

National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"



Department of Intellectual Property and Private Law Faculty of Sociology and Law

Department of Machine Design Institute of Mechanical Engineering

Intellectual property and patent science

SYLLABUS

for humanitarian and technical specialties of the Igor Sikorsky Kyiv Polytechnic Institute

REQUISITES FOR BASIC DISCIPLINE

Level of higher education	second (master's)	
Branch of knowledge	for branches of knowledge 02, 03, 05, 06, 07, 16, 23, 28	
Specialty	all specialties of the specified branches of knowledge	
Educational program	all educational programs of specialties related to these areas of knowledge	
Discipline status	mandatory discipline	
Form of study	full-time / day	
Year of preparation, semester	year one, semesters 1 or 2 in accordance with Annex 3 of the order № HOH / 18/2021 from 01.02.2021 On the organization and planning of the educational process for the 2021-2022 academic year	
The scope of discipline	3 credits (90 hours), including 36 hours of lectures, practical classes 18 hours, independent work 36 hours	
Semester control /	Modular control work	
control measures	Test	
Lessons schedule	According to the schedule	
Language of instruction	Ukrainian / English	
Information about the course leader / teachers	Lecturers and practical training teachers of department of intellectual property and private law (https: //ipp.kp i.ua/about/vikladachi/) and the department of Machine Design in accordance with the load of scientific and pedagogical staff (https://km.kpi.ua/)	
Course placement	Determined by the lecturer of the relevant part of the course and brought to the notice of students in the first lesson	

CURRICULUM OF THE DISCIPLINE

1. Description of the discipline, its purpose, subject of study and learning outcomes

1.1. Description of the discipline

The discipline consists of two parts :

• Part 1. "Intellectual property and patent science - 1. Intellectual property law" (provided by the Department of Intellectual Property and Private Law of the Faculty of Sociology and Law).

• Part 2. "Intellectual property and patent science - 2. Patent science and acquisition of rights" (provided by the Department of Machine Design of the Institute of Mechanical Engineering).

1.2. The purpose of the discipline

The purpose of the discipline is to train a specialist who has basic competencies in intellectual property law, in particular on the legislation and legal protection of intellectual property in Ukraine, their legal protection criteria and terms of property rights, evaluation, commercialization, and contractual methods of property rights. intellectual property and protection of intellectual property rights, creation of intellectual property objects, implementation of patent research on the databases of Ukrpatent, regional offices and the World Intellectual Property Organization, acquisition of rights (state registration of rights) to objects of intellectual property rights.

	The purpose of the discipline is the formation of students' competencies:		
GC 1	Ability to abstract thinking, analysis and synthesis.		
GC 2	Ability to search, process and analyze information from various sources.		
GC 3	Ability to identify, pose and solve problems.		
GC 4	Ability to work in a team.		
GC 5	Ability to work in an international context.		
PC 1	Ability to solve complex problems of biomedical engineering using the methods of mathematics, natural and engineering sciences.		
PC 2	Ability to develop a working hypothesis, plan and set experiments to test the hypothesis and achieve the engineering goal using appropriate technologies, technical means and tools.		
PC 3	Ability to analyze complex medical engineering and bioengineering problems and formalize them to find quantitative solutions using modern mathematical methods and information technology.		
PC 4	Ability to create and improve tools, methods and technologies of biomedical engineering for research and development of bioengineering facilities and systems for medical and technical purposes.		
PC 5	Ability to develop terms of reference for creation, as well as to model, evaluate, design and construct complex bioengineering and medical engineering systems and technologies.		
PC 7	Ability to work in a multidisciplinary team.		

1.3. The subject of study of the discipline

The subject of discipline - a set of legal norms that regulate public relations reflected in legislation, legal doctrine and judicial practice and which are related to the creation, protection of the results of intellectual creative activity and protection of rights to them.

1.4. Learning outcomes

PLO 1	Understanding of fundamental-applied, medical-physical and bioengineering bases of technologies and equipment for research of physiological and pathological processes of the person .
PLO 2	Understanding the principles of action of modern diagnostic equipment and display systems of biomedical information, the basis of appropriate software .
PLO 3	Possession of modern methods of scientific research software, construction of adequate theoretical models and methods of their substantiation
PLO 4	Application of calculation methods and selection of classical and new designs of biomaterials, elements of devices and systems of medical appointment .
PLO 5	Application of methods and tools for designing computer networks .

PLO 10	Knowledge in the most advanced fields of education and professional activity and at the junction of different fields		
PLO 11	Understanding the latest achieving in Biomedical Engineering		
PLO 12	Understanding of ethical, environmental and commercial constraints in engineering practice		
PLO 13	Knowledge of a foreign language to an extent sufficient for general and professional communication		
PLO 15	Understanding of specialized conceptual principles acquired in the process of learning and/or professional activity at the level of the latest achievements, which are the basis for original thinking and innovation, in particular in the context of research work.		
PLO 22	Presentation of research and development results in the state and foreign languages in the form of applications for inventions, scientific publications, reports at scientific and technical events.		
PLO 23	Providing methodological and practical assistance in the implementation of projects and programs, plans and agreements.		
PLO 24	Mastery of adaptation skills and action in situations related to work in the specialty, the ability to generate new ideas in the field of biomedical engineering.		
PLO 25	Implementation of achievements of domestic and foreign science and technology, use of creative initiative, rationalization, invention and best practices that ensure the effective operation of the medical enterprise.		

