Artificial Intelligence & Tax Law: Theory and Practice

Professor Mindy Herzfeld

University of Florida Levin College of Law Graduate Tax Program

Syllabus

Compressed Course January 2024

AI and Tax

LAW #7931

Professor Mindy Herzfeld

Office: 374

Phone: 352-273-0932

Office Hours: Monday, Jan 8, 3:30-4PM via zoom

Wednesday, Jan 10, 2-3PM via zoom Wednesday, Jan 17, 2-4PM in room 374

- A. <u>Course Materials</u>: The required reading/video links/tools to be utilized can be accessed through links provided below or are posted on Canvas.
- B. <u>Topics</u>: The topics for class, along with the assigned readings are described in the pages that follow.
- C. Grade: Your grade will be based on the following:
 - (1) Classroom Assignments (20% of grade) (on some days you will be asked to submit questions / thoughts related to the readings, for discussion topics for class)
 - (2) AI Tool Exercises (60% of grade) There are 4 exercises using different AI tools that you will be required to submit as part of the course, discussed in greater detail below. Half of your grade (40%) will be based solely based on submitting the required work product during the week. The other half (20% of the grade) will be awarded based on submission of final work product by January 28.
 - (3) AI Tools Comparison (20% of grade), due January 28, 2023.

This course follows the Levin College of Law's grading policies found here https://www.law.ufl.edu/life-at-uf-law/office-of-student-affairs/current-students/uf-law-student-handbook-and-academic-policies. The below chart describes the specific letter grade/grade point equivalent in place.

Letter Grade	Point Equivalent
A (Excellent)	4.0
A-	3.67
B+	3.33
В	3.0
В-	2.67
C+	2.33
C (Satisfactory)	2.0
C-	1.67
D+	1.33
D (Poor)	1.0
D-	0.67
E (Failure)	0.0

- D. <u>Readings and Other Prep Assignments</u>. You should be prepared to discuss the reading assignments for each class. You will also be required to familiarize yourself with the tech tools being used in class, as described below and further in the syllabus.
- E. <u>Attendance</u>. Per ABA requirements, you will be expected to attend a minimum of 80 percent of all classes. Because this is a compressed course, attendance at each class is required and absence is reflected in the grading, without an excused absence from Student Affairs. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

F. Class Preparation

Because this is a compressed course, you should be prepared to spend several hours preparation time before the course begins. During the week of the course, you should be prepared to spend several hours a day that week reading and preparing assignments. In total, you can expect to spend approximately 30 hours in preparation for class, including reading and working on assigned exercises utilizing AI tools.

The following should be downloaded or registration completed before the start of the course:

- 1. <u>eBrevia registration: the course will include an exercise using the eBrevia tool. Please provide me with confirmation that OK for me to provide your names and emails to eBrevia in order to register you for free access to this app.</u>
- 2. BlueJ registration: the course will include an exercise using the Blue J Legal tool. Please provide me with confirmation that OK for me to provide your names and emails to eBrevia in order to register you for free access to this app.
- 3. OpenAI: You should sign up for an OpenAI account, which is free. https://openai.com/
- 4. Microsoft PowerBi. You must sign up for an account to access Microsoft PowerBi. https://powerbi.microsoft.com
- G. <u>Guest Lecturers</u>. There will be a number of guest lectures during the week as indicated below. They are giving of their time partly in order to learn from you. You will need to be prepared with assignments (readings and AI tools) for discussion with them.
- H. <u>Class Schedule</u>. This class will meet on the following days/times, all via zoom. The zoom link is posted in canvas.

Monday, January 8: 9:30am – 12:30pm Tuesday, January 9: 10:00am-12:30pm Wednesday, January 9: 9:30am-12:30pm Thursday, January 10: 10:00am-12:30pm Friday, January 11: 9:30am-12:30pm

Summary of the Course

Artificial Intelligence is one of the most exciting and important developments of our time. Machine learning has and will continue to alter the way we conduct business and our lives and is transforming the nature of work. In law, artificial intelligence is raising both fundamental questions about how law is made and the role of machines in the analysis of contracts and statutes, the evolution of law, and the role of machines in legal decisions. In the legal practice, artificial intelligence is introducing radical changes into the lawyer's role, how information is

processed and how data is analyzed, and in the ability of lawyers to charge for their skills and expertise. All of these changes are evident in the field of tax law as well.

This course will consider the application of artificial intelligence and the challenges it poses to legal thought, tax law in particular. It also considers some of the practical ramifications of those changes for the daily practice of tax law.

Assigned readings are noted below.

