

UCLA Institute for Technology, Law & Policy

THE INFORMATION POLICY LAB SYLLABUS – EXTENDED REALITY

UCLA SCHOOL OF LAW

SPRING 2024

Background:

The Institute for Technology, Law & Policy (ITLP) is a partnership between the UCLA School of Law and UCLA Samueli School of Engineering which undertakes cross-disciplinary research and analysis to ensure that new technologies are developed, implemented, and regulated in ways that are socially beneficial, equitable, and accountable. Since the ITLP's launch in January 2020, it has pursued a diverse programming agenda, including direct engagement on a range of public policy issues related to how our digital world is governed and regulated, with a particular emphasis on questions related to freedom of expression, privacy, transparency and accountability. This work has included direct interfacing with government, civil society, and private sector stakeholders working on these challenges.

Course Description:

The “Information Policy Lab” will provide students with an opportunity to engage directly on emerging public policy questions related to the intersection of law and technology through a combination of research, writing, and direct interaction with external stakeholders who are on the front lines of global debates related to the regulation of new technologies. The course will provide a substantive experiential learning opportunity for students interested in careers in the public policy space, allowing them to develop research, writing, networking, communication and advocacy skills that are fundamental to effective and impactful work on tech policy.

Each year that the course is offered revolves around a particular theme. The first Information Policy Lab took place during the Fall 2022 term, where a group of nine students worked together to identify policy solutions to support the sustainability of journalism in light of the growing power of online platforms. During the Spring 2023 term, ITLP launched the first [research output](#) of the Information Policy Lab at the “Platforms and the Press Symposium”. We have since distributed the research through our network, including to staff working on the *Journalism Competition and Protection Act* and the *California Journalism Preservation Act*, and hosted a hearing of the Senate Judiciary Committee in December to discuss the report.

For the Fall 2023 term, the selected theme is “Extended Reality.”. Students in small groups of between 2 and 4 will be assigned a specific sub-theme to examine, based on their interests and particular skills. The sub-themes will be decided by the instructors in advance of the commencement of the course, in consultation with the participating external stakeholders. The groups’ main task in the course will be to develop a standalone research product which includes a comprehensive examination of the competing interests at play within that issue, and a set of recommendations or better practice standards for better protecting key digital rights interests related to that topic. This report is ultimately meant to be publicly facing, as a policy paper that the ITLP will publish and distribute, in order to inform ongoing policy debates. The final research products are due **by 4:00 p.m. on Thursday, May 9, 2024.**

The course will introduce students to a series of private sector, academic, civil society and regulatory stakeholders who are active in setting and implementing new policies related to this theme through a series of guest lectures and interviews. These external participants will introduce students to the public policy challenges they are grappling with in this sector, and share their perspectives on possible avenues forward, or areas where further research could be most fruitful. In addition to supporting their understanding of the tech policy space, and the ecosystem of stakeholders who impact decision-making, these conversations will help students to cultivate a range of crucial skills which are relevant to both working in the tech policy space, as well as to lawyering in general, including how to interview clients and potential clients, negotiating and assessing competing interests from diverse stakeholders, and using individual perspectives to improve their understanding of the broader information landscape.

Working under the supervision of the instructors, and based on the interviews, their coursework, and their independent research, the students will develop a policy-paper related to their specific project. The research process will also include periodic check-ins with the external stakeholders, to solicit feedback and ensure that the finished product is relevant to the substance of emerging public policy debates. This ongoing engagement and feedback is meant to mirror, as closely as possible, the role that legal policy experts play in guiding positions among civil society, private sector, and regulatory entities, and to help the students cultivate legal research and analysis skills that are essential both in fulfilling this role and in lawyering more generally.

The final weeks of the term will be devoted to thinking about next steps, and avenues towards translating their research into impact. This should include, at a minimum, a strategy for publicizing and disseminating the research among influential stakeholders, and ideas about broader advocacy work that could help to bring about positive changes among private sector or government agencies. It will also include a presentation and mock-interview component, allowing students to build an introductory understanding of media engagement and messaging. These end-of-term activities are intended to reflect the role that civil society policy-makers play in trying to translate ideas into

impact, and will help to cultivate advocacy, communications, agenda setting, public engagement and campaigning skills.

