI. Despite all the evidence that points to the fact that AI will significantly affect us, good or bad, we still hold (or hope) that human beings will continue to be the protagonists of this age. As we proceed throughout our course, this theme will be revisited frequently.

knowledge economy, entailing both unprecedented opportunities and risks to human creativity.

Over the past centuries, human beings have developed the intellectual property system to incentivize and honor our creativity. How should IP adapt to the paradigm shift in creation then, to ensure that “machine creativity” will always be deployed to promote human creativity, rather than to displace it? This is the theme our class aims to explore. At this crucial inflection point, together with you - we aim to break some grounds in how IP could continue to facilitate human creativity in an AI-powered age, by considering the following issues:

- The technological and epistemological underpinnings for the emerging human + AI creative synergies;
- The challenges to the patent doctrine of inventorship by the new inventing paradigm;
- The challenges to the patent doctrine of non-obviousness by the new inventing paradigm;
- The challenges to the patent doctrine of enablement by the new inventing paradigm;
- The challenges to the copyright doctrines of authorship and originality by the new creative paradigm;
- Potential copyright infringement issues involved with the training and outputs of Generative AI;
- The defense of fair use / transformative use in the context of Generative AI;
- Trademark law in the “AI age”;
- The interplay of intellectual property and antitrust in the “AI age”.
- Theoretical frameworks for justifying intellectual property in the “AI age”: the divergent foundations of utilitarianism and normative rights; the principle of dignity – how does the theoretical framework inform doctrinal adaptations?
- The interplay of intellectual property and human right in the “AI age”;

As you see, we are indeed exploring some uncharted territories here. In this class, we consider our roles as less of the conventional *lecturer-students* relationship, but more of a *fellowship* – alongside each other as co-adventurers into this enchanting new world. Therefore, you will be challenged to act more like a proactive researcher, including reading the assigned issues and materials carefully, conducting your independent research if necessary (centering on the outlined issues in discussion), actively participating in the class discussion, and producing a well-researched and reasoned final essay on an IP issue you identified as particularly challenging in the “AI age”. As instructors, we will outline the major issues to be discussed in each class, provide basic

reading materials (including mandatory reading and elective materials), and moderate the class discussion. Hopefully, it will be a fun and fulfilling journey for each one of us.

In our first class, we will call upon some of you to introduce one *creative* project that you think AI can assist (the project can be personal, professional, or a major challenge faced by humanity as a whole). For example, Ms. Mulan may explain how AI helps her to repurpose some old medicine to treat a rare disease, and Mr. Bilbo might tell us how AI helps him to harvest the biggest turnip in Shire – both are great accounts! Please prepare accordingly.

As the last note, let's play a little game – please read the following four poems carefully and judge which work is the AI generation.

### Poem 1

How shall I name you, immortal, mild,  
proud shadows?

I only know that all we know comes from you,  
And that you come from Eden on flying feet.  
Is Eden far away, or do you hide  
From human thought, as hares and mice  
and coney  
That run before the reaping-hook and lie  
In the last ridge of the barley? Do our woods  
And winds and ponds cover more quiet woods,  
More shining winds, more star-glimmering ponds?

Is Eden out of time and out of space?  
And do you gather about us when pale light  
Shining on water and fallen among leaves,  
And winds blowing from flowers, and whirr  
Of feathers  
And the green quiet, have uplifted the heart?

### Poem 2

In the dawn of the AI age we stand,  
where machines weave tales once told by man's hand.  
Creativity's flame, once solely our claim,  
now flickers with AI in the grand game.

Generative minds in silicon cast,  
Challenge our doctrines of patents held fast.  
Who authors the song, the code, or the prose,  
When machine inspiration fluidly flows?

Yet, in the dance of rights and machine might,  
Lies a future both daunting and so bright.  
Berkeley's scholars, with passion and grace,  
Seek answers in this digital embrace.

In this "age of tech", one truth does implore:  
Creativity's heart is worth fighting for.

### Poem 3

I sing the rise of machines, their crafted might,  
Born of our minds, yet striding into their own light.  
Oh, thinkers, builders, bearers of the quill,  
What do we seek to shape—what path do we fulfill?

Will the code empower or the spirit displace?  
Can we guide the machine, or shall it erase?  
These tools of creation, unbound and profound—  
Do they honor the spark, or leave it unground?

And you, guardians of rights, who chart the law's line,  
What is your purpose, your sacred design?  
Is it to speed the wheel, to push the plow,  
Or to hold high the flame of the maker's vow?

Is progress the end, or is it the means?  
Do we exalt machines, or the soul that dreams?  
Does law serve the moment, the swiftest advance,  
Or the timeless bond of the human dance?

Here we stand, at the edge of the known,  
Faced with a question that cuts to the bone.  
The telos of law, the purpose it claims—  
Is it for invention, or humanity's flames?

Oh, let us not answer too soon, too sure—  
These questions must linger, their echoes endure.  
For in the asking, a truth might arise,  
A path unforeseen beneath open skies.

### Poem 4

Like roots wrapped round a rock,  
somewhere, underground,  
we hold to something formed in the dark: unseen but unyielding.

We are all of us summoned from spirit — two bodies, yes, all of that;  
but really, before the helix unwinds and protein platforms spring into place,  
We are conjured up.  
We are “knit together”, as a holy book says. We are created.

And in our turn we make things.  
Spoons and tractors, pop-tarts and ping pong balls.  
We make so much.

Some of us began to write in code, made boxes to spin worlds from code.  
Stacked the boxes, sped up the code.  
It was all a lot of work.

Now some code has been trained to act like a curious dog,  
snooping where we might not know to look.  
And someone said, that’s us, we find new things.  
The little code that wags its tail is us.

