

MINISTRY OF HEALTH OF UKRAINE
BOGOMOLETS NATIONAL MEDICAL UNIVERSITY

GUIDELINES
to practical classes

Academic discipline	Fundamentals of patent law
Branch of knowledge	22 “Health care”
Specialty	226 “Pharmacy, industrial pharmacy”
Specialization	226.01 “Pharmacy”
Department	Analytical, physical and colloid chemistry

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Proceedings N 1 dated 29 August 2024

Considered and approved by cyclical methodological commission of specialty 226
“Pharmacy, industrial pharmacy”
Proceedings N 1 dated 30 August 2024

Developers:

Galina Zaitseva – Head of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor,

Yaroslava Pushkarova – Associate Professor of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor.

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Topic of lesson No. 1: Copyright and related rights.

Competencies:

– **integral competence:** ability to solve tasks of research and/or innovative nature in the field of pharmacy;

– **general competencies (GC):**

1. Ability for abstract thinking, analysis and synthesis (GC 01).

2. Knowledge and understanding of the subject area; understanding of professional activity (GC 02).

3. Ability to work in a team (GC 06).

4. The ability to make decisions and act in compliance with the principle of inadmissibility of corruption and any other manifestations of dishonesty (GC 10).

– **professional competences of the specialty (PC):**

1. Ability to integrate knowledge and solve complex problems of pharmacy / industrial pharmacy in broad or multidisciplinary contexts (PC 01).

2. The ability to collect, interpret and apply data necessary for professional activity, carrying out research and implementation of innovative projects in the field of pharmacy (PC 02).

Purposes:

– to explain the relationship between copyright and cultural development;

– to classify objects and subjects of copyright and related rights;

– to analyze personal non-property rights and property rights of the author;

– to reveal the meaning of copyright in the field of pharmacy and medicine.

Documentation:

1. Law of Ukraine “On Copyright and Related Rights”, Articles 1, 7-15, 35-39 (English translation).

Equipment: practical tasks, tests, student’s notebook.

Lesson plan and organizational structure

Stage	Description of the stage	Learning levels	Time
Preparatory	Organizational issues (checking the presence of students)	Familiarization	1 min.
	Formation of motivation, activation of cognitive activity	Perception	3 min.
	Control of the initial level of teaching: test control and/or individual survey, verification of the performance of tasks of extra-auditory independent work	Reproductive	10 min.
Main	Discussion of theoretical material according to the subject of the topic	Comprehension Understanding	10 min.

	Solving practical tasks	Application in practice Search creative activity	25 min.
	Independent work of the student under the supervision of the teacher (auditory work of the student)	Application in practice Search creative activity	10 min.
	Generalization of knowledge	Fixing	5 min.
Final	Control of the final level of teaching (test control or practical tasks)	Reproduction	15 min.
	General evaluation of the student's educational activity	Familiarization	10 min.
	Informing students about the topic of the next lesson and tasks for independent work	Familiarization	1 min.

Recommended literature.

Basic

1. Llewelyn, D., & Aplin, T. Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights / Sweet & Maxwell. – London, 2019. – Chapters 10-12. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

2. On copyright and related rights: Law of Ukraine dated 23.12.1993 No. 3792-XII: as amended on 15.12.2021. Articles 1, 7-15, 35-39. URL: <https://zakon.rada.gov.ua/laws/show/3792-12?lang=en#Text> (date of access: 25.07.2024).

Additional

1. Bouchoux, D. E. Intellectual property: the law of trademarks, copyrights, patents, and trade secrets / Delmar, Cengage Learning. – USA, 2013. – Chapters 9 and 10. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

Information resources

1. <https://nmuofficial.com/en/zagalni-vidomosti/kafedri/department-medical-general-chemistry/>
2. <https://likar.nmu.kiev.ua/md/course/view.php?id=7413>
3. <https://www.wipo.int/copyright/en/>

Questions for the student's self-preparation for the practical lesson:

1. Copyright and related rights: general provisions.
2. Objects and subjects of copyright and related rights.

Developers:

Galina Zaitseva – Head of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor,

Yaroslava Pushkarova – Associate Professor of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor.