Course Goals:

- Supporting the educational development of UCLA students, including teaching critical engagement with emerging public policy questions, legal research, comparative analysis, and fact-finding in a dynamic and fast-moving field.
- Supporting the professional development of UCLA students, including fostering a greater understanding of careers in tech policy, and the broader professional ecosystem underlying these distinct roles.
- Experiential skills development, particularly related to the specific skills required to contribute meaningfully to the tech policy space, namely research, analysis, interviewing, stakeholder/client management, communications, public engagement, campaigning, and balancing competing interests.
- Generating innovating new research related to challenges at the interface of law and technology.
- Cultivating a broad network of cross-sectoral and interdisciplinary collaborators.
- Developing students' professional identities through diverse opportunities for applied skills demonstration and practice, feedback, and self-assessment.

Meeting Time and Location:

The Information Policy Lab will be held on Tuesdays from 10:35 - 12:35 pm in room 3483.

Key Contacts:

Michael Karanicolas
Executive Director - UCLA ITLP
karanicolas@law.ucla.edu

Melodi Dincer
Resident Fellow - UCLA ITLP
dincer@law.ucla.edu

Supervision:

In addition to classroom interaction and office hours, the instructors will meet regularly with each student group to discuss expectations and goals, progress, and project development. Student

communications, meeting agendas, and progress on assigned projects will be kept in the BruinLearn platform.

Course Materials:

The text(s) for this course will include academic and civil society research papers, official statements of policy from private sector tech platforms, and appropriate case law, which will be compiled by the instructor and made available to students via BruinLearn.

General Course Outline (subject to revision):

January 16 – Mapping the Extended Reality Ecosystem

This class will include an overview of the syllabus, course expectations, and how to manage work for this course, followed by an introductory overview of extended reality technologies and the challenges and opportunities that arise out of their development and increased popularity. In addition to equipping students with the tools to develop their project ideas, and to engage with the external stakeholders that they will be meeting, this class will provide an introduction to the life-cycle of a policy-centric advocacy campaign, including the role that civil society, private sector actors, government regulators, and other institutions play in determining how the digital space is governed.

Readings:

- Rabindra Ratan & Yiming Lei, *What is the metaverse? 2 media and information experts explain*, The Conversation (Aug. 12, 2021), <https://theconversation.com/what-is-the-metaverse-2-media-and-information-experts-explain-165731>. [2 pages]
- Crystal Nwaneri, *Ready Lawyer One: Legal Issues in the Innovation of Virtual Reality*, 30 Harvard Journal of Law & Technology 601 (2017): <https://ssrn.com/abstract=3036098> [27 pages]
- Kevin Bonsor & Nathan Chandler, *How Augmented Reality Works*, HOW STUFF WORKS (Nov. 9, 2018), <https://computer.howstuffworks.com/augmented-reality.htm> [2 pages]
- Kaitlyn Irvine, *XR: VR, AR, MR-What's the Difference?*, VIGET (Oct. 31, 2017), <https://www.viget.com/articles/xr-vr-ar-mr-whats-the-difference>. [2 pages]
- Trevor English, *VR Headsets Work Through a Combination of Different Tracking Technologies*, INTERESTING ENG'G (May 9, 2020), <https://interestingengineering.com/vr-headsets-work-through-a-combination-of-different-tracking-technologies> [2 pages].

Skim:

- *Government Enters the Metaverse*, Accenture (2022), <https://www.accenture.com/content/dam/accenture/final/industry/public-service/document/Accenture-Federal-Technology-Vision-2022-Government-Enters-the-MetaverseNew.pdf>
- EU strategy to lead on Web 4.0 and virtual worlds, https://ec.europa.eu/commission/presscorner/detail/en/ip_23_3718

January 23 – Introduction to Privacy Law

This class will be devoted to an overview of the legal issues related to personal privacy protection in order to understand the key privacy concerns arising from the Extended Reality Ecosystem in subsequent classes. We will cover a brief introduction to prominent privacy statutes in the U.S. (particularly the CCPA) and the European GDPR, as well as the distinctions between personal information and sensitive/biometric information, and the legal concerns related to the Government’s access to platforms’ data.