Not yet, we think; not yet.  
Maybe soon, maybe never.  
But not yet.  
Not until a box can write about something it feels yet cannot name.  
Something it knows but was not taught to know.  
Or until a box holds a baby box and asks  
“how did this perfect thing come from me?”

In any event, no matter how clever the code becomes  
remember this:

“What differs between us and the machines  
is that we are not machines.”

Ok, see you soon in class!!

### **Textbook/Course Materials**

There is no official textbook for this course. We will post course materials on bCourse from time to time and provide URL links to reading materials in the Syllabus.

Five books are highly recommended though. They will also be put on library reserve for your interest:

1. Keith R. Sawyer, *Explaining Creativity: The Science of Innovation* (3<sup>rd</sup> eds., Oxford University Press, 2024)
2. Daron Acemoglu & Simon Johnson, *Power and Progress: Our Thousand-Year Struggle Over Technology and Prosperity* (PublicAffairs, 2024)
3. Ajay Agrawal et al., *Power and Prediction: The Disruptive Economics of Artificial Intelligence* (Boston: Harvard Business Review Press, 2022).
4. Marcus du Sautoy, *The Creativity Code: Art and Innovation in the Age of AI* (The Belknap Press of Harvard University Press 2020).
5. Judea Pearl & Dana Mackenzie, *The Book of Why: The New Science of Cause and Effect* (New York: Basic Books, 2018).

## **Course Schedule<sup>2</sup>**

### **Class 1: Introduction – What is the role of intellectual property in promoting human creativity in the “AI age”? (Jan. 15, 2025)**

- What’s unique about today’s AI models that enables them to pose unprecedented benefits and risks to human creativity?
- How do you define “creativity”? Can an AI model be “creative”? If so, how is the “artificial creativity” different than human creativity? If not, why?
- Creativity-Enabling AI v. Creativity-Displacing AI
- What is the *telos* (very purpose) of IP? What is IP’s role in promoting human creativity in an age powered with AI?

### **Readings:**

1. American Museum of Natural History, *Study Identifies Creativity Genes that Make Human Unique* (April 21, 2021), available at <https://www.amnh.org/explore/news-blogs/research-posts/human-creativity>.
2. Joanna Zylińska, *Art in the Age of Artificial Intelligence*, p. 139-41, 381 *Science* 6654 (2023), available at: <https://www.science.org/doi/10.1126/science.adh0575>.
3. Yuan Hao, *The Rise of Centaur Inventors: How Patent Law Should Adapt to the Challenges by Human – AI Inventing Synergies to the Inventorship Doctrine*, p. 1-18, 104 *The Journal of Patent and Trademark Office Society* 71, 2024, draft available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4186684](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4186684).

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<sup>2</sup> Due to the evolutionary nature of the law in this field, specific class assignments are subject to changes throughout the semester.

4. Melvin Kranzberg, *Technology and History: Kranzberg's Laws*, p. 544-60, *Technology and Culture*, Vol. 27, No. 3 (July 1986), available at: <https://www.jstor.org/stable/3105385>.
5. Winston Cho, *Artists Score Major Win in Copyright Case Against AI Art Generators* (August 13, 2024), *The Hollywood Reporter*, available at: <https://www.hollywoodreporter.com/business/business-news/artists-score-major-win-copyright-case-against-ai-art-generators-1235973601/>.

### **Elective References:**

6. Ajay Agrawal, Joshua Gans & Avi Goldfarb, *Generative AI Is Still Just a Prediction Machine* (November 18, 2024), *Harvard Business Review*, available at: <https://hbr.org/2024/11/generative-ai-is-still-just-a-prediction-machine>.
7. Noam Chomsky, *The False Promise of ChatGPT* (Mar. 8, 2023), *New York Times*, available at: <https://www.nytimes.com/2023/03/08/opinion/noam-chomsky-chatgpt-ai.html>.
8. Marcus du Sautoy, *The Creativity Code: Art and Innovation in the Age of AI* (The Belknap Press of Harvard University Press 2020), Chapters 1-3.
9. Robert Keith Sawyer, *The Science of Human Innovation: Explaining Creativity* (Oxford University Press 2024, 3<sup>rd</sup> eds.), Chapter 2, 5-7.

### **Class 2: The Rise of “Centaur Creators” (Jan. 22, 2025)**

- The strengths and weaknesses of the large-scale-model (“LM”) based AI: Correlation v. Causation;
- The rapid development and deployment of Generative AI: *Turing Test v. Lovelace Test* - Can state-of-the-art AI (“SOTA”) models pass the Turing Test? What technological developments in recent years caused this progress? Can SOTA pass the Lovelace Test? In your opinion, which one is the better test for *creativity*?
- The paradigm shift in scientific research, technological invention and artistic creation;
- The emergence of “Centaur” (Human + AI) Creative Synergies: the complementary roles of human being and AI.

