LAW 6940 Entrepreneurship & Innovation Clinic [12859] UNIVERSITY OF FLORIDA LEVIN COLLEGE OF LAW

FALL SYLLABUS - LAW 6940 - 3 CREDITS

Professor Thinh Nguyen

BG 105A

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MEETING TIME: Thursday 3:30 - 5:30 PM

LOCATION: MLAC - 213

COURSE DESCRIPTION AND OBJECTIVES:

Welcome to the **Innovation & Entrepreneurship Clinic**, directed by Professor **Thinh Nguyen**. This course introduces students to the practice of technology law by representing inventors, researchers, entrepreneurs, start-ups, and technologists in matters related to intellectual property (IP), technology licensing, and artificial intelligence (AI). Students will represent pro bono clients under the supervision of the director and experienced attorneys in registering copyrights, trademarks, and patents, in drafting and negotiating technology agreements, in technology-related litigation, and in counseling clients on a wide variety of issues related to AI and IP. Students will also deepen their understanding of AI technology through experiential learning by using Python and open source AI libraries to build, test, and deploy their own AI and machine learning applications. Students will also learn from guest speakers about contemporary issues at the intersection of law and technology and have opportunities to practice technology transaction skills like drafting and negotiation in classroom simulations.

STUDENT LEARNING OUTCOMES:

OBJECTIVES:

At the end of this course, students should be able to:

- Understand the role that IP protection plays in start-up growth and development
- Identify the key drivers and negotiation strategies in technology transactions and frame them within the context of research, development, and commercialization relationships in the technology environment;
- Understand how AI works by using Python and open source AI programming packages to develop, train, and test basic machine learning models
- Apply their understanding of AI and IP to representation of clients who are innovating in AI or otherwise engaged with issues arising from AI applications
- Further deepen their drafting, negotiation, and counseling skills within the context of client representation

REQUIRED READING MATERIALS:

Readings for this course will be assigned on a weekly basis to reinforce lessons, provide you with additional context, or to prepare you for material in a subsequent class. There is no textbook required for this class, and all readings will be made available online no later than Friday (for class the following week). Please check the Canvas website at the end of each class for the assigned readings for the next class.

COURSE EXPECTATIONS AND GRADING EVALUATION:

This course is graded satisfactory (S) / unsatisfactory (U) based on attendance, participation in classroom exercises, completion of weekly assignments, and work on clinic client matters, including timely completion of work product, as documented in reflection journals. This grading policy is to encourage you to take academic risks by exploring areas that may be new or intellectually challenging for you, but you should strive to do your best and seek help from me as needed.

CLASS ATTENDANCE AND MAKEUP POLICY:

Attendance in class is required by both the ABA and the Law School. Attendance will be taken at each class meeting. Students are allowed three (3) absences during the course of the semester. Students are responsible for ensuring that they are not recorded as absent if they come in late. A student who fails to meet the attendance requirement will be dropped from the course. The law school's policy on attendance can be found here.

UF LEVIN COLLEGE OF LAW STANDARD SYLLABUS POLICIES:

Other information about UF Levin College of Law policies, including compliance with the UF Honor Code, Grading, Accommodations, Class Recordings, and Course Evaluations can be found at https://doi.org/10.1007/jhi/hits/

ABA OUT-OF-CLASS HOURS REQUIREMENTS: In compliance with ABA Standard 310, for each credit hour earned, a student must receive 15 hours of classroom or direct faculty instruction and complete at least 30 hours of out-of-class work per semester. For this course, which is 3 credits, a student will spend 45 hours per semester in the classroom and a minimum of 90 hours on out-of-class work to obtain credit. This means you will spend approximately 10.5 hours / week on this course, and 135 total hours in combined instruction and out-of-class work.

Students should track their hours in Clio or in a method identified by the Clinic Director. Students should record their time in detailed, six-minute increments, describing each task clearly and accurately. Students should track all time spent on work related to Clinic or client work, including class preparation, client meetings, preparing for Court, Court appearances, supervision meetings, and any other Clinic- and case-related activities. Be specific and descriptive in documenting time.