Readings:

- What is Data Privacy?
 - Data Privacy Principles (read Intro; p. 1262–1264 [B. Fair Information Practice Principles]; p. 1266–1280 [Section 2: Definitions B. Chapter 2: Data Privacy Principles up to Section 12: Onward Transfer]). [17 pages total]
- U.S. data privacy overview
 - CRS Report on Data Protection Law (2019): <https://crsreports.congress.gov/product/pdf/R/R45631>
 - Federal statutes (skim p. 7–35)
 - CCPA overview (read 38–39)
 - GDPR overview (read 40–50) [40 pages total]
- Biometric Data
 - Policy Statement of the Federal Trade Commission on Biometric Information and Section 5 of the Federal Trade Commission Act (May 18, 2023): https://www.ftc.gov/system/files/ftc_gov/pdf/p225402biometricpolicystatement.pdf [12 pages].
 - “The Special Case of Biometric Data”, Knowing Machines Generative AI Legal Explainer (2023): <https://knowingmachines.org/knowing-legal-machines/legal-explainer/questions/when-i-use-genai-products-like-chatgpt-can-they-collect-my-data> [~3 pages]
- Government access to platform data:
 - Overview of various ECPA provisions allowing government access to consumer data: <https://epic.org/ecpa/> [~5 pages]
 - National Security Letters: *National Security Letters: FAQ*, EFF, <https://www.eff.org/issues/national-security-letters/faq#main-content> [6 pages]

Skim:

- California Privacy Rights Act Overview: <https://www.caprivacy.org/cpra-exec-summary/>
 - CPRA (formerly Prop 24) Analysis: <https://epic.org/californias-proposition-24/>
 - LA Times Editorial in support of Prop 24: <https://www.latimes.com/opinion/story/2020-09-15/yes-on-proposition-24>
- Stored Communications Act § 2703 orders
 - § 2703(d) Orders: Jack Nicas, *What Data About You Can the Government Get from Big Tech?*, N.Y. TIMES (June 14, 2021), <https://www.nytimes.com/2021/06/14/technology/personal-data-apple-google-facebook.html>
 - § 2703(f) Preservation Orders: Melodi Dincer & Kristin M. Mulvey, *The Government Cannot Force Email Companies to Copy and Save Your Account 'Just in Case,'* ACLU (Feb. 21, 2019), <https://www.aclu.org/news/privacy-technology/government-cannot-force-e-mail-companies-copy-and-save-your> (overview of § 2703(f) preservation orders)

January 30 – Introduction to Content Moderation

This class will provide students with a foundational understanding of content moderation within digital platforms, laying the groundwork for deeper exploration in the context of the Extended Reality Ecosystem in subsequent classes. We will examine the legal framework for content moderation practices, particularly Section §230, the challenges of balancing content moderation with freedom of expression, and the main proposals to improve content moderation in the digital landscape and their limitations.

Readings:

- Kate Klonick, *The New Governors: The People, Rules, and Processes Governing Online Speech*, 131 Harv. L. Rev. 1598, 1616-1662, (2018), https://harvardlawreview.org/wp-content/uploads/2018/04/1598-1670_Online.pdf [46 pages]
- Mark A. Lemley & Eugene Volokh, *Law, Virtual Reality, and Augmented Reality*, 166 U. Pa. L. Rev. 1051, 1053-1100 (2018), https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=9622&context=penn_law_review. [47 pages].

February 6 - Panel & Group meeting 1

This class will take place in two parts. Students will attend a mandatory, one-hour panel session, currently scheduled for February 6, featuring external stakeholders who are on the front lines of emerging law and policy debates related to extended reality technologies. Separately, the

instructors will schedule a meeting with each research team to map out their assignment for the course.

Readings:

- Brittan Heller, Revisiting Code as Law: Regulation and Extended Reality, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4559458 (60 pages).
- Mark A. Lemley & Eugene Volokh, *Law, Virtual Reality, and Augmented Reality*, 166 U. Pa. L. Rev. 1051, 1100-1138 (2018), https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=9622&context=penn_law_review. [38 pages].

February 13 – Drafting Workshop 1

The first half of this class will consist of short presentations, where students will lead a discussion of their early findings and conclusions for peer feedback. The second half of this class will consist of a drafting workshop, helping students to refine and improve their messaging and policy direction to maximize potential impact.