### **Readings:**

1. Yuan Hao, *The Rise of Centaur Inventors: How Patent Law Should Adapt to the Challenges by Human – AI Inventing Synergies to the Inventorship Doctrine* (2022), p.19-39, available at:  
[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4186684](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4186684)

### **Elective References:**

1. Ali Azhar, *Despite Rapid Advances, Studies Show AI Can't Match Human Creativity* (Jan. 6, 2025), available at:  
<https://www.hpcwire.com/2025/01/06/despite-rapid-advances-studies-show-ai-cant-match-human-creativity/>.
2. Teppo Felin & Matthias Howeg, *Theory is All You Need: AI, Human Cognition, and Causal Reasoning* (Feb. 24, 2024), available at:  
[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4737265](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4737265).
3. *The Chinese Room Argument*, available at:  
<https://plato.stanford.edu/entries/chinese-room/>, or a more detailed version is presented by Searle himself <https://www.youtube.com/watch?v=rHKwIYsPXLg>.
4. DeepMind, *Alpha Fold: Using AI for Scientific Discovery*, available at:  
<https://www.deepmind.com/blog/alphafold-using-ai-for-scientific-discovery-2020>, or a more detailed version is presented by Demis Hassabis, *Using AI to Accelerate Scientific Discovery* (Crick Insight Lecture Series, March 2022), available at <https://www.youtube.com/watch?v=XtJVLOe4cfs>.
5. Ben Dickson, *Why Machine Learning Struggles with Causality*, available at:  
<https://bdtechtalks.com/2021/03/15/machine-learning-causality/>.
6. George Musser, *How AI Knows Things No One Told It* (May 11, 2023), Scientific America, available at: <https://www.scientificamerican.com/article/how-ai-knows-things-no-one-told-it/#>.
7. Hans Moravec, *The Moravec's Paradox*, summary available at:  
[https://en.wikipedia.org/wiki/Moravec%27s\\_paradox](https://en.wikipedia.org/wiki/Moravec%27s_paradox).

### **Class 3: A Primer on Patent Law (Jan. 29, 2025)**

- The Patentability Requirements of Novelty, Non-obviousness and Disclosure;
- The Concepts of Inventorship and Conception.

### **Readings**

1. [Inventorship] *Burroughs Welcome Co. v. Barr Laboratories, Inc.*, 40 F.3d 1223, 1225 (Fed. Cir. 1994).
2. [Novelty] *Metallizing Engineering Co. v. Kenyon Bearing & Auto Parts Co.*, 153 F.2d 516 (2<sup>nd</sup> Cir. 1946)
3. [Non-obviousness] *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398 (2007)
4. [Non-obviousness: “the Analogous Arts Limitation”] *In re Clay*, 966 F.2d 656 (Fed. Cir. 1992)
5. [Disclosure] *Amgen Inc. et al. v. Sanofi et al.*, 598 U.S.\_\_(2023)

### **Elective Reference:**

1. Mark A. Lemley, Peter S. Menell, Robert P. Merges, and Shyamkrishna Balganesh, Chapter III.B. The Elements of Patentability, *Intellectual Property in the New Technological Age: 2022, Vol. I: Perspectives, Trade Secrets and Patents* (Clause 8 Publishing).

### **Class 4: AI’s Challenge(s) to Patent Inventorship (Feb. 5, 2025)**

- What specific challenges does AI pose to the inventorship doctrine of patent law?
- What policy choices do we have? How would you advise patent law to adapt to the challenges?
- How did the USPTO Inventorship Guidance address these challenges?

### **Readings:**

1. US Patent and Trademark Office, *The Inventorship Guidance and Examples for AI-assisted Inventions* (Feb. 12, 2024), available at: <https://www.uspto.gov/subscription-center/2024/uspto-issues-inventorship-guidance-and-examples-ai-assisted-inventions>.
2. Yuan Hao, *The Rise of Centaur Inventors: How Patent Law Should Adapt to the Challenges by Human – AI Inventing Synergies to the Inventorship Doctrine* (2022), p. 39-52, 62-69.
3. *Introduction and Conclusion* of Tom W. Dornis, *Artificial Intelligence and Innovation: The End of Patent Law as We Know it*, 23 Yale Journal of Law & Technology 97 (2020).
4. Dan Burk, *AI Patents and the Self-Assembling Machine*, 105 Minnesota Law Review Headnotes 301 (2021), p.301-08, 321-22.

## Elective References:

1. *Thaler v. Vidal*, 43 F. 4th 1207 (Fed. Cir.2022), available at: [https://cafc.uscourts.gov/opinions-orders/21-2347.OPINION.8-5-2022\\_1988142.pdf](https://cafc.uscourts.gov/opinions-orders/21-2347.OPINION.8-5-2022_1988142.pdf).
2. Ryan Abbott, *I Think, Therefore I Invent: Creative Computers and the Future of Patent Law*, 57 B.C.L. Rev. 1079 (2016), p. 1103-21.
3. *Burroughs Wellcome Co. v. Barr Laboratories, Inc.*, 40 F.3d 1223, 1225 (Fed. Cir. 1994).
4. Tom W. Dornis, *Artificial Intelligence and Innovation: The End of Patent Law as We Know It*, 23 Yale Journal of Law & Technology 97 (2020).
5. Dan Burk, *AI Patents and the Self-Assembling Machine*, 105 Minnesota Law Review Headnotes 301 (2021).
6. [a summary of several influential views] Zak Turner, *IP Policy for AI-Designed Drugs* (2023), available at: [https://repositories.lib.utexas.edu/bitstream/handle/2152/120316/turnerzak\\_L\\_ATE\\_4235682\\_72218270\\_Turner\\_Thesis\\_EdisontoAI\\_2023-1.pdf?sequence=2](https://repositories.lib.utexas.edu/bitstream/handle/2152/120316/turnerzak_L_ATE_4235682_72218270_Turner_Thesis_EdisontoAI_2023-1.pdf?sequence=2).

## **Class 5: The Challenges to Non-obviousness (Feb. 12, 2025)**

- AI's potential impact on the concepts of “person of ordinary skill in the art” and “analogous prior art”;
- If we can characterize AI as “the prediction machine”, considering the interplay and non-obviousness in US case law, how may this affect the doctrine of non-obviousness?