Objectives of the course

This course has a number of objectives:

- 1. To understand the term artificial intelligence, in particular Generative AI;
- 2. To explore the applications of artificial intelligence to the law and the legal profession and the opportunities and challenges it poses to each and become familiar with the academic literature in the field;
- 3. To appreciate the unique opportunities and challenges AI offers in the field of tax law and to the tax profession;
- 4. To become familiar with AI tools that tax practitioners are utilizing in daily practice;
- 5. To explore an area of individual interest related to AI and tax.

Required Course Materials

All required readings are posted in canvas or linked to/listen in the syllabus.

- 5. Reference Materials. Additional reference materials are noted below and for each class.
- **6.** <u>Office Hours</u>. In addition to the office hours noted above, I am available for in-person or phone consultations. These can be scheduled by email at herzfeld@law.ufl.edu.

Note: Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within

the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.".

Reference Materials

Research Handbook on Big Data Law (Roland Vogl, ed.) (2021) (available on <u>reserve in library</u> and selected chapters available on canvas).

Class 1: Monday, January 9

Overview of the Course

A Primer on Artificial Intelligence

Required Reading:

- What is AI? / Basic Questions, by Prof. John McCarthy, available at http://jmc.stanford.edu/artificial-intelligence/what-is-ai/index.html, along with Branches of AI, available at http://jmc.stanford.edu/artificial-intelligence/what-is-ai/branches-of-ai.html (2007)
- 2. What is Generative AI, IBM Research Blog https://research.ibm.com/blog/what-is-generative-AI
- 3. Madhumita Murgia, *Algorithms are deciding who gets organ transplants. Are their decisions fair?* FT (Nov. 9, 2023). Available in canvas.

Challenges and Opportunities in AI and Law

Required Reading:

- 4. The Economist, *Large, creative AI models will transform lives and labour markets* (Apr. 22, 2023). Available in canvas. AND
- 5. Richard Susskind and Daniel Susskind, *Generative AI will upend the professions*, FT (Jun. 18 2023). Available in canvas. AND
- 6. Daniel Susskind, *The Future of the Professions*, Proceedings of the American Philosophical Society, 162:2 (2018). (Download)

OR

7. Harry Surden, *Artificial Intelligence and Law: An Overview*, 35 Ga. St. U. L. Rev. (2019). (updated version available in canvas) HeinOnline

OR

8. Anton Korinek, *Taxation and the Vanishing Labor Market in the Age of AI*, 16 Ohio St. Tech L.J. 244 (2020) available at available at HeinOnline

Overview: AI in Law and Tax: Presentation by Chris Kontaridis, PwC (co-founder, PwC Legal Business Solutions), and Hannah LaJoie, PwC (UF LLM 2022)

AI: Legal Risks and Risk Mitigation, Camila Tobon, Shook Hardy Bacon, Denver

AI in the Legal Industry: Navigating Opportunities and Challenges, **Daniel Barsky**, Holland & Knight, Miami

Class 2: Tuesday, January 10

New Frontiers in AI and Tax Practice

Required Reading:

Benjamin Alarie, Anthony Niblett, and Albert Yoon, *Data analytics and tax law (Research Handbook on Big Data Law* (Roland Vogl, ed.) (2021). On reserve in library or on canvas.

Ben Alarie, Rory McCreight, & Cristina Tucciarone, *The Path of Tax Law: Towards Legal Singularity*, 180 Tax Notes Federal 1455 (Aug. 28, 2023). Or available on canvas.

Prompt Engineering: There is lots of material that can provide you with background on Prompt Engineering on the web. You should become familiar with the concept. Similarly, you will want to do some background prep in understanding **Microsoft Power Bi**. We will be utilizing both of those tools in today's class.

Materials on Debt v. Equity Legal Question:

IRC Section 385

Laidlaw Transportation Inc. v. Commissioner, T.C. Memo 1998-232

Fin Hay Realty Co. v. United States, 398 F.2d 694, 697 (3d Cir. 1968)

Presentation: Defining Generative AIDaren Campbell, Ivan Roussev – EY

Presentation: Prompt Engineering; Power BI

Clara Parra Espinosa, Microsoft, Director WW Tax & Customs, and Lina Rebouh

Generative AI and Power BI Demos

PowerBI Exercise: Due Friday

Class 3: Wednesday, January 11

Tech Tools

Required Reading

- 1. <u>Webinar:</u> Tax Analysts: AI in Tax: Possibilities and Challenges (Jun. 6, 2023) https://events.taxanalysts.org/06062023
- 2. Frankenreiter, Jens and Nyarko, Julian, Natural Language Processing in Legal Tech. Legal Tech and the Future of Civil Justice (David Engstrom ed.) Forthcoming, Available at SSRN: https://ssrn.com/abstract=4027030 or https://dx.doi.org/10.2139/ssrn.4027030
- 3. Pierce, Natalie and Goutos, Stephanie, Why Lawyers Must Responsibly Embrace Generative AI (June 14, 2023). Berkeley Business Law Journal, Vol. 21, No. 2, 2024, Available at

