

PatentX
Handbook for Teachers
version 2.1, March 9, 2022

Introduction

PatentX is a collaborative global network of courses on patent law. Pilot versions of PatentX courses were offered at Harvard and the National Law University, Delhi, in 2020 and 2021. Complete versions of PatentX courses will be offered in several universities and nonacademic institutions, starting in September of 2022.

PatentX courses are designed to be one-semester university-level courses. However, their modular form would enable them to be taught in more intensive formats. The minimum duration of a course compatible with retention of the material by students would be two weeks.

All PatentX courses begin with a “Core,” consisting of seven modules. Each module contains a recorded lecture that describes a major dimension of the patent system and a set of readings that juxtapose the ways in which an important issue within that dimension is currently addressed in at least five jurisdictions. The goal of the Core is to provide students a deep understanding of all aspects of the global patent system — without which they would be unable thoughtfully to analyze more advanced topics. The syllabus for the Core, which contains links to all of the recorded lectures and reading assignments, is available at <https://ipxcourses.org/patentx-core/>.

In addition to the Core, each PatentX course includes five optional modules, which examine various aspects of patent law itself, its theoretical foundations, or its impact on economic and social life. The diverse menu of potential optional topics, from which each PatentX teacher can choose when shaping this portion of his or her course, is available at <https://ipxcourses.org/patentx-options/>. The menu currently contains 10 finished modules and 7 modules that are in various stages of production. Others will likely be added in the near future. Like the modules in the Core, each of the optional modules contains a recorded lecture and a set of reading assignments.

Patent Law and Global Public Health

Because of the severity of the challenges that global pandemics present to the patent system, the PatentX course that thus far has received the most work and attention focuses on the relationships among patent law, other legal systems, and public health. The complete syllabus for the course is available at <https://ipxcourses.org/patent-law-and-global-public-health/>.

In addition to the Core modules, *Patent Law and Global Public Health* contains a sequence of five modules that are designed to illuminate the public-health problems that confront every country in the world – and present especially serious challenges for lawmakers in developing countries. The first of these five modules describes the current global health crisis and analyzes its causes. The remaining four modules then consider a variety of ways in which lawmakers and policymakers might reconcile three equally important goals: (a) increasing their citizens’ access to existing vaccines and medicines; (b) augmenting incentives for pharmaceutical innovators to develop new

vaccines and medicines to combat both neglected endemic diseases and future pandemics; and (c) ensuring that the vaccines and medicines distributed to patients are safe and effective.

Potential PatentX Courses

A wide variety of other curricula could be assembled from the optional modules. A few examples are set forth below:

- A course designed to introduce students to the hardest issues currently confronting lawmakers throughout the world might combine the Core with a set of modules drawn from the Frontiers menu (301-306). This would enable the teacher to explore such topics as: the patentability of the fruits of Artificial Intelligence; patents on innovations in Financial Technology; Traditional Knowledge and Genetic Resources; and Standard Essential Patents.
- A course aimed at practitioners, rather than lawmakers and policymakers, would likely include the three modules in the Practice menu (501-503), which address patent litigation in multiple jurisdictions and strategic uses of patents and other forms of intellectual property.
- A course designed to illuminate the historical and theoretical foundations of the patent system might include the three modules in the Theory menu (401-403), which explore the insights that can be drawn from utilitarianism; various theories of fairness; and cultural theories.

Creating and Teaching a PatentX Course

One of the purposes of the modular structure of Patent X is to afford each teacher substantial latitude in selecting topics and reading assignments that fit his or her audience, objectives, and preferred pedagogy. When making such choices, a teacher might find useful the following thoughts and suggestions:

- The primary reason that the reading assignments in the Core portion of each PatentX course contain documents showing how each issue is addressed in several national and regional jurisdictions is to expose students to a variety of approaches (each presumptively compatible with the major multilateral treaties), thereby enabling students to make informed decisions concerning the options that would be best for their own countries. However, requiring students to read the materials from all of the jurisdictions included in the Core syllabus is probably excessive; a teacher is likely to find it sufficient to assign the materials from three or four countries.
- The recorded lecture in each module is (or will be) roughly 90 minutes in length. The reading assignments in each module should take students roughly an additional 90 minutes to complete. Finally, students will be expected during each module to participate in at least one seminar (roughly 90 minutes in length) supervised by a knowledgeable teacher, in which they discuss issues raised by the lecture and the readings. The typical student will thus require approximately 4.5 hours to complete each module. By adding reading assignments or seminars, a teacher can of course increase that amount.