## Readings:

1. *Graham v. John Deere Co.*, 383 U.S.1 (1966) [the four *Graham* factors]
2. *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398 (2007) [detailed analysis for the 4<sup>th</sup> *Graham* factor]
3. *In re Clay*, 966 F.2d 656 [non-analogous prior art]
4. *Abstract and Conclusion* of Ryan Abbott, *Everything is Obvious*, 66 UCLA L. Rev. 2 (2019).
5. Dan Burk, *AI Patents and the Self-Assembling Machine*, 105 Minnesota Law Review Headnotes 301 (2021), p.308-12.
6. Yuan Hao, *The Rise of Centaur Inventors: How Patent Law Should Adapt to the Challenges by Human – AI Inventing Synergies to the Inventorship Doctrine* (2022), p. 53-61.

### Elective References:

1. Robert P. Merges, *Uncertainty and the Standard of Patentability*, 7 Berkeley High Tech. L. J. 1 (1993);
2. Laura Pedraza-Farina & Ryan Whalen, *The Ghost in the Patent System: An Empirical Study of Patent Law's Elusive "Ordinary Artisan"* (March 30, 2022), Iowa Law Review, available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4071208](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4071208).
3. John Duffy, *Inventing Invention: A Case Study of Legal Innovation*, Texas Law Review, Vol. 86, No. 1, 2007, available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1087067](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1087067).
4. Abstract of Ruffolo et al., *Fast and Accurate Antibody Structure Prediction from Deep Learning on Massive Set of Natural Antibodies*, Nat Commun 14, 2389 (2023), available at: <https://www.nature.com/articles/s41467-023-38063-x>.
5. Robert Plotkin, *AI and the Level of Ordinary Skill: Why Patent Law Must (and Can) Adapt to AI-Augmented Invention* (Jan. 7, 2025), available at: [https://ipwatchdog.com/2025/01/07/ai-level-ordinary-skill-patent-law-must-can-adapt-ai-augmented-invention/id%3D184822/?utm\\_source=chatgpt.com](https://ipwatchdog.com/2025/01/07/ai-level-ordinary-skill-patent-law-must-can-adapt-ai-augmented-invention/id%3D184822/?utm_source=chatgpt.com).
6. Lucas R. Yordy, *The Library of Babel for Prior Art: Using Artificial Intelligence to Mass Produce Prior Art in Patent Law*, 74 Vanderbilt Law Review 521 (2021).

### **Class 6: The Challenge to Disclosure (Feb. 19, 2025)**

- If we see enablement and non-obviousness as the two sides of a flip coin, how may the new inventing regime challenge the enablement doctrine?

### Readings:

1. *Amgen Inc. et al. v. Sanofi et al.*, 598 U.S. 594 (2023)
2. *Janssen Pharmaceutical v. Teva Pharmaceutical*, 583 F.3d 1317 (Fed. Cir. 2009)
3. Isomorphic Labs, *AlphaFold 3 Predicts the Structures and Interactions of All of Life's Molecules* (August 5, 2024) , available at: <https://www.isomorphiclabs.com/articles/alphafold-3-predicts-the-structure-and-interactions-of-all-of-lifes-molecules#:~:text=AlphaFold%203%20achieves%20unprecedented%20accuracy,a%20growing%20class%20of%20therapeutics.&text=Using%20AlphaFold%203%20in%20combination,were%20previously%20out%20of%20reach.&text=Read%20more%20about%20how%20we%20are%20using%20AlphaFold%203%20for%20drug%20design>

4. Abstract of Fast and Accurate Antibody Structure Prediction from Deep Learning on Massive Set of Natural Antibodies, available at: <https://www.nature.com/articles/s41467-023-38063-x>.

### **Elective References:**

1. Donald Chisum, *Anticipation, Enablement and Obviousness: An Eternal Golden Braid*, 15 ALPLA Q.J. 57 (1987).

### **Class 7: A Primer on Copyright Law (Feb. 26, 2025)**

- The Concept of Authorship
- Selected Doctrines of Copyright Infringement
- The Defense of Fair Use

### **Readings:**

1. 17 U.S. Code § 102, 106, 107
2. *Alexander Lindsay v. The Wrecked and Abandoned Vessel R.M.S. Titanic*, 52 U.S.P.Q.2d 1609 (S.D.N.Y. 1999).
3. *Kelley v. Chicago Park Dist*, 635 F. 3d 290 (7<sup>th</sup> Cir. 2011).
4. *Nichols v. Universal Pictures Corp.*, 45 F.2d 119 (2d Cir. 1930).
5. *Authors Guild, Inc. v. Google, Inc.*, 721 F.3d 132 (2<sup>nd</sup> Cir. 2015).
6. *Andy Warhol Foundation for the Visual Arts, Inc. v. Goldsmith et al.*, 598 U.S. \_\_ (2023).

### **Class 8: The Challenges to Authorship (Mar. 5, 2025)**

- The conventional doctrine of *authorship*;
- AI's specific challenge(s) to *authorship*;
- How would you advise copyright law to address these challenges?

### **Readings:**

1. U.S. Copyright Office, *Copyright and Artificial Intelligence (Part 2): Copyrightability* (Jan. 2025), p1-24, available at <https://www.copyright.gov/ai/Copyright-and-Artificial-Intelligence-Part-2-Copyrightability-Report.pdf>.
2. Jane C. Ginsburg & Luke A. Budiardjo, *Authors and Machines*, 34 Berkeley Technology Law Journal 343 (2019), Part I, III, IV, V.