2. Prerequisites and postrequisites of the discipline

The list of disciplines, or knowledge and skills, possession of which is necessary for the applicant for higher education for successful mastering of the discipline	List of disciplines, which are based on learning outcomes in this discipline
It is studied on the basis of a bachelor's degree	 Special disciplines that involve the implementation of tasks of technical creativity Scientific work on the topic of the master's dissertation Practice Research practice

3. The content of the discipline

Part 1. Intellectual property law

Topic 1. The system of intellectual property

Topic 2. Exemption and acquisition of rights to intellectual property

Topic 3. Protection of intellectual property rights

Topic 4. Contracts in the field of intellectual property

Topic 5. Economics of intellectual property

Topic 6. Intellectual property management

Part 2. Patent science and acquisition of rights

Topic 7. Creation and patent information research of objects of industrial property rights

Topic 8. Legal protection of the results of scientific and technical creativity

Topic 9. Legal protection of commercial designations

Topic 10. Legal protection of copyright and related rights

Topic 11. Unfair competition, its types, mechanisms of prevention, detection and counteraction, liability for violation of rights

4. Training materials and resources

Part 1. Basic literature

- 1. Право інтелектуальної власності: підручник / за заг. ред. С.Б. Булеци, О.І. Чепис. Ужгород: РІК-У, 2019. 488 с. (бібліотека Університету);
- 2. Право інтелектуальної власності: підручник / за заг. ред. О.І. Харитонової. Київ: Юрінком Інтер, 2019. 539 с. (бібліотека Університету);
- 3. Інтелектуальна власність та авторське право: навчальний посібник/ І.М. Чістякова та інші. Київ: Каравела, 2019. 203 с. (бібліотека Університету).
- 4. Верба І.І. Основи інтелектуальної власності [Електронний ресурс] : навчальний посібник / І. І. Верба, В. О. Коваль ; за ред. С. В. Чікіна ; НТУУ "КПІ". 2-ге вид., перероб. і доп. Електронні текстові дані (1 файл: 2,20 Кбайт). Київ: НТУУ "КПІ", 2013. 262 с.: 23 іл. Режим доступу http://library.kpi.ua:8080/handle/123456789/2387
- Ромашко А.С. Міжнародні договори та угоди у сфері інтелектуальної власності: Навч. посіб. / А.С. Ромашко, І.І. Верба, В.В. Пригода. – Вид.2-ге переробл. та доповн. [Електронний ресурс] / - К.: НТУУ "КПІ", 2015. – 186. Режим доступу http://ela.kpi.ua/handle/123456789/28002

Additional literature :

- 1. Посібник для суддів з інтелектуальної власності /І.М. Бенедисюк та ін. К.: К.І.С., 2018. 424 с.
- 2. Коваль І.Ф. Комерціалізація прав інтелектуальної власності: навч.посіб. К.: Юрінком Інтер, 2018. 272 с.
- 3. Якубівський І.Є. Набуття, здійснення та захист майнових прав інтелектуальної власності в Україні: монографія. Львів: ЛНУ імені Івана Франка, 2018. 522 с.
- 4. Вахонєва Т.М. Авторське право і суміжні права в Україні: навчальний посібник. К.: ВД «Дакор», 2016. 564 с.
- 5. Жилінкова О.В. Договірне регулювання відносин щодо інтелектуальної власності в Україні та за кордоном: монографія. К.: Юрінком Інтер, 2015. 280 с.
- 6. Коваль І. Ф. Захист прав у сфері промислової власності: проблеми законодавчого забезпечення та правозастосування: монографія. К.: НДІ ІВ НАПрН України, Лазурит-Полиграф, 2011. 320 с.
- Цивільний кодекс України: науково-практичний коментар (пояснення, тлумачення, рекомендації з використанням позицій вищих судових інстанцій, Міністерства юстиції, науковців, фахівців). Т. 6: Право інтелектуальної власності / за ред. проф. І. В. Спасибо-Фатєєвої. Х.: ФОП Лисяк Л.С., 2011. 592 с. (Коментарі та аналітика).

Information resources of the Internet

Web-site of the Verkhovna Rada of Ukraine. Legislation of Ukraine - <u>https://zakon.rada.gov.ua/</u> Web-site of the Ministry of Economy of Ukraine –

http://www.me.gov.ua/Tags/DocumentsByTag?lang=uk-UA&id=bb27fb37-4305-4686-9ea0-995d1c10f028&tag=DerzhavnaSluzhbaIntelektualnoiVlasnosti

Web-site of the State Enterprise "Ukrainian Institute of Intellectual Property" https://ukrpatent.org

Web-site of the State Organization "Ukrainian Agency for Copyright and Related Rights"http://www.uacrr.kiev.ua

Web-site of the World Intellectual Property Organization http://www.wipo.int/portal/index.html.ru

Part 2. Basic literature

1. Кузнєцов Ю.М. Патентознавство та авторське право: Підручник / Ю.М. Кузнєцов – К.: ТОВ "Кондор", 2005. – 428 с., 2-е видання, перероблене і доповнене, 2009. – 446 с.

- 2. Мікульонок І.О. Інтелектуальна власність та патентознавство: підручник. Київ: КПІ ім. Ігоря Сікорського, Вид-во «Політехніка»», 2019. 244 с. Досткп: https://ela.kpi.ua/handle/123456789/31664
- 3. Мікульонок І.О. Складання та подання заявки на винахід і заявки на корисну модель: навч. посіб. Київ : КПІ ім. Ігоря Сікорського, 2021. 116 с. Доступ: https://ela.kpi.ua/handle/123456789/39745
- Практикум з дисципліни "Патентознавство та авторське право" для студентів та аспірантів технічних спеціальностей та спеціальності "Інтелектуальна власність" [Електронний ресурс] / А. С. Ромашко, О. М. Кравець, О. В. Литвин ; НТУУ "КПІ". – Електронні текстові дані (1 файл: 2,72 Мбайт). – Київ: НТУУ "КПІ", 2014. - Режим доступу http://ela.kpi.ua/handle/123456789/28003
- Ромашко А.С. Міжнародні договори та угоди у сфері інтелектуальної власності: Навч. посіб. / А.С. Ромашко, І.І. Верба, В.В. Пригода. – Вид.2-ге переробл. та доповн. [Електронний ресурс] / - К.: НТУУ "КПІ", 2015. – 186. Режим доступу http://ela.kpi.ua/handle/123456789/28002
- 6. Ромашко А.С. Торговельна марка: самостійний пошук, підготовка до реєстрації, моніторинг Навч. посіб. / А.С. Ромашко, О.М.Кравець. [Електронний ресурс] / К.: НТУУ "КПІ", 2016. 170. гриф Затверджено Вченою радою НТУУ "КПІ" від 30 червня 2016 р– Режим доступу http://ela.kpi.ua/handle/123456789/28006