- Each teacher must determine for himself or herself how best to organize the live seminars that are crucial to the course. Our own experience is that deep discussion is facilitated by using case studies that illuminate difficult issues by example. Thus far, we have developed 46 such case studies. They are collected in a password-protected database, to which all PatentX teachers will be given access. Each of these case studies contains material suitable for distribution to students. Most case studies also contain Teaching Notes. To preserve their pedagogic value, the Teaching Notes must not be made available to students. The current list of case studies is set forth below.

 PX001 Apple	 PX021 Sram	
 PX002 Windsurfer	 PX022 CRISPR	
 PX003 Mousetrap	 PX023 IndiaPharma	
 PX004 Polaroid	  PX024 Dana Farber	
 PX005 Beachbub	  PX025 Ski Drone	
 PX006 American Axle	  PX026 Beneficial Utility	
 PX007 Dabus	  PX027 Rocna	
 PX008 Group Selfies	  PX028 Regeneron	
 PX009 Salty Frog	  PX029 Automotive Tech	
 PX010 Roberts	  PX030 Windy City	
 PX011 Fingerprints	  PX031 Epilady	
 PX012 Geolocation	 PX032 Quassia Amara	
 PX013 Lanard	  PX033 Hoodia	
 PX014 Rudy	  PX034 Rooibos	
 PX015 CardioNet	  PX035 Aircraft	 PX041 Bounded Rationality
 PX016 3D Printing	  PX036 Amgen	 PX042 Artificial Intelligence
 PX017 DJOrtho	  PX037 Archer	 PX043 User Innovation
 PX018 Lexmark	  PX038 Barry	 PX044 Differential Pricing
 PX020 Oncomouse	  PX039 Extrusion	 PX045 Standard Essential Patents
	  PX040 Actavis UK	 PX046 Prior User Rights

Collaboration

We hope that, in at least four ways, PatentX teachers will share ideas and materials:

- 1) We strongly encourage PatentX teachers to develop additional case studies – and then to submit them for addition to the PatentX database, thereby making them available to all other teachers in the network. Case studies that feature aspects of patent law and public health in developing countries would be especially valuable.
- 2) We also encourage teachers to suggest revisions of the Core syllabus. We are especially interested in judicial opinions or short essays that would enable us to expand the sets of jurisdictions that are featured in the reading assignments.
- 3) In addition to the case studies, the PatentX database contains a folder for each of the PatentX modules, the purpose of which is to enable teachers to exchange ideas concerning the materials and techniques they have found most helpful for teaching the topic in question. We are in the process of seeding these folders with our own thoughts concerning the techniques that we have found most useful in teaching at our institutions. We strongly encourage all PatentX teachers to add their own suggestions and experiences.
- 4) Finally, we have created a password-protected blog, designed to enable PatentX teachers and students to exchange ideas concerning recent developments in Patent Law and in other fields of intellectual property. It is available at <http://ipfora.org>. We hope that teachers and students will seed the blog with notices about developments in their own jurisdictions.

Examinations and Certificates

At least twice during each year, we will provide to all PatentX teachers examinations that will enable their students to demonstrate mastery of Patent Law. PatentX teachers are encouraged to supplement the examination questions that we will supply with questions of their own. Each PatentX teacher will administer and grade his or her own examinations.

Students who pass one of these final examinations will receive a certificate of completion.

PatentX teachers who wish to use this certificate system must periodically provide to the PatentX Steering Committee random samples of their students' responses to the examination questions and the grades that the teacher assigned to them. The purpose of this obligation is to enable us to maintain the credibility of the certificates.

Summits

We hope to convene, once a year, a summit to which all PatentX teachers are invited. The principal purpose of these meetings will be to enable members of the network to share ideas concerning ways in which the project as a whole can be improved and to strengthen the PatentX community.

Global health conditions may require us to hold virtual summits. However, subject to obtaining funding, we hope to conduct these annual meetings in person.

Global Faculty

The following scholars constitute the PatentX global faculty. Each member is a PatentX teacher in his or her home institution, and provides expertise and support to the PatentX global network and affiliated institutions worldwide.

Margo Bagley, Emory Law School
William Fisher, Harvard Law School (chair)
Ruth Okediji, Harvard Law School
Arul Scaria, National Law University, Delhi
Hoachen Sun, Hong Kong University
Madhavi Sunder, Georgetown University Law School.