## Elective References:

1. U.S. Copyright Office, *Copyright and Artificial Intelligence (Part 2): Copyrightability* (Jan. 2025), p24-41, available at <https://www.copyright.gov/ai/Copyright-and-Artificial-Intelligence-Part-2-Copyrightability-Report.pdf>.
2. Jane C. Ginsburg & Luke A. Budiardjo, *Authors and Machines*, 34 Berkeley Technology Law Journal 343 (2019), Part II.
3. Shyamkrishna Balganesh, *Causing Copyright*, Columbia Law Review Vol. 117, No. 1 (2017).
4. James D.A. Boyle, *The Search for an Author: Shakespeare and the Framers*, 37 Am. U. L. Rev. 625 (1988)
5. Oren Bracha, *The Ideology of Authorship Revisited: Authors, Markets, and Liberal Values in Early American Copyright*, 118 Yale L.J. 186 (2008)
6. Jane C. Ginsburg, *The Concept of Authorship in Comparative Copyright Law*, 52 DePaul L. Rev. 1063 (2003)
7. Peter Jaszi, *Toward a Theory of Copyright: The Metamorphoses of "Authorship,"* 1991 Duke L. J. 455 (1991).
8. , by Jackson Pollock, 58 Hous. L. Rev. (2020).
9. Patrick R. Gould, *Artificial Authors: Case Studies of Copyright in Works of Machine Learning*, 67 Journal of the Copyright Society of the USA (2020), available at: <https://ssrn.com/abstract=3734574>.
10. Annemarie Briday, *Coding Creativity: Copyright and the Artificially Intelligent Author*, 2012 Stan. Tech. L. Rev. 5, 27 (2012).
11. Pamela Samuelson, *Allocating Ownership Rights in Computer-Generated Works*, 47 U. Pitt. L. Rev. 1185 (1986).

## **Class 9: AI Challenges to Copyright Infringement (Mar. 12, 2025)**

- Copyright infringement issues involved in AI training and output generation;
- How fair is the defense of fair use in the context of AI training with copyrighted human works? What is *your* opinion on the arguments of “transformative use” and “non-expressive use”? How does the rise of licensing deals impact your opinion?
- Transaction costs in licensing and collective licensing mechanism

## Readings:

1. <https://chatgptiseatingtheworld.com/2024/11/24/status-of-all-35-copyright-lawsuits-v-ai-nov-24-2024-concord-music-v-anthropic-injunction-hearing-on->

[nov-25-thomson-reuters-sj-hearing-on-dec-5-standing-becomes-an-issue-cases-march-on/](#).

2. Second Amended Complaint of *Anderson et al. v. Stability AI et al.*, p30-60. Available at [https://storage.courtlistener.com/recap/gov.uscourts.cand.407208/gov.uscourts.cand.407208.238.o\\_1.pdf](https://storage.courtlistener.com/recap/gov.uscourts.cand.407208/gov.uscourts.cand.407208.238.o_1.pdf).
3. Mark Adams, *Why Fair Use Supports Non-Expressive Uses* (Feb. 2024), available at <https://www.authorsalliance.org/2024/02/29/why-fair-use-supports-non-expressive-uses/>.

### **Extended Readings:**

1. [https://www.oecd.org/en/publications/intellectual-property-issues-in-artificial-intelligence-trained-on-scraped-data\\_d5241a23-en.html](https://www.oecd.org/en/publications/intellectual-property-issues-in-artificial-intelligence-trained-on-scraped-data_d5241a23-en.html).
2. Executive Summary of the CISAC Study on the Economic Impact of AI in Music and Audiovisual Industries (Nov. 2024), available at <https://www.cisac.org/services/reports-and-research/cisacpmp-strategy-ai-study>.
3. *Andy Warhol Foundation for the Visual Arts, Inc. v. Goldsmith et al.*, 598 U.S. \_\_ (2023).
4. Shaymkrishna Balganesh & Peter S. Menell, *Going “Beyond” Mere Transformation: Warhol and Reconciliation of the Derivative Work Right and Fair Use* Columbia Journal of Law and the Arts (forthcoming 2024)
5. Pamela Samuelson, *Generative AI meets Copyright*, Science, Vol. 381, Issue 6654 (July 12, 2023), pp. 158-61. <https://www.science.org/doi/10.1126/science.adio656>.
6. Robert Merges, *The End of Friction? Property Rights and Contract in the “Newtonian” World of On-line Commerce*, Berkeley Tech. Law Journal, Vol. 12, Issue 1 (1997).
7. Mark A. Lemley, *Should a Licensing Market Require Licensing?*, 70 L. & CONTEMP. PROBS. 185 (2007).
8. *Cartoon Network LP v. CSC Holdings, Inc.*, 536 F. 3d 121, 128-29 (2d Cir. 2008)
9. *MAI Systems Corp. v. Peak Computer Inc.*, 991 F. 2d 511 (9<sup>th</sup> Cir. 1993) (case
10. Mark Lemley & Brian Casey, *Fair Learning*, available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3528447](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3528447);
11. Matthew Sag, *Copyright Safety for Generative AI*, Houston Law Review, Vol. 61, No. 2 (2023). [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4438593](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4438593).
12. Robert Merges, *Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, California Law Review, Vol. 84, No. 5 (1996).
13. *What is Glaze?* <https://glaze.cs.uchicago.edu/what-is-glaze.html>.

