

Development of Technology and Patent System

<i>Course Code:</i>	<i>MATE110024</i>
<i>Course Title:</i>	<i>Development of Technology and Patent System</i>
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Course Description

Deriving from technological innovation, patent system (PS) is the key toward promotion, diffusion, and exclusion of technology. To the extent that it enhances diffusion of technical knowledge through the economy and generates useful adaptive inventions, it contributes positively to productivity growth. One question is how the PS works. Furthermore, growth of PS arose the problem of anti-monopoly legislation, especially on how to balance technological protection and anti-monopoly.

In our course, development of technology and patent system will be reviewed. PS between nations will be introduced. In addition, in technology-integrated industry as electronics, the patent pool issue will be discussed. It is noted that the patent protection varies with industries. As a result, the way they are protected in various industries such as pharmacy, electronic and chemistry industries will be discussed to help understand better on patent system.

In addition to theory, this course will also enable you to patent practice, like how to apply patents in China, as well as PCT (Patent Cooperation Treaty) patent.

Choice between trade secret and patent is another issue for corporation. In fact, it is the issue on intellectual property protection strategy and of course it will be discussed sufficiently. Topics like why some technical scheme will be applied as patents, while others will be protected as trade secrets, how to construct intellectual property fence to obtain maximum benefit will be dealt with.

The issue on how to play the so-called patent games in different countries is of great importance for multi-national corporations. In our courses, the patent-related legal system will be introduced to help control the legal risk of exports and technical imports.

Course Goals and Objectives

Upon completion of this course, students will:

- Be able to articulate how patent system is affecting technological innovation.
- Understand the balance between intellectual property protection and anti-monopoly.
- Understand the difference between trade secret and patent and can make choice between them.
- Be able to apply patent (China patent) and PCT patent.
- Master skill on patent strategy.

Textbook

Every class, we will have readings about development of technology and patent system. Some of these articles will have some references.

I will expect you to find articles (in English-language and Chinese media) relevant to this course so that we can discuss them.

.If you don't understand everything in the readings I have assigned, don't worry. Do your best, and we will highlight the most important points in class.

Attendance Policy

You must show up for every class. Class will start promptly. Please be on time. Your success in this course depends on active class participation. Attend every class meeting so you can learn from and contribute to our discussions and other activities. You are expected to participate regularly in class. If you miss two classes without an excuse, your final grade in the course will be reduced by one letter. If you miss three or more classes, you will receive an F in the course.

During our class meetings, you should show respect to your classmates and your instructor by turning off your cellphone, by paying attention and by participating in our discussions.

Late Work

All assignments in our Development of Technology and Patent System course are due by the start of class. If you have an emergency (a serious illness or family crisis), contact me to discuss the situation; I might allow you to turn in your work late with a penalty. Otherwise, late work will not be accepted.

Ethics and Academic Honesty

Fabricating material or using another's work without attribution is an extremely serious offense. And you must not make up sources, quotes or facts.

Intentional and flagrant acts of academic dishonesty will result in an F in the course. Accidental acts of academic dishonesty will be dealt with on a case-by-case basis; at a minimum, they will result in failure on the assignment. Talk to me if you have any questions about whether something might constitute academic dishonesty.

Assignments, Tests and Calculation of Final Course Grades

Here are my ideas about the kind of work you will do in this class. I may modify this list after we have met and discussed the course.

Group presentation (July 28) – We will divide the class into groups of three to five students. Each group will select a topic, such as case study of patent strategy. The group then will make a 5-10 minutes presentation to the entire class about that topic.

Midterm exam (July 20) – You will take an exam covering Chapters 1-4 and other material we have covered to date.

Quizzes (July 15 and 30) – You will take two short comprehension and skills quizzes.

Final exam (Aug 4) – You will take an exam covering important content from the entire program (Chapters 1-9).

This chart show how much each gradebook item will be worth. This grading system will be modified if we change the number or types of assignments during the semester. Changes will be announced in class and on our course website.

Gradebook item	Weight
Group presentation (July 15, 23)	15%
Midterm exam (July 16)	30%
Quizzes (July 13 and 27) and class participation	15%
Final exam (July 30)	40%
Total	100%

Here is how I will calculate your final grade:

Weighted total	Final grade	Weighted total	Final grade	Weighted total	Final grade
		94-100%	A	90-93%	A-
87-89%	B+	84-86%	B	80-83%	B-
77-79%	C+	74-76%	C	70-73%	C-
67-69%	D+	64-66%	D	60-63%	D-
Below 60%	F				

Tentative Course Schedule

Changes will be announced in class and by email

DATE	TIME	TOPIC	IND ASSIGN	GROUP ASSIGN
July 6	13:00-15:10	Introduction : Brief history of technological development and patent system		
July 8	8:55-11:35	Chapt1: intellectual property protection and anti-monopoly		
July 9	13:00-15:10	Chapt2:Patent feature in different eras		
July 13	13:00-15:10	Chapt3: Choice between patent and trade secrets	Quiz	
July 15	8:55-11:35	Chapt4: Patent systems in different nations and Intellectual property protection in various industries (electronics, pharmaceutical industry, etc)		Patent system in one industry
July 16	13:00-15:10	Midterm Exam		
July 20	13:00-15:10	Chapt5: How to apply a patent		
July 22	8:55-11:35	Chapt6: Patent litigation and liabilities: How to reply invalidity of patent application		
, July 23	13:00-15:10	Chapt7: On Patent Infringement		How to protect your patent
July 27	13:00-15:10	Chapt8: Intellectual property protection strategy in multi-national corporation	Quiz	
July 29	8:55-11:35	Chapt9: The growth of patent pool and its strategy		
July 30	13:00-15:10	Final Exam		