Readings:

- Steve Rathje, *The Power of Framing: It's Not What You Say, It's How You Say It*, The Guardian (July 20, 2017), <https://www.theguardian.com/science/head-quarters/2017/jul/20/the-power-of-framing-its-not-what-you-say-its-how-you-say-it> [~4 pages]
- The Opportunity Agenda: <https://opportunityagenda.org/wp-content/uploads/2022/12/2019.05.06-Toolkit-Without-Comic-Book.pdf> (framing, messaging, and narrative section p. 13–20) [7 pages]
 - See also, FrameWorks *Building a Strong Frame*, <https://www.frameworksinstitute.org/toolkit/aapvaccine-building-a-strong-frame/> [~2 pages]
- Deborah Stone, *Causal Stories and the Formation of Policy Agendas*, 104:2 Polit. Sci. Q. 281 (1989), <https://www.uvm.edu/~dguber/POLS293/articles/stone.pdf>. [18 pages]
- Chris Torres, *Causal Stories and Problem Definitions: How Policymakers and Superintendents Frame School Turnaround*, <https://journals.sagepub.com/doi/10.1177/23328584231186425> (Theoretical Framework, Background Literature [up to “The Logics of Sanctions or Support in Turnaround Policy”], & Discussion and Implications sections) [~7 pages]
- Simon Fondrie-Teitler and Amritha Jayanti, *Consumers Are Voicing Concerns About AI* <https://www.ftc.gov/policy/advocacy-research/tech-at-ftc/2023/10/consumers-are-voicing-concerns-about-ai> [2 pages].

- Michael Mintrom, *So You Want to Be a Policy Entrepreneur?*, <https://www.tandfonline.com/doi/full/10.1080/25741292.2019.1675989> [16 pages]

Skim:

- Yana Breindl, *Assessing Success In Internet Campaigning*, 16 *Inf. Commun. Soc.* 1419 (2013), <https://www.tandfonline.com/doi/full/10.1080/1369118X.2012.707673> [17 pages].
- João Tiago Silveira & Diana Ettner, *Legislative drafting tools preventing arbitrariness in discretionary powers*, 7:2 *Theory Pract. Legis.* 153 (2019), <https://www.tandfonline.com/doi/full/10.1080/20508840.2020.1729552> [14 pages].

February 20 - Panel & Group meeting 2

This class will also include both a mandatory, one-hour panel session, currently scheduled for February 20, featuring external stakeholders who are on the front lines of emerging law and policy debates related to extended reality technologies, and a second set of individual meetings with each research team.

February 27 – Privacy Considerations of Extended Reality Technologies

This class will explore the privacy risks arising from Extended Reality technologies' collection of sensitive personal information, including biometric identifiers, geolocation, precise maps of the physical world, and outward-facing data. We will discuss how the collection and usage of this data can enhance or affect the surveillance practices of tech companies and government institutions, and the potential regulatory responses to this phenomenon.

Readings

- Joseph Jerome & Jeremy Greenberg, *Augmented Reality and Virtual Reality: Privacy and Autonomy Considerations in Emerging, Immersive Digital Worlds*, <https://fpf.org/wp-content/uploads/2021/04/FPF-ARVR-Report-4.16.21-Digital.pdf>. [40 pages].
- Brittan Heller, *Watching Androids Dream of Electric Sheep: Immersive Technology, Biometric Psychography, and the Law*, 23 *Vand. J. Ent. & Tech. L.* 1 (2020), <https://scholarship.law.vanderbilt.edu/jetlaw/vol23/iss1/1/>. [51 pages]
- Katitza Rodríguez & David Greene, *EFF Submission to the OHCHR Consultation on the Practical Application of the United Nations Guiding Principles on Business and Human Rights to the Activities of Technology Companies*, Electronic Frontier Foundation (Feb. 22, 2022), <https://www.eff.org/files/2022/04/03/ohchr-eff-submission-02252022.pdf>. [9 pages].
- Katitza Rodríguez & Kurt Opsahl, *Augmented Reality Must Have Augmented Privacy*, Electronic Frontier Foundation (Oct. 16, 2020),

<https://www.eff.org/deeplinks/2020/10/augmented-reality-must-have-augmented-privacy>. [3 pages].