14. GNU General Public License V3, available at:  
<https://www.gnu.org/licenses/quick-guide-gplv3.html>.

### **Class 10: Theoretical Framework: Justifying IP in the “AI Age”? (March 14, 2025)(via Zoom)**

- The Two Conventional Pillars of IP Foundation: Consequentialist (Utilitarian) Theory and Individual Rights (Deontological) Theory
- Will a consequentialist and a deontologist differ as to how the IP system should adapt to the previously identified AI challenges? If so, how? If not, why not?
- Read Prof. Merges’ writing on the challenges posed by the “internet age” – in your mind, how might these challenges change now we are at the dawn of the “AI age”? What can our IP system learn from its lessons of the “internet age”? How should IP adapt to the previously identified AI challenges, in light of the “first-order principles of property right”?
- How do we find the “middle-ground” as to IP’s adaptation to the previously identified AI challenges? Do you think these challenges happen on the doctrinal level, the mid-level, or the foundational level? Can you give some doctrinal adaptation suggestions based on the midlevel principles, as identified by Prof. Merges in his *JIP* book?
- The Principle of Dignity – Its Significance and Implications in the “AI Age”

#### **Readings:**

1. Robert P. Merges, *Justifying Intellectual Property* (Harvard University Press 2011), Chapter 1.
2. Yuan Hao, *The Rise of Centaur Inventors: How Patent Law Should Adapt to the Challenges by Human – AI Inventing Synergies to the Inventorship Doctrine* (2022), p. 69-102, available at:  
[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4186684](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4186684).

#### **Extended Readings:**

1. Robert P. Merges, *Justifying Intellectual Property* (Harvard University Press 2011), Chapters 3, 5, 7 and 10.

### **Class 11: AI’s Impact on the Creative Industry (Abril 2, 2025)**

- A Mini In-Class Debate: Does Reproduction of Human Artists’ Copyrighted Works by Gen-AI Models in Training Constitute “Fair Use”?

- **Guest Speaker 1:** Senior Counsel of an AI Company
- **Guest Speaker 2:** the Global Dimension (Taiwan)
- AI's Impact on the Creative Industries: Human Creativity Boosting v. Human Creativity Replacing
  - In what ways can AI serve as a valuable tool to amplify human creativity and promote science and the arts?
  - How do we respect and reward human creators without impeding beneficial technological progress?
  - **A *specific example*:** Creator's persona and the unauthorized digital replica

### **Readings:**

1. Farrah Vazquez et al., *Digital Replicas and the First Amendment: The Latest in Artificial Intelligence Legislation* (September 2024), available at <https://www.dwt.com/blogs/artificial-intelligence-law-advisor/2024/09/balancing-ai-deepfake-laws-and-the-first-amendment>.
2. Executive Summary of U.S. Copyright Office, *Copyright and Artificial Intelligence, Part I: Digital Replicas* (July 2024)
3. NO FAKES Act One-Pager, available at [https://www.coons.senate.gov/imo/media/doc/no\\_fakes\\_act\\_one-pager.pdf](https://www.coons.senate.gov/imo/media/doc/no_fakes_act_one-pager.pdf).

### **Elective References:**

1. Robert Merges, *Restitution, Property, Right of Publicity*, Boston Univ. Law Review (2019), Vol. 99:2415.
2. Mark Roesler and Garret Hutchinson, *What's in a Name, Likeness, and Image? The Case for a Federal Right of Publicity Law* (Sep. 2020), available at: [https://www.americanbar.org/groups/intellectual\\_property\\_law/publications/1andslide/2020-21/september-october/what-s-in-a-name-likeness-image-case-for-federal-right-of-publicity-law/#2](https://www.americanbar.org/groups/intellectual_property_law/publications/1andslide/2020-21/september-october/what-s-in-a-name-likeness-image-case-for-federal-right-of-publicity-law/#2)
3. *White v. Samsung Electronics American, Inc.*, 971 F.2d. 1395 (1992)
4. *Haelan Laboratories, Inc v. Topps Chewing Gum, Inc.*, 202 F. 2d 866 (2d Cir. 1953).

## **Class 12: Competition Concerns in the Age of AI Platform Companies (April 9, 2025)**

- What technological features of contemporary AI models have imposed disadvantages on small innovators/creators? What is the significance of innovation by small independent innovators/creators? What roles IP and antitrust can each play generally to facilitate innovation by small innovators/creators?
- Are we now stepping rapidly into an age of AI platform companies? What lessons can we learn from the “internet age”?

## **Readings**

1. Sushrat Jain, *Assessing the Potential for Antitrust Moats and Trenches in the Generative AI Industry* (Dec. 2024), CPI Antitrust Chronicle, available at [https://www.edgewortheconomics.com/publication-moats-trenches-generative-AI?utm\\_source=chatgpt.com](https://www.edgewortheconomics.com/publication-moats-trenches-generative-AI?utm_source=chatgpt.com).
2. Staff in the Bureau of Competition and Office of Technology at FTC, *Generative AI Raises Competition Concerns* (June 2023), available at: <https://www.ftc.gov/policy/advocacy-research/tech-at-ftc/2023/06/generative-ai-raises-competition-concerns>.
3. Tejas N. Narechania & Ganesh Sitaraman, *An Antimonopoly Approach to Governing Artificial Intelligence*, Yale Law and Policy Review (Jan. 2024), p. 1-15, available at [https://yalelawandpolicy.org/sites/default/files/YLPR/narechania\\_sitaraman\\_a\\_nantimonopolyapproach\\_ylpr\\_2024.pdf?utm\\_source=chatgpt.com](https://yalelawandpolicy.org/sites/default/files/YLPR/narechania_sitaraman_a_nantimonopolyapproach_ylpr_2024.pdf?utm_source=chatgpt.com).
4. Robert Merges, *Patent Markets and Innovation in the Era of Big Platform Companies* (Feb. 2019), p. 2-9, available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3340648](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3340648).