For Pro Bono Hours, refer to the Clinic Operating Manual.

COURSE SCHEDULE OF TOPICS AND ASSIGNMENTS

This syllabus is offered as a guide to the direction of the course. Our pace will depend in part on the level of interest and the level of difficulty of each section and is subject to change.

PART 1: INTRODUCTION / AI		
1	Class 1: Introduction & Course Overview:	
8/21		
	Course Overview:	
	- Overview of topics: Intellectual Property, Technology Transactions, AI	
	- Clinic procedures	
	- Professionalism and ethics	
	- AI Projects	
	Introduction to Artificial Intelligence:	
	- History of AI and machine learning	
	- Types of AI	
	- Artificial Neural Networks and Deep Learning	
2	Class 2: Deep Dive into Deep Learning	
8/28		
	- Implementing Perceptrons with a demonstration of the MNIST Digits dataset	
	- Vectors, matrix multiplication, weights and biases	
	- Overview of basic AI tasks: regression, association, classification	
3 9/4	Class 3: AI Training	
	- Backpropagation and gradient descent	
	- Confusion matrices, F Scores, and other measures of accuracy	
	- Undefitting, over fitting, and regularization	
	- Training AI models with Scikit-Learn: regression, Perceptrons, Support Vector	
	Machines, and Random Forests	
4 9/11	Class 4: Building Neural Networks	
	- Introduction to Keras and Tensorflow	
	- Understanding tensorflow using Tensorflow playground	
	- Revisiting MNIST Digits: training a model on MNIST digits using Keras /	
	Tensorflow	
	- Building Keras models with the Sequential interface, functional interface, and	
-	subclassing	
5	Class 5: Advanced Neural Networks	
9/18		
	- Computer vision models: convolutional networks	
	- Autoencoders / decoders: encoding information Property pours decides decides with time series data	
	 Recurrent neural networks: dealing with time series data Transformers and LLMs: language models 	
6	Class 6: Building Advanced Neural Networks	
9/25		
	- Implementing convolutional networks, RNNs, and autoencoders in Keras	
	- Large Language Models and Transformers:	
	- Huggingface transformer pipelines	
	- Using the ChatGPT, Gemini, and Claude APIs	

7 10/2	Class 7: Advanced Application of LLMs
	- Introduction to Langchain
	- Semantic search
	- Structured query and data extraction
	- Retrieval Augmented Generation (RAG) and Cache Augmented Generation (CAG)
	- Agentic AI
8 10/9	PART II: Innovation Law
	Class 8: Introduction to Intellectual Property Practice
	- Overview of forms of intellectual property protection
	- Copyright
	- Trademark
	- Trade secrets
	- Patents
9	Class 9: Continue Introduction to Intellectual Property Practice
10/16	
	- Ethical considerations
	- Portfolio counseling
	- Litigation strategies
1.0	- IP valuation
10 10/23	Class 10: The Innovation Ecosystem
	- Formation and financing issues with start-ups
	- The role of private equity and founders
	- Exit strategies for founders and employees
- 1 1	- The role of IP in company valuation and exit
11 10/30	Class 11: Licensing IP
	- Research and development, technology licensing, and commercialization strategies
	- Basic forms of licensing technology:
	- Non-disclosure agreements
	- Patent licensing
	- Trademark licensing
	- Copyright licensing
12 11/6	Class 12: Continue Licensing IP
	- Software licensing:
	- Software development licenses
	- End User License Agreements (EULA)
	- Cloud services and platforms

	- License negotiation exercise
13 11/13	Class 13: Open Source Software
	- Conclude negotiation exercise
	- Introduction to Open Source Software
	 - Introduction to philosophy of Free and Open Source Software (FOSS) - OSI Open Source Definition - Permissive vs. copyleft licenses
	Open Source AIAdvising start-up clients on open source