SSRN: https://ssrn.com/abstract=4477704 or http://dx.doi.org/10.2139/ssrn.4477704

Legal Tech: Presentation from Tori Kim, ebrevia

Exercise: Contract Term Extraction (due on Friday)

TaxGPT: Presentation from Benjamin Alarie, BlueJ Legal

Exercise: Debt Equity Analysis (Due on Friday)

Review: ChatGPT Exercise

Class 4: Thursday, January 12

AI and Tax Administration, Regulating AI

Required Reading

- 1. White House Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence (Oct. 30, 2023) https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/ and on canvas
- 2. AI Accountability Policy Request for Comment, A Notice by the National Telecommunications and Information Administration on 04/13/2023, NTIA-2023-0005 https://www.federalregister.gov/documents/2023/04/13/2023-07776/ai-accountability-policy-request-for-comment and available on canvas
- 3. The Bletchley Declaration by Countries Attending the AI Safety Summit, 1-2 November 2023, https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023, and available on canvas.
- 4. Ryan Calo, *Modeling Through*, 71 Duke L. J. 1391 (2021) https://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=4118&context=dlj
- 5. Joshua Blank & Leigh Osofsky, *Legal Calculators and the Tax System*, 16 Ohio St. Tech L.J. 73 (2020). HeinOnline

Remarks by: IRS, LB&I: Ted Setzer, Deputy Commissioner, Compliance & Integration, Ron Hodge III, Acting Director, Compliance & Analytics, LB&I; Eric Cirelli

Optional Additional Reading

OECD Forum on Tax Administration, *Tax Administration 3.0: The Digital Transformation of Tax Administration*, http://www.oecd.org/tax/forum-on-tax-administration/publications-and-products/tax-administration-3-0-the-digital-transformation-of-tax-administration.htm (2020)

Kimberly A. Houser and Debra Sanders, *The Use of Big Data Analytics by the IRS: Efficient Solutions or the End of Privacy as We Know It?*, XIX Vanderbilt J. Entertain't & Tech. L. 817 (2017) <u>HeinOnline</u>

Class 5: Friday, January 13

Review:

eBrevia Contract extraction tool

BlueJ: Debt/Equity Analysis

PowerBI: Debt Equity Analysis

Crypto, DeFi, and Tax

- 1. Coinbase Comments on IRS Proposed Crypto Broker Reporting Regulations (Nov. 10, 2023). Available on canvas or at: <u>TaxNotes</u>.
- 2. OECD, Taxing Virtual Currencies: An Overview Of Tax Treatments And Emerging Tax Policy Issues (2020) www.oecd.org/tax/tax-policy/taxing-virtual-currencies-an-overview-of-tax-treatments-and-emerging-tax-policy-issues.htm (chapter 3) (available in Canvas)
- 3. OECD, Crypto-Asset Reporting Framework and Amendments to the Common Reporting Standard (2022) https://www.oecd.org/tax/exchange-of-tax-information/crypto-asset-reporting-framework-and-amendments-to-the-common-reporting-standard.htm (pp 1-26)
- 4. GAO, Virtual Currencies: Additional Information Reporting and Clarified Guidance Could Improve Tax Compliance GAO-20-188 (Feb 12, 2020) https://www.gao.gov/products/GAO-20-188
- 5. OPTIONAL: Eric D. Chason, *Cryptocurrency Hard Forks and Revenue Ruling 2019-24* (December 9, 2019). 39 Virginia Tax Review 2 (2019), available at https://ssrn.com/abstract=3501179

NOTE: These are all very lengthy readings. I advise you to read just the introductions and/or to skim them. The point is to get a sense of what governments are trying to do and the challenges, not to absorb every detail of the proposed regulatory schemes.

Presentation from: Lawrence Zlatkin, Dana Flynn, and Peter Psiachos, all of Coinbase

University Policy on Accommodating Students with Disabilities:

Students requesting accommodation for disabilities must first register with the Dean of Students Office (http://www.dso.ufl.edu/drc/). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Office of Student Affairs when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

University Policy on Academic Misconduct:

Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/.

**Netiquette: Communication Courtesy: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats.

Netiquette Guide for Online Courses

Getting Help:

For issues with technical difficulties for E-learning in Sakai, please contact the UF Help Desk at:

- <u>Learning-support@ufl.edu</u>
- (352) 392-HELP select option 2
- https://lss.at.ufl.edu/help.shtml

** Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources are available at http://www.distance.ufl.edu/getting-help for:

- Counseling and Wellness resources
- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support

Should you have any complaints with your experience in this course please visit http://www.distance.ufl.edu/student-complaints to submit a complaint.

Course evaluation:

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.