## **Elective References:**

1. Madison Johnson, *Rising M&A Activity in AI Space May Trigger Antitrust Concerns* (Dec. 19, 2024), available at [https://www.lexisnexis.com/community/insights/legal/b/thought-leadership/posts/rising-m-a-activity-in-ai-space-may-trigger-antitrust-concerns?srsId=AfmBOor1Ec65RjyaMsqhi1JeLsEF2QsL4nkEUcoX3DtnYgBz484HOHiw&utm\\_source=chatgpt.com](https://www.lexisnexis.com/community/insights/legal/b/thought-leadership/posts/rising-m-a-activity-in-ai-space-may-trigger-antitrust-concerns?srsId=AfmBOor1Ec65RjyaMsqhi1JeLsEF2QsL4nkEUcoX3DtnYgBz484HOHiw&utm_source=chatgpt.com).
2. *FTC Inquiry into Generative AI Investments and Partnerships* (Jan. 25, 2024), available at [https://www.ftc.gov/news-events/news/press-releases/2024/01/ftc-launches-inquiry-generative-ai-investments-partnerships?utm\\_source=chatgpt.com](https://www.ftc.gov/news-events/news/press-releases/2024/01/ftc-launches-inquiry-generative-ai-investments-partnerships?utm_source=chatgpt.com).

3. Alden Abbott, *US Antitrust Laws: A Primer* (March 2021), Mercatus Policy Brief Series, available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3834496](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3834496).

### **Class 13: Trademark Law in the “AI Age” (April 16, 2025)**

- The Development of a Certification System to Differentiate Human-Created and AI-Generated Content;
- The Impact of AI on Private Trademark Search Engines and Their Economic and Legal Implications;
- AI’s Impact on the Trademark Registration System

#### **Readings:**

1. Andrew W. Torrance & Bill Tomlinson, *Organic Websites: Certification of AI-Generated or Human-Written Content on the Internet*, 24 Chi.-Kent J. Intell. Prop. 72 (2025)
2. Dev S. Gangjee, *Eye, Robot: Artificial Intelligence and Trademark Registers*, (Draft Version) in N. Bruun, G. Dinwoodie, M. Levin & A. Ohly (eds.), *Transition and Coherence in Intellectual Property Law*, (Cambridge University Press, 2020)
3. **Introduction** and **Conclusion**, Sonia K Katyal & Aniket Kesant, *Trademark Search, Artificial Intelligence, and The Role of the Private Sector*, Berkeley Technology Law Journal (2020), Vol 35: 501.

#### **Elective References:**

1. Dan Burk, *Cheap Creativity and What It Will Do* (March 23, 2023), 57 Georgia Law Review, 1669 (2023), UC Irvine School of Law Research Paper No. 2023-19, available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4397423](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4397423).
2. Sonia K Katyal & Aniket Kesant, *Trademark Search, Artificial Intelligence, and The Role of the Private Sector*, Berkeley Technology Law Journal (2020), Vol 35: 501.

### **Class 14: The Interplay of IP and Human Rights in the “AI Age” (April 23, 2025)**

- Do you agree that human beings should have a fundamental right to creativity in the “AI age”? If not, what are your arguments? If yes, what are the justifications, and how should we craft the IP system accordingly in the AI age? What are some of the policy levers we already have? What will be its implications?

- Troubleshooting session

### **Readings:**

1. Laurence R. Helfer, *Human Rights and Intellectual Property: Mapping an Evolving and Contested Relationship*, Chapter 5 of the Oxford Handbook of Intellectual Property Law (Rochelle C. Dreyfuss & Justine Pila eds., 2018), available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2832417](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2832417).

### **Elective References:**

1. Laurence R. Helfer, *Toward a Human Rights Framework for Intellectual Property*, 40 U.C. Davis Law Review 971-1020 (2007).
2. Laurence R. Helfer, *Human Rights and Intellectual Property: Conflict or Coexistence?* 5 Minnesota Intellectual Property Review 47 (2003).
3. Peter K. Yu, *Reconceptualizing Intellectual Property Interests in a Human Rights Framework*, 40 U.C. Davis L. Rev. 1039, 1051 (2007).
4. Paul Torremans, *Copyright as a Human Right*, in *Copyright and Human Rights: Freedom of Expression – IP – Privacy* 5 (Paul L. C. Torremans ed., 2004).
5. David Shiman, *Economic and Social Justice: A Human Rights Perspective*, available at: [www.umn.edu/humanrts/edumat/hreduseries/tb1b/Section1/tb1-3.htm](http://www.umn.edu/humanrts/edumat/hreduseries/tb1b/Section1/tb1-3.htm).
6. Roberta Kwall, *The Soul of Creativity*, Chapter 9.

## **Course Attendance and Grading Policies**

### **Class Participation Policy**

As this is a discussion-intensive course, regular and active participation is both expected and valued. We also recognize that life occasionally presents unexpected challenges. If you are unable to prepare for a class due to urgent circumstances, please email us in advance. Similarly, if you find yourself unable to answer a question posed in class, even after diligent preparation, feel free to say you would like to pass. Rest assured, your overall engagement throughout the semester will be considered, and occasional passes will not negatively impact your evaluation.

We highly encourage you to volunteer answers and ask questions to enrich the class discussions. Please note that, at times, we may need to postpone addressing certain questions to maintain the class's flow. This does not diminish the value of your inquiries—we simply aim to answer them at a more appropriate time. Any lingering questions are always welcome during office hours, where we can explore them in greater depth.

Attendance is essential, even on days when you may not feel fully prepared (though you should make every effort to avoid such situations). Your presence and willingness to engage are critical to fostering a collaborative and dynamic learning environment.