Part 2. Additional literature :

- 1. Альтшуллер Г. С. Найти идею: Введение в ТРИЗ теорию решения изобретательских задач. 4-е изд. М.: Альпина Паблишер, 2011.
- 2. Волкотруб И. Т. Основы художественного конструирования: Учебник для худож. учеб. заведений. – 2-е изд., перераб и доп. – Киев: Выща школа, 1988. – 191с.: ил.
- 3. Кузнєцов Ю. М., Мікульонок І. О., Самойленко О. В. Практикум з дисципліни "Патентознавство та авторське право". Навчальний посібник / Під ред. Ю.М. Кузнєцова. – Київ: НТУУ "КПІ", 2014. – 317 с.
- Текст лекцій з дисципліни "НАБУТТЯ ПРАВ ІНТЕЛЕКТУАЛЬНОЇ ВЛАСНОСТІ" Частина 1 "Набуття прав на винахід (корисну модель)" для спеціальностей ОКХ спеціаліст 7.18010011 "Інтелектуальна власність" та магістр 8.18010011 "Інтелектуальна власність"/ Уклад. А.С. Ромашко - К.: НТУУ "КПІ" (електронне видання), 2012. - 137 с. [Електронний ресурс].
- 5. Текст лекцій з дисципліни «Набуття прав інтелектуальної власності» Ч. 2 «Набуття промислові зразки» спеціальностей ОКХ прав на для спеціаліст 8.18010011 «Інтелектуальна 7.18010011 «Інтелектуальна власність», магістр власність» [Електронний ресурс] / НТУУ «КПІ» ; уклад. А. С. Ромашко. – Електронні текстові дані (1 файл: 432 Кбайт). - Київ : НТУУ «КПІ», 2013. - 64 с. [Електронний pecypc]. - Режим доступу: <u>http://ela.kpi.ua/handle/123456789/2662</u>
- Збірник тестових питань з дисципліни «Патентознавство та авторське право» для студентів освітньо-кваліфікаційного рівня «магістр» [Електронний ресурс] / НТУУ «КПІ»; уклад. А. С. Ромашко. Електронні текстові дані (1 файл: 217 Кбайт). Київ : НТУУ «КПІ», 2013. 34 с. [Електронний ресурс]. Режим доступу: <u>http://ela.kpi.ua/handle/123456789/2663</u>

Information resources of the Internet

Web-site of the Verkhovna Rada of Ukraine. Legislation of Ukraine: <u>https://zakon.rada.gov.ua/</u> Web-site of the Ministry of Economy of Ukraine –

http://www.me.gov.ua/Tags/DocumentsByTag?lang=uk-UA&id=bb27fb37-4305-4686-9ea0-995d1c10f028&tag=DerzhavnaSluzhbaIntelektualnoiVlasnosti Web-site of the State Enterprise "Ukrainian Institute of Intellectual Property" - https://ukrpatent.org

Web-site of the State Organization "Ukrainian Agency for Copyright and Related Rights" - http://www.uacrr.kiev.ua

Web-site of the World Intellectual Property Organization - <u>http://www.wipo.int/portal/index.html.ru</u>

EDUCATIONAL CONTENT

5. Methods of mastering the discipline (educational component)

5.1 Distribution of study time by topic

	Classroom,	IWS,
Names of content modules, topics	h.	h
Part 1. Intellectual property law		
Topic 1. Lecture 1 -2. Intellectual property system	4	1
Topic 1. Practical lesson 1. Intellectual property system	2	1
Topic 2. Lectures 3 -4. The emergence and acquisition of intellectual property	4	1
Topic 2. Practical lesson 2. The emergence and acquisition of rights to intellectual property objects	2	1
Topic 3. Lectures 5-6. Protection of intellectual property rights	4	2
Topic 3. Practical lesson 3. Protection of intellectual property rights		2
Topic 4. Lectures 7-8. Contracts in the field of intellectual property		2
Topic 4. Practical lesson 4. Contracts in the field of intellectual property		2
Topic 5. Lectures 9-10. Economics of intellectual property		2
Topic 5. Practical lesson 5. Economics of intellectual property	2	2
Topic 6. Lectures 11-12. Management of intellectual property	4	2
Topic 6. Practical lesson 6. Management of intellectual property	2	2
Modular control work		4
Test	2	
Total hours for parts 1:	36	24

Part 2. Patent science and acquisition of rights		
Lecture 1. Theme 7. Creation and patent information research of objects of	2	1
industrial property rights.		
7.1. Creativity as a kind of intellectual work.		
7.2. Methods of setting and solving creative problems on the example of		
invention.		
7.3. Stages of development of the invention		
Lecture 2. 7.4. Patent information and documentation, patent research.	2	1
7.5. Patent information resources.		
7.6. Patent research		
7.7. Patent form		
<i>Practical lesson №1</i> . Solving inventive problems. Patent information	2	2
search		
<i>Lecture 3.</i> Topic 8. Legal protection of the results of scientific and		1
technical creativity		
8.1. Procedure for acquiring rights to inventions and utility models		

Together for parts 1 and 2:	90	36
Total hours for part 2	18	12
trademark. Copyright registration		
Practical lesson № 3. Applying for registration of property rights to a	2	2
11.3. Parasitic marketing at events of mass sports and cultural nature		
Ukraine and the world		
11.2. Countering piracy, trolling and counterfeiting. Piracy and trolling in		
the Paris Convention and in Ukraine		
11.1. Unfair competition, its types. Regulations on unfair competition in		
detection and counteraction. Liability for violation of rights		
Topic 11. Unfair competition, its types, mechanisms of prevention,		
world		
10.3. Features of protection of objects of related rights in Ukraine and the		
10.2. State registration of copyrights		
<i>Lecture 6.</i> Topic 10. Legal protection of copyright and related rights 10.1. Features of copyright protection in Ukraine and the world	Z	1
9.3. Acquisition of rights to a geographical indication	2	1
9.2. Acquisition of trademark rights		
significance		
9.1. The concept of brand (commercial) name and geographical		
Lecture 5. Topic 9. Legal protection of commercial designations	2	1
industrial design. Protection of trade secrets		
<i>Practical lesson №2.</i> Applying for registration of property rights to an	2	2
aspects of their protection		
Scientific discovery, semiconductor product, plant varieties and some		
Procedure for acquiring rights to trade secrets and innovation proposals.		
<i>Lecture 4.</i> 8.3. Procedure for acquiring rights to industrial designs.	2	1