March 5 – Content Moderation and governance in Extended Reality Environments

This class will explore the unique complexities of moderating immersive content in the Extended Reality landscape, addressing issues of user-generated content and augmented experiences. The discussion will encompass how potential regulatory responses could deal with safeguarding XR environments from harmful or misleading content/conduct, including cyberbullying, sexual harassment, hate speech, and mis- and disinformation while striking a balance with other competing interests. Finally, we will discuss potential governance frameworks that may empower stakeholders to lead responsibly within the XR environment while mitigating potential socioeconomic harms.

Readings

- Patrick Henz, *The psychological impact of the Metaverse*, 2 Discov Psychol 47 (2022), <https://doi.org/10.1007/s44202-022-00061-3>. [8 pages]
- Andrew McStay, *The Metaverse: Surveillant Physics, Virtual Realist Governance, and the Missing Commons*, 36 Philos. Technol. 13 (2023). <https://doi.org/10.1007/s13347-023-00613-y>. [26 pages]
- Sameer Hinduja, *The metaverse: Opportunities, risks, and harms*, Cyberbullying Research Center, available at: <https://cyberbullying.org/metaverse>. [3 pages]
- Inga Trauthig & Samuel Woolley, *Addressing Hateful and Misleading Content in the Metaverse*, Journal of Online Trust and Safety 1.5 (2023), <https://tsjournal.org/index.php/jots/article/view/109>. [20 pages].
- Joshua Hansen, *Virtual Indecent Assault: Time for the Criminal Law to Enter the Realm of Virtual Reality*, 50 VUWLR 57 (2019), <https://ssrn.com/abstract=3442707>. [20 pages].
- Andreas Procopiou, *Ready Player Bad: The Future Rise of Extremism and Terrorism in the Metaverse*, 2022 IEEE 2nd International Conference on Intelligent Reality (ICIR) (2022), <https://ieeexplore.ieee.org/document/10070906> [4 pages].

Optional:

- Podcast: Tiffany Xingyu & Mark DeLoura, *Trust and Safety in the Metaverse*, in Building the Open Metaverse, <https://cesium.com/open-metaverse-podcast/trust-and-safety-in-the-metaverse/>

March 12 - Drafting Workshop 2

This class will continue discussions of effective policy advocacy, through the lens of how to draft an effective short paper, or op-ed, persuading readers of an appropriate policy outcome. The discussion will include information on an effective pitch, ensuring that recommendations are clear, concise, and actionable, as well as how to consider possible stakeholder responses to different recommendations, and avenues to nullify objections and balance competing priorities.

Readings:

- Martha B. Coven, *Writing on the Job: Best Practices for Communicating in the Digital Age* 101–10 (2022) (to be emailed) [9 pages]
- Jack Goldsmith, *Successful Student Online Legal Writing*, Lawfare (Oct. 27, 2016), <https://www.lawfareblog.com/successful-student-online-legal-writing> [~5 pages]
- *Op-Ed Writing: Tips and Tricks*, THE OPED PROJECT, <https://www.theopedproject.org/resources#gettingstarted> [~9 pages]
- *How to Write an Op-Ed Article* (Guidelines from Duke University’s Office of News and Communications), https://www.umass.edu/pep/sites/default/files/how_to_write_an_oped-duke_2.pdf [3 pages]
- Hannah Bloch, *A Good Lead Is Everything – Here’s How to Write One*, NPR (Oct. 12, 2016), <https://training.npr.org/2016/10/12/leads-are-hard-heres-how-to-write-a-good-one> [~3 pages]
- Holly J. Morris, *Nut Graf and Lead Duos That Point Readers in the Right Direction*, NPR (June 3, 2021), <https://training.npr.org/2021/06/03/nut-graf-and-lead-duos-that-point-readers-in-the-right-direction> [~3 pages]
- George Orwell, *Politics and the English Language*, Horizon, Apr. 1946, <https://www.orwellfoundation.com/the-orwell-foundation/orwell/essays-and-other-works/politics-and-the-english-language> [~10 pages]
- Examples of op-eds written by lawyers (skim):
 - Melissa Murray, *Americans Are Losing Their Right to Not Conform*, N.Y. Times (July 6, 2022), <https://www.nytimes.com/2022/07/06/opinion/dobbs-griswold-abortion-rights-conformity.html>
 - Elie Mystal, *The Supreme Court Has Just Invented a New Way to Harass Vulnerable People*, The Nation (Apr. 29, 2022), <https://www.thenation.com/article/society/supreme-court-cummings>
 - Patrick Toomey & Alex Abdo, *US Courts Must Stop Shielding Government Surveillance Programs from Accountability*, The Guardian (Sept. 26, 2022), <https://www.theguardian.com/commentisfree/2022/sep/26/us-courts-government-accountability-state-secrets>
 - Janel George, *Critical Race Theory Fights Resemble Anti-Integration Fights*, TEEN VOGUE (Dec. 21, 2021), <https://www.teenvogue.com/story/critical-race-theory-massive-resistance>