### Grading Policy

The Course will be graded on the NC/PC/P/H/HH system – Pass (50%), Honors (30%), and High Honors (20%). Your final grade will be determined based on the following elements and percentages:

Class participation **50%**

Final essay **50%**

### Late Assignments Policy

Timely submission of assignments is an important part of professionalism. As such, we generally expect you to submit each assignment by the due date. We understand, though, that extenuating circumstances may sometimes prevent you from doing so. If you need to submit an assignment late for a valid reason (e.g. illness or family emergency), please email us before the due date (or as soon as possible in light of the circumstances). We will be happy to provide you with an extension if necessary. However, if you fail to communicate with us, unexcused late or incomplete assignments will result in reduced points from your class participation grade.

### Policy on the Use of Generative AI Software

Generative AI is software, for example, ChatGPT, that can perform advanced processing of text at skill levels that at least appear similar to a human's. Generative AI software is quickly being adopted in legal practice, and many internet services and ordinary programs will soon include generative AI software. At the same time, Generative AI presents risks to our shared pedagogical mission. For this reason, we adopt the following rule, which enables some uses of Generative AI but also bans uses of Generative AI that would be plagiaristic if Generative AI's output had been composed by a human author.

The class of generative AI software:

- May be used (or even encouraged, as this is an “AI themed” course) to perform research in ways similar to search engines such as Google, for correction of grammar, and for other functions attendant to completing an assignment. The software may not be used to compose any part of the submitted assignment.
- Never may be employed for a use that would constitute plagiarism if the generative AI source were a human or organizational author. For discussion of plagiarism, see <https://gsi.berkeley.edu/gsi-guide-contents/academic-misconduct-intro/plagiarism/>

### **School-wide Policies and Resources**

1) A “credit hour” at Berkeley Law is an amount of work that reasonably approximates three to four hours of work per week for 15 weeks, including a) classroom time, b) time spent preparing for class, c) time spent in review sessions and studying and taking, final exams, d) time spent researching, writing, and revising papers and other written work, and e) time spent preparing for and completing any other final project, presentation, or performance. For the purposes of these calculations, 50 minutes of classroom instruction counts as one hour, and the 15 weeks include the exam period. You can expect to spend this amount of time per unit per week on in-class and out-of-class, course-related work as described above. (Note that this total workload will be distributed differently in classes that only meet for part of the semester.)

2) Students who need accommodations for disability or pregnancy or want to discuss the implementation of their accommodations, including accommodated exams, should contact [Chelsea Yuan](#), Director for Student Services, Accessible Education.

Student Services schedules all exams, including accommodated exams, as the law school is committed to anonymous grading. PROFESSORS DO NOT HAVE THE AUTHORITY TO RESCHEDULE EXAMS.

3) The [Academic Honor Code](#) governs the conduct of all students during examinations and in all other academic and pre-professional activities at Berkeley Law. We expect students to adhere to this code scrupulously. If you have any questions about whether your conduct may violate the code, please contact your professor or the Dean of Students before you act. You may face severe consequences, including a failing grade in this class or removal from the program, and the Bar will receive notification of your conduct.

4) [Berkeley Law Academic Skills Program](#). Every student admitted to Berkeley Law. Has the ability to succeed in law school and we are committed to fostering an academic environment in which all students can achieve their full potential. To schedule an individual appointment and for handouts on core law school skills and study strategies, free online study aids, information about practice exams and hypos, and much more, please visit and bookmark the Academic Skills Program website.

5) [Student Technology Help](#) As a Berkeley Law student, you are entitled to general software support for your computer from the law school, and certain free software downloads from UC Berkeley, while enrolled. If you have issues with internet access or computer equipment required to participate in classes remotely, contact [studentcomputing@law.berkeley.edu](mailto:studentcomputing@law.berkeley.edu). Information, links, and instructions for many common computer/technical questions can be found in the [law library's online computing guide](#). For bCourses, Zoom, and technical support questions, please email [studentcomputing@law.berkeley.edu](mailto:studentcomputing@law.berkeley.edu) or you can use the [Student Computing chat](#). In both cases, someone will respond to you during our regular business hours.

If you have research-related questions, please contact the reference librarians by filling out the [reference request form](#). You can also reach reference librarians during business hours by using the [law library's chat service](#).

6) If you are in need of economic, food, or housing support, you can find basic needs information [here](#) You may be eligible for money to buy groceries via [CalFresh](#) or our Food Assistance Program. If you need food immediately, please visit our [UC Berkeley Food Pantry](#).

7) The University of California is committed to creating and maintaining a community dedicated to the advancement, application, and transmission of knowledge and creative endeavors through academic excellence, where all individuals who participate in University programs and activities can work and learn together in an atmosphere free of harassment, exploitation, or intimidation. Every member of the community should be aware that the University prohibits sexual violence and sexual harassment, retaliation, and other prohibited behavior (“Prohibited Conduct”) that violates the law and/or University policy. The University will respond promptly and effectively to reports of Prohibited Conduct and will take appropriate action to prevent, correct, and when necessary, to discipline behavior that violates this policy. For the complete UC Policy, definitions, compliance, and procedures, please access the [Sexual Violence and Sexual Harassment Policy](#).

Resources: If you have further questions or concerns about reporting behavior related to sexual harassment, sexual violence, and/or protected category discrimination, please contact the Office for the Prevention of Harassment and Discrimination (OPHD) by phone 510-643-7985 or email [ask\\_ophd@berkeley.edu](mailto:ask_ophd@berkeley.edu).

[Path to Care Center](#) Confidential Advocates provide affirming, empowering, and confidential support for those that have experienced gendered violence, including sexual harassment, emotional abuse, dating, and intimate partner violence, sexual assault, stalking, and sexual exploitation. Advocates bring a non-judgmental, caring approach to exploring all options, rights, and resources. They can be reached by phone at (510) 642-1988.