5.2. Methods of mastering

Theoretical part

Part 1. Intellectual property law - 24 hours (12 lectures)

Lectures 1 and 2. Intellectual property system (4 hours)

Purpose :

educational: to form an idea of the intellectual property right, the system of objects of intellectual property rights, the subjects of the right to them and content of their rights, legislation in the field of intellectual property, the state system of legal protection of intellectual property;

developmental: formation of logical legal thinking;

forming: to cultivate a positive and respectful attitude to legal science.

Contents of the lectures:

- 1. Concepts: "object of intellectual property" and " intellectual property rights".
- 2. Objects of intellectual property rights.
- 3. Subjects of intellectual property law.
- 4. National legislation on intellectual property.
- 5. International intellectual property law.
- 6. State system of intellectual property.

Lectures 3 and 4. The emergence and acquisition of objects of intellectual property rights (4 hours)

Purpose :

educational: to form an idea of the origin and acquisition of rights to various objects of intellectual property rights, the difference between the concepts of "origin" and "acquisition of rights" to objects of intellectual property rights;

developmental: formation of logical legal thinking;

forming: to cultivate a positive and respectful attitude to legal science.

Contents of the lectures:

1. The emergence of rights to objects of copyright.

- 2. The emergence of rights to objects of related rights.
- 3. Acquisition of rights to objects of patent law and industries samples.
- 4. Acquisition of rights to commercial designations.
- 5. The emergence and acquisition of rights to other objects of intellectual property rights.

Lectures 5 and 6. Protection of intellectual property (4 hours)

Purpose :

educational: to form an idea of the concepts, grounds, forms, methods of protection of intellectual property rights;

developmental: formation of logical legal thinking;

forming: to cultivate a positive and respectful attitude to legal science.

Contents of the lecture:

- 1. The concept and grounds for protection of intellectual property rights.
- 2. Jurisdictional form of intellectual property rights protection.
- 3. Non-jurisdictional form of intellectual property rights protection.

Lectures 7 and 8. Contracts in the field of intellectual property (4 hours)

Purpose :

educational: to form an idea of the contractual methods of disposing of intellectual property rights; developmental: formation of logical legal thinking;

forming: to cultivate a positive and respectful attitude to legal science.

Contents of the lecture:

1. The concept and content of the contract.

- 2. Contracts at the stage of creation of an object of intellectual property.
- 3. Contracts at the stage of use of intellectual property.
- 4. Contract on the transfer of exclusive intellectual property rights.
- 5. Other contracts on the disposal of intellectual property rights.

Lectures 9 and 10. Economics of intellectual property (4 hours)

Purpose :

educational: to form an idea of the commercialization of intellectual property rights; developmental: formation of logical legal thinking; forming: to cultivate a positive and respectful attitude to legal science. **Contents of the lecture:**

1. Intellectual property as an intangible asset.

2. Valuation of rights to intellectual property.

- 3. Accounting for intellectual property.
- 4. Taxation of transactions with objects of intellectual property rights .
- 5. Commercialization of intellectual property rights.

Lectures 11 and 12. Intellectual property management (4 hours)

Purpose :

educational: to form an idea of the principles of intellectual property management, the life cycle of the object of intellectual property rights and the management of intellectual property at different stages of its life cycle;

developmental: formation of logical legal thinking;

forming: to cultivate a positive and respectful attitude to legal science.

Contents of the lecture:

1. The concept of management and principles of intellectual property management .

- 2. Life cycle of the object of intellectual property rights.
- 3. Management of intellectual property at different stages of its life cycle.

Part 2. Patent science and acquisition of rights - 12 hours (6 lectures) TOPIC 7. CREATION AND PATENT INFORMATION RESEARCH OF OBJECTS OF INDUSTRIAL PROPERTY RIGHTS

PART 2. LECTURE 1

7.1. Creativity as a kind of intellectual work. Social and scientific and technical aspects of creativity. General characteristics of OIPR.

7.2. Methods of setting and solving creative problems on the example of invention. General classification of methods for solving inventive problems, their essence.

7.3. Stages of development of the invention

PART 2. LECTURE 2

7.4. Patent information and documentation, patent research. Patent documents and regulation base of patent information activities. The state system of patent information. National and international classifications of industrial property.

7.5. Patent information resources. Non-patent information. Using the Internet to search for patent information.

7.6. Patent research. The content and procedure of patent research. Life cycle of the object of economic activity. Patent form. The use of patent information in the creation and development of new technology. Patent landscape - concept and application.

7.7. Patent form. Appointment and preparation.

TOPIC 8. LEGAL PROTECTION OF RESULTS OF SCIENTIFIC AND TECHNICAL CREATIVITY

PART 2. LECTURE 3

8.1. The procedure for acquiring rights to inventions and utility models.

The concept of invention and utility model. Objects of inventions and utility models. Objects that are not recognized as inventions (utility models). Conditions for granting legal protection to inventions (utility models). Acquisition fees. Procedure for obtaining a patent: date of filing the application, priority of the application. Temporary legal protection, examination of the application, registration of the patent.

8.2. Application for registration of rights to an invention (utility model).

List of materials when submitting an application in Ukraine. The requirement of unity of invention (utility model). The invention (purpose, structure, assembly, features). Requirements for the description of the invention (utility model). Requirements for graphic materials that explain the description of the invention. Summary of the invention. Registration of application documents. Types and essence of examinations on applications, record keeping on application. Ways of

patenting an invention (utility model) in foreign countries.