March 19 – Blogs and Presentations

Each research team will present a blog-style document of 800 to 1200 words related to their research topic. Our goal is to pitch the pieces to Tech Policy Press, ideally as a standalone series.

April 2 – Introduction to effective policy advocacy

This class will introduce students to the basics of tech policy campaigning, including the relationship between policy and communication, how to craft an effective message, and the development of realistic and defined advocacy goals.

Readings: [27 pages]

- Sarah Stachowiak, *Pathways for change: 6 Theories about How Policy Change Happens*, ORS, [www.pointk.org/resources/files/pathways for change 6 theories about how policy change happens.pdf](http://www.pointk.org/resources/files/pathways_for_change_6_theories_about_how_policy_change_happens.pdf). [14 pages]
- Meg Young, Lassana Magassa & Batya Friedmann, *Toward inclusive tech policy design: a method for underrepresented voices to strengthen tech policy documents*, 21:89 *Ethics and Information Technology* 103, <https://link.springer.com/content/pdf/10.1007/s10676-019-09497-z.pdf> [13 pages]

April 9 – Lawyer as an advocate

This purpose of this class is to explore different perspectives on the role lawyers play in shaping, supporting, and empowering social movements. We will discuss how lawyers typically advocate for social causes, as well as new approaches developed alongside contemporary movements such as the prison-industrial complex (PIC) abolition movement. We will then explore how lawyers can advocate for nascent surveillance resistance and tech justice movements.

Readings:

- Deborah N. Archer, *Political Lawyering for the 21st Century*, 96 *DENVER L. REV.* 399, 428–33 (Section III up to C.) [5 pages]
- Amna Akbar, *Toward a Radical Imagination of Law*, 93 *N.Y.U. L. REV.* 405, 406–416 (Introduction), 473–79 (Section IV) [16 pages]
- Scott L. Cummings, *Movement Lawyering*, 27 *U. ILL. L. REV.* 1645, 1654–60 (Section II), 1689–95 + 1703–1711 (Section IV A. and B.2.) [14 pages]
- Nancy Polikoff, *Am I My Client?: The Role Confusion of a Lawyer Activist*, 31 *HARV. CIV. RTS.-CIV. LIB. L. REV.* 443 (1996) (skim) (I have a copy of this paper, but students can also access it on heinonline: https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/hcrcl31§ion=26)
- Ali Bhagat & Rachel Phillips, *The Techfare State: Debt, Discipline, and Accelerated Neoliberalism*, 28 *NEW POL. ECON.* 1 (2023) [I have a copy from the authors] [11 pages]
- Hannah Bloch-Wehba, *Algorithmic Governance from the Bottom Up*, 48 *B.Y.U. L. REV.* 69, 109–34(2022) (Introduction, Section III, and Section IV) [25 pages]

Optional:

- (skim) Hannah Bloch-Wehba, *Algorithmic Governance from the Bottom Up*, 48 B.Y.U. L. REV. 69, 89–109 (Section II) [20 pages]

April 16 – Charting a Path Forward

The purpose of this class will be to revisit key concepts in light of what the students have learned from their work over the term. In particular, it will allow space for discussion of how to connect their policy ideas to the various stakeholders that they have been introduced to over the term beyond their immediate “clients”, and developing an avenue for continued engagement in this space, and to provide an opportunity for learning and reflection on the analytical, communications, and advocacy skills developed throughout the class. Students will have the opportunity to discuss their ideas in view of the final term project presentations.