PART 2. LECTURE 4

8.3. Procedure for acquiring rights to industrial designs

The concept of industrial design. Unregistered industrial design. Protection of unregistered industrial designs in the EU countries and in Ukraine and its term. Conditions for granting legal protection and conditions for protection of industrial design. Examination of industrial samples. Registration deadline. The scope of legal protection. Acquisition fees. Requirements for registration of an application for registration of an industrial design. System of classification of industrial samples. Protection of industrial design in foreign countries, including the Hague system.

8.4. Procedure for acquiring rights to trade secrets and innovation proposals. Scientific discovery, semiconductor product, plant varieties and some aspects of their protection.

Information with limited access, its types and characteristics. Information that cannot be a trade secret. The concept of "know-how" and its relation to the objects of intellectual property rights. Innovative proposal in the legislation of Ukraine. Methods of information protection that has commercial value for the enterprise (institution, organization) Composition of semiconductor products. Scientific discoveries. Varieties of plants.

PART 2. LECTURE 5

TOPIC 9. LEGAL PROTECTION OF COMMERCIAL INDICATIONS

9.1. The concept of brand (commercial) name and geographical indications

Identification of commercial designations as typical objects of intellectual property rights.. The concept of brand (commercial) name; trademarks; geographical indications. The content of the right to a commercial name and geographical indication. Legal protection of unregistered commercial designations. The relationship of different objects of intellectual property rights.

9.2. Acquisition of trademark rights

Terms of legal protection. Grounds for refusal of legal protection.

Rules for filing an application for trademark registration. Rules of examination of applications. Application of the provisions of international classification agreements relating to trademarks. Independent search for a trademark before the registration procedure and during monitoring to identify violations of rights using available electronic sources. International protection of trademarks under the Madrid system

9.3. Acquisition of rights to geographical indications

Types of geographical indications. Procedure for acquiring rights to geographical indications Application of the provisions of international agreements relating to geographical indications.

PART 2. LECTURE 6

TOPIC 10. LEGAL PROTECTION OF COPYRIGHT AND RELATED RIGHTS

10.1. Features and protection of copyright in Ukraine and the world.

Objects / subjects of copyright. Scope of legal protection and term of protection.

10.2. State registration of copyrights .

Security document: type, binding. composition of the application, examination of the application, procedure for receipt, cost. Rights arising from the security document. Notification of the owner of their rights. Official works. Co-authorship. Use of copyright objects without the consent of the owner. Acquisition of rights abroad. WIPO PROOF service

10.3. Features of protection of objects of related rights in Ukraine and the world Objects / subjects of related rights. Scope of legal protection and term of protection.

TOPIC 11. UNFAIR COMPETITION ITS TYPES, MECHANISMS OF PREVENTION, DETECTION AND CONTROL. RESPONSIBILITY FOR VIOLATION OF RIGHTS

11.1. Unfair competition and its types

Regulations on unfair competition in the Paris Convention and in Ukraine

11.2. Countering piracy, trolling and counterfeiting.

Piracy and trolling in Ukraine and in the world. Mechanisms to prevent unfair competition and counterfeit products .

11.3. Parasitic marketing at events of mass sports and cultural nature. Examples of parasitic marketing and countermeasures.

The practical part

Part 1. Intellectual property law - 12 hours (6 practical classes)

Practical lesson 1. Intellectual property system (2 hours)

Purpose :

educational: to generalize knowledge about the right of intellectual property, the system of objects of intellectual property law, the subjects of the right to them and the content of their rights; developmental: formation of logical legal thinking;

forming: to cultivate a positive and respectful attitude to legal science.

Questions for repetition: Concepts: "object of intellectual property" and "intellectual property right". Objects of intellectual property rights. Subjects of intellectual property law. National legislation on intellectual property. International intellectual property law. State system of intellectual property.

Questions for analysis:

- How do you understand the concepts of "creative activity" and "intellectual activity". Give examples. Justify the answer.
- Which concept is broader "author" or "subject of law"? Who can be the author an individual or a legal entity? Justify the answer.

Practical lesson 2. Origin and acquisition of rights to intellectual property (2 hours)

Purpose :

educational: to generalize knowledge about the origin and acquisition of rights to intellectual property;

developmental: formation of logical legal thinking;

forming: to cultivate a positive and respectful attitude to legal science.

Questions for repetition: The emergence of rights to copyright objects. The emergence of rights to the object of related rights. Acquisition of rights to objects of patent law and industrial designs. Acquisition of rights to commercial designations. Occurrence and acquisition of the right to other objects of intellectual property rights.

Questions for analysis:

• How do you understand the concepts of "the emergence of new intellectual property rights" and "acquisition of intellectual property rights"? Give examples. Justify the answer.

• Is it possible to consider a personal letter written for another person as an object of copyright? Who has the right to dispose of such a letter - its author or the person to whom it is written?

• Can there be objects of related rights without copyright? Justify the answer. What rights do the singer have - copyright or related? Does the singer have the right to dispose of the lyrics and music? If so, under what conditions?

• How do you understand the concept of "co-authorship"? Commercials and films are coauthored. How is it possible to dispose of property rights to such copyright objects? Is it possible to dispose of property rights alone ? If so, under what conditions?

- How to distinguish inventions and utility models from:
 - trade secrets, know-how;
 - scientific discovery.

Practical lesson 3. Protection of intellectual property rights (2 hours)

Purpose :

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educational: to generalize knowledge about the protection of intellectual property rights;

developmental: formation of logical legal thinking;

forming: to cultivate a positive and respectful attitude to legal science.

Questions for repetition: The concept and grounds for protection of intellectual property rights. Jurisdictional form of protection of intellectual property rights. Non-jurisdictional form of protection of intellectual property rights.

Questions for analysis:

- Compare the concepts of "protection of intellectual property" and "protection of intellectual property rights".
- Compare the concepts of "alternative (non- widowed) protection of intellectual property rights" and "non-jurisdictional form of protection of intellectual property rights."

Practical lesson 4. Contracts in the field of intellectual property (2 hours)

Purpose :

educational: to generalize knowledge about contractual ways of disposing of intellectual property rights;

developmental: formation of logical legal thinking;

forming: to cultivate a positive and respectful attitude to legal science.

Questions for repetition: The concept and content of agreements in the field of intellectual property. Contracts at the stage of creation of an intellectual property object. Contracts at the stage of use of intellectual property. Agreement on the transfer of exclusive property of their intellectual property rights. Other agreements on the disposal of intellectual property rights.

Task:

- 1. Get acquainted with the samples of agreements in the field of intellectual property: <u>https://ukrpatent.org/uk/articles/copyright-reg</u> (item 5 Information on state registration of copyright and agreements concerning the author's right to a work).
- 2. Prepare an application (<u>https://ukrp_atent.org/uk/articles/copyright-forms</u>) for registration of the contract concerning the author's right to the work: a) the contract on alienation of intellectual property rights; b) license agreement.

Practical lesson 5. Economics of intellectual property (2 hours)

Purpose :

educational: to generalize knowledge about commercialization of rights to intellectual property; developmental: formation of logical legal thinking;

forming: to cultivate a positive and respectful attitude to legal science.

Review question: Intellectual property as an intangible asset. Valuation of intellectual property rights. Intellectual property accounting. Taxation of transactions with objects of intellectual property rights. Commercialization of intellectual property rights.

Questions for analysis:

• What is the role of commercialization of intellectual property rights in the development of society? Give examples. Justify the answer.

Practical lesson 6. Intellectual property management (2 hours)

Purpose :

educational: generalize knowledge about the management of intellectual property rights; developmental: formation of logical legal thinking;

forming: to cultivate a positive and respectful attitude to legal science.

Questions for repetition: The concept of management and principles of intellectual property management. Life cycle of the object of intellectual property rights. Management of intellectual property at different stages of its life cycle.

Questions for analysis:

• How do you understand the concept of "balance of interests of the subjects of intellectual property law"? Give examples. Justify the answer.

Part 2. Patent science and acquisition of rights - 6 hours (3 practical lessons)

Practical lesson №1.

Solving inventive problems. Patent information search.

Theoretical part

1. Levels of inventions. Conscientious and dishonest patents

2. Methods of solving inventive tasks

3. Selection of the heading of the International Patent Classification

4. Performing a patent search (acquaintance with patent databases)

5. Demonstration of one of the methods of solving inventive problems

The practical part while working in the classroom

6. Determine the heading of the IPC of the object on the instructions of the teacher and painting the name of the section of the class, subclass, main group

7. Find patents on patent bases under a certain heading of the IPC 1-3.

8. Survey on the topic of the lesson

The practical part for independent work

8. Defining the IPC rubric of the object on the topic of the master's dissertation (or on the topic of interest to the student) with the name of the section, class, subclass, main group.

9. Selection of 2-3 analogues of the object according to item 8 of this lesson.

Practical lesson № 2. Applying for registration of property rights to an industrial design. Protection of trade secrets.

Theoretical part

1 Selection of the IPPC rubric on the basis of Ukrpatent, determination of the name of the industrial design

2 Search for industrial designs (database of registered industrial designs)

3 Preparation of the application form.

4 Application for registration of industrial designs by examples.

5 Classification of information with limited access

6 Specifics of trade secrets, its disclosure in materials related to the master's dissertation or professional activity and documentation

The practical part while working in the classroom

7 Definition of the list of images of an industrial design

6 Survey on the topic of the lesson / compilation of other materials of the application .

The practical part for independent work

8 Definition of IPPC codes of industrial design codes related to the topic of the master's dissertation (or to a topic of interest to the student). Search by Ukrpatent and WIPO databases. Compilation of descriptions and images .

9 Revealing possible trade secrets in materials related to the master's dissertation or further professional activity.

Practical lesson № 3. Making an application for registration of property rights to brend mark. Copyright registration.

Theoretical part

1 Collect source data.

2 Grouping the list of goods and services with IPPC codes using the Internet service "Goods & Services Manager".

3 Classification of trademarks (TM) according to the Vienna classification.

4 Preparation of the application form and documents for it.

5 Organization of self-search in the brand.

6 The procedure for filing an application for copyright registration and determining the composition of additional documents and material media

The practical part of the work in the classroom

8 Survey on the topic of the lesson / compilation of application materials with definition of

headings of the Nice and Vienna classifications..

9 Determining the list of documents for copyright registration for a specific object of copyright

10 Registration of the application for registration of copyright

The practical part for independent work

11 Selection of an existing / development of a new brand for the production of goods / services related to the startup / topic of the master's dissertation (for example, for the production of products / processes studied in the dissertation, or for equipment / materials applicable in production). Search for similar brands

6. Independent work of higher education students

Part 1. Intellectual property law

Students' independent work includes preparation for classroom classes by mastering lecture materials, studying basic, additional literature and legislation, performing practical tasks.

N⁰	Topic / question submitted for self-study	Number of
i / o		hours IWS
1.	Topic 1. The system of intellectual property	2
	Get acquainted with international documents in the field of intellectual property	
2.	Topic 2. The emergence and acquisition of rights to intellectual property	2
	Get acquainted with the specifics of the emergence or acquisition of the right to atypical objects of intellectual property rights	
3.	Topic 3. Protection of intellectual property	4
	Learn how to protect intellectual property rights	
4.	Topic 4. Contracts in the field of intellectual property	4
	Get acquainted with the samples of agreements in the field of intellectual	
	property: <u>https://ukrpatent.org/uk/articles/copyright-reg</u> (item 5 of	
	Information on state registration of copyright and agreements concerning the	
	copyright to a work) and prepare an application	
	(https://ukrpatent.org/uk/articles/copyright-forms) on registration of an	
	agreement concerning the author's right to a work: a) an agreement on the	
	alienation of intellectual property rights; b) license agreement.	
5.	Topic 5. Economics of intellectual property	4
	Get acquainted with the specifics of taxation of transactions with objects of	
	intellectual property rights	
6.	Topic 6. Intellectual property management	4
	Get acquainted with the management of intellectual property at different	
	stages of its life cycle	
7.	Preparation and execution of modular control work	4
	Together	24

Part 2 Patent science and acquisition of rights

N⁰ i⁄o	Topic / question submitted for self- study	
1.	Topic 7 Creation and patent information research of objects of industrial property rights The concept of "system" and the system approach in the creative process.	

	Methodological basis and social aspects of scientific and technical creativity. Stages of invention development. Psychological features of scientific and technical creativity. Definitions and basic concepts of engineering psychology.	
2.	IWS to Practical Lesson 1 Topic 8 Legal protection of the results of scientific and technical creativity. Get acquainted with the " <u>Rules for compiling and submitting an application for an</u> invention and an application for a utility model", " <u>Rules for compiling and</u> <u>submitting an application for an industrial design</u> ". Regulations on semiconductor products. Identify industrial ICPS codes as the topic of your work. Write a description and define the image. Get acquainted with the search databases for industrial designs. Get acquainted with the types of information that cannot be classified as a trade	4
	secret. IWS to Practical Lesson 2	
3.	Topic 9 Legal protection of commercial designations Get acquainted with the " <u>Rules for drawing up</u> , submitting and considering an <u>application for the issuance of a certificate of Ukraine for a mark for goods and services</u> ". Definition of the Nice and Vienna Classification Codes. Choice of similar trade marks IWS for Practical Class 3 (part)	2
4.	Topic 10 Legal protection of copyright and related rights. Get acquainted with the Procedure for state registration of copyright and agreements relating to the author's right to a work IWS to Practical Lesson 3 (part)	1
5.	Topic 11 Unfair competition, its types, mechanisms of prevention, detection and counteraction. Get acquainted with the Law of Ukraine "On Protection against Unfair Competition" and the Association Agreement	1
	Together	12

POLICY AND CONTROL

7. Policy of academic discipline (educational component)

7.1. Forms of work

Lectures are conducted with the use of visual means of presentation of the material and with the use of methodological materials, access to which is available to applicants for higher education. Students receive all materials via e-mail, campus or telegram group.

Applicants for higher education are involved in the discussion of lecture material and ask questions about its essence.

Forms of individual and collective work (team work, pair work) are used in practical classes to implement the tasks of the teacher to acquire skills of independent practical work.

During the study of the course strategies of active and collective learning are used, which are determined by the following methods and technologies:

1. methods of problem-based learning (problem-based presentation, part-search (heuristic conversation) and research method);

2. personality-oriented (developing) technologies based on active forms and methods of learning ("brainstorming", "situation analysis", etc.);

3. information and communication technologies that provide problem-solving nature of the learning process and intensification of independent work of higher education seekers (electronic presentations, application of practical tasks (tests) on the basis of computer and multimedia

means, supplementation of traditional educational classes with means interactions based on network communication capabilities (software, mobile applications, etc.).

7.2. Rules for attending classes

Classes can be held in classrooms according to the schedule. Classes can also be conducted online in a synchronous mode using video communication, provided that the applicant for higher education is unambiguously identified. Conducting classes online should be provided by the relevant order of the University.

If there are good reasons, the higher education applicant must inform the teacher in advance (within 1 day) about the reasons for the possible omission of the control measure.

If it is not possible to notify in advance, the applicant must contact the teacher within one week to agree on the form and procedure for debt settlement.

If the classroom falls on a non-working day (holiday, memorable, etc.), the material of such a lesson partly goes into the category of "Independent work of higher education", and partly added to the next lesson. It is also possible to save time on missed classes when performing modular tests in extracurricular activities (by testing).

7.3. Rules for assigning incentive and penalty points

Incentive points for:

+ 5 points - for active work in at least 5 lectures (questions, requests to clarify aspects of the lecture material, constructive denial of the presented information and participation in discussions);

+ 10 points - to the student author (inventor) of the object for which the application is submitted (only if a set of materials and application number is submitted);

+ up to 10 - mastering the distance course of WIPO DL-101 "Fundamentals of Intellectual Property" (Free), subject to providing a screen result of the final exam. Assimilation of paid courses during classes is not encouraged. Assimilation during classes of other free courses (as well as paid courses, which are paid by the student before the first of September, when teaching the discipline in the first semester or before the first of February, when teaching in the second semester), on intellectual property, is subject to such a course that is equivalent to the volume of the above course (at least 50 hours);

+ up to 5 - mastering the distance course WIPO DL101R - DL-101 for Ukrainian students in a language other than Russian, and for foreign students - in a language other than the language of the country of origin of the student (added to the above points for the course).

Penalty points are not provided.

8. University policy

8.1. Norms of ethical behavior

The policy and principles of academic integrity are defined in Section 3 of the Code of Honor of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute". Read more: <u>https://kpi.ua/code</u>

8.2. Norms of ethical conduct

Norms of ethical behavior of students and employees are defined in Section 2 of the Code of Honor of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute". Read more: <u>https:// kpi.ua/code</u>

Evaluation and control measures

The main part of students ranking formed through active participation in practical lessons and the results of the modular control.

Modular control work and test is performed by a lecturer from section 1 (lecturer of the Department of Intellectual Property and Private Law, Faculty of Sociology and Law).

Part 1. Intellectual property law

Current control: express survey on the topic of classes, testing, solving legal problems, preparation of draft documents, performance of modular control work.

Calendar control: performed twice a semester as monitoring of the current state of fulfillment of syllabus requirements.

Semester control: test in two parts of the discipline is performed by a lecturer from part 1 (lecturer of the Department of Intellectual Property and Private Law, Faculty of Sociology and Law).

Conditions for admission to semester control: set by the lecturer of part 1 of the discipline.

Part 2 Patent science and acquisition of rights

Current control: express survey on the topic of classes, testing, solving legal problems, preparation *IWS*.

Calendar con troll: performed twice a semester as monitoring of the current state of fulfillment of syllabus requirements.

Semester control: test in two parts of the discipline is performed by a lecturer from part 1 (lecturer of the Department of Intellectual Property and Private Law, Faculty of Sociology and Law).

Conditions for admission to semester control : set by the lecturer of part 1 of the discipline.

RATING SYSTEM FOR ESSESSING OF LEARNING OUTCOMES

Part 1. Intellectual property law

1) <u>Current control: express-survey on the topic of the lesson, performance of test tasks, discussion of legal cases, preparation of draft documents, performance of modular control work.</u>

The student's rating consists of points obtained for express surveys on the topic of the lesson, discussion of legal cases, solving practical problems, supplementing the answers of other students in the discussion in practical classes, performing test tasks online and preparing draft documents. In total for 1 practical lesson the student can receive up to 10 points. For performing a modular test, a student can receive up to 7 points. If a student is absent from a practical lesson, it is necessary to complete the missed lesson by solving online tests (access to the test is provided by the teacher) or solving legal problems (by sending the work to the teacher's e-mail).

2) <u>Calendar control: performed twice a semester as monitoring of the current state of fulfillment of syllabus requirements.</u>

Criterion	First	Second
Term	8th week	14th week
obtaining a	the maximum possible score at the time of	if the current rating score is at least 50% of the maximum possible score at the time of the calendar control

The total number of points from part 1 "Intellectual Property Law" - up to 67 points.

The total number of points in the discipline "Intellectual Property and Patent Science" is set taking into account 2 parts of the discipline: the first (Intellectual Property Law) - up to **67 points** + the second (Patent Science and Acquisition of Rights) - up to **33 points** = up to 100 points.

3) Semester control: test

Activity on practical classes, practice of all missed practical classes, participation in discussion of cases, performance of tests, legal tasks, preparation of projects of documents, performance of modular control work allows to receive an automatic estimation if the student had 60 points or above. If the student has completed all test tasks, prepared draft documents, completed a modular test, but scored less than 60 points or the student wants to increase his rating score, the final score is based on the results of test control (in the form of online testing).

Rating scale (R):

	Type and ktyvnostey	The maximum possible score
Practical lesson №1	express-survey on the topic of the	10
Practical lesson №2	lesson, discussion of legal cases,	10
Practical lesson №3	supplementing the answers of other	10
Practical lesson №4	students in the process of discussion	10
Practical lesson №5	in practical classes, performance of	10
Practical lesson №6	test tasks, preparation of practical assignments	10
Modular control work	performance of work in electronic	7
	form	
Total for part 1		67

Part 2 Patent science and acquisition of rights

Assessment of the applicant for higher education in practical classes Current control:

Weight score - an average of 11 for 2 academic hours - one practical lesson. At each lesson, students can choose to take a test or actually work on objects during or after a practical lesson (additional points may be awarded for such work)..

Points for practical classes (assessment, mainly through testing) :

up to 11 you points - the student is prepared for the practical lesson, is present at it and passed the test in class (or during the day) or task **within 2 weeks** after class;

up to 11 points - the student is absent from the lesson, within 2 weeks after the relevant practical lesson took the task from the teacher, worked on the topic and completed and submitted the completed task within 2 weeks after the practical lesson;

up to 3 -x points - a student who was present at the lesson and passed a test or task and additionally performed independent work before the lesson (except for practical N_{23}) within 2 weeks after the relevant practical lesson;

0 points - the student is absent from class, did not study the topic on their own, did not fulfill the teacher's task.

The final score for Part 2 may not exceed 33.

№ i / o	Control measure	Weight score
1	Execution of a practical task 1. Solving inventive problems. Patent information search.	11
2	Performing practical tasks 2. Applying for the registration of property rights for an industrial sample. Protection of trade	

	secrets.	
3	Performing practical tasks 3. Execution of an application for registration of property rights to a trademark. Copyright registration.	
	Total for practical tasks	33
	Total for part 2	33

Calendar control: *carried out twice a semester as a monitoring of the current state of compliance with the requirements of the syllabus.*

Criterion	First	Second
Term	8th week	14th week
obtaining a	the maximum possible score at the time of	if the current rating score is at least 50% of the maximum possible score at the time of the calendar control

8. Types of control and rating system for evaluation of learning outcomes (RSE)

type of control	Method of control	
Current control	Part 1. Verification of preparation for practical classes (express survey, testing, discussion of legal cases), preparation of draft documents, modular control work Part 2. Checking the implementation of practical classes in accordance with the schedule	
Calendar control	performed twice a semester as monitoring of the current state of fulfillment of syllabus requirements	
Semester control	Test	

8.1. Types of control

8.2. The rating system evaluation

Overall rating score of the discipline "Intellectual Property and Patent Science" (maximum 100 points):

$R_{\Sigma} = R_1 + R_{Pr1} + R_{Pr2} + R_{Pr3}$,

where R_{11} - rating score for the section "Intellectual property and patent science - 1. Intellectual property law" (from 0 to 67 points inclusive, including 7 points for modular control work) - is set by the teacher of part 1 of the discipline; R_{Pr1} , R_{Pr2} , R_{Pr3} - rating points for the performance of works provided by practical classes N_{21} ... N_{23} from part 2 of the discipline.

The final rating cannot exceed 100 points.

8.3. Credit test work

Activity in practical classes, practice of all missed practical classes, participation in discussion of cases, performance of tests, legal tasks, preparation of projects of documents, performance of modular control work allows to receive automatic estimation if the student has typed 60 points and above. If the student has completed all test tasks, prepared draft documents, completed a modular test, but scored less than 60 points or the student wants to increase his rating score, the final grade is based on the results of a test (in the form of online testing).

Number of points	Rating
95 100	Perfectly
85 94	Very good
75 84	Good
65 74	Satisfactory
60 64	Enough
Less than 60	Unsatisfactorily

.4. Table of correspondence of rating points to grades on the university scale

Work program of the discipline (syllabus):

Part 1.

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Part 2.

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Approved by:

Extended meeting of the Department of Machine Design of IME (Protocol № 19 of June 17, 2021)

The syllabus project was approved by: Methodical Commission of Igor Sikorsky Kyiv Polytechnic Institute

Final syllabus agreed:

Methodical Council of the Faculty of Biomedical Engineering (Protocol № 11 of 25.06. 2021.)