Topic of lesson No.2: Health care inventions and utility models

Competencies:

– **integral competence:** ability to solve tasks of research and/or innovative nature in the field of pharmacy;

– **general competencies (GC):**

1. Ability for abstract thinking, analysis and synthesis (GC 01).
2. Knowledge and understanding of the subject area; understanding of professional activity (GC 02).
3. Ability to work in a team (GC 06).
4. The ability to make decisions and act in compliance with the principle of inadmissibility of corruption and any other manifestations of dishonesty (GC 10).

– **professional competences of the specialty (PC):**

1. Ability to integrate knowledge and solve complex problems of pharmacy / industrial pharmacy in broad or multidisciplinary contexts (PC 01).
2. The ability to collect, interpret and apply data necessary for professional activity, carrying out research and implementation of innovative projects in the field of pharmacy (PC 02).

Purposes:

- to explain general information about inventions and utility models;
- to familiarize with the main aspects of the protection of rights to inventions and utility models;
- to familiarize with samples of patent documents, samples of patent applications, patent certificates for inventions (utility models), as well as with international INID codes;
- to analyze the difference between the legal protection of an invention and a utility model;
- to reveal the peculiarities of patenting inventions (utility models) in the field of pharmacy and medicine.

Documentation:

1. Law of Ukraine “On the Protection of Rights to Inventions and Utility Models”, Articles 1, 6 and 7. (English translation).
2. Samples of patent documents for inventions and utility models.
3. International INID codes.
4. Samples of patent application inventions and utility models.
5. Photocopies of the originals of patentable inventions and utility models.

Equipment: practical tasks, tests, student’s notebook.

Lesson plan and organizational structure

Stage	Description of the stage	Learning levels	Time
Preparatory	Organizational issues (checking the presence of students)	Familiarization	1 min.
	Formation of motivation, activation of cognitive activity	Perception	3 min.
	Control of the initial level of teaching: test control and/or individual survey, verification of the performance of tasks of extra-auditory independent work	Reproductive	10 min.
Main	Discussion of theoretical material according to the subject of the topic	Comprehension Understanding	10 min.
	Solving practical tasks	Application in practice Search creative activity	25 min.
	Independent work of the student under the supervision of the teacher (auditory work of the student)	Application in practice Search creative activity	10 min.
	Generalization of knowledge	Fixing	5 min.
Final	Control of the final level of teaching (test control or practical tasks)	Reproduction	15 min.
	General evaluation of the student's educational activity	Familiarization	10 min.
	Informing students about the topic of the next lesson and tasks for independent work	Familiarization	1 min.

Recommended literature.

Basic

1. Llewelyn, D., & Aplin, T. Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights / Sweet & Maxwell. – London, 2019. – Chapters 3 and 4. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

2. About protection of the rights to inventions and utility models: Law of Ukraine dated December 15, 1993 No. 3684-XII: as amended on 15.06.2020. Articles 1, 6 and 7. URL: <https://zakon.rada.gov.ua/laws/show/3687-12?lang=en#Text> (date of access: 25.07.2024).

Additional

1. Bouchoux, D. E. Intellectual property: the law of trademarks, copyrights, patents, and trade secrets / Delmar, Cengage Learning. – USA, 2013. – Chapter 17.

URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

2. Public health, innovation and intellectual property rights : report of the Commission on intellectual Property Rights, Innovation and Public Health / World Health Organisation. – Geneva : WHO, 2006. – Chapter 1. URL: <https://likar.nmuofficial.com/md/course/view.php?id=7413> (date of access: 25.07.2024).

Information resources

1. <https://nmuofficial.com/en/zagalni-vidomosti/kafedri/department-medical-general-chemistry/>
2. <https://likar.nmu.kiev.ua/md/course/view.php?id=7413>
3. https://www.wipo.int/web/patents/topics/utility_models

Questions for the student's self-preparation for the practical lesson:

1. Inventions and utility models: general provisions.
2. Protection of rights to inventions and utility models.

Developers:

Galina Zaitseva – Head of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor,

Yaroslava Pushkarova – Associate Professor of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor.

Topic of lesson No. 3: Object of the invention (utility model) "device".

Competencies:

– **integral competence:** ability to solve tasks of research and/or innovative nature in the field of pharmacy;

– **general competencies (GC):**

1. Ability for abstract thinking, analysis and synthesis (GC 01).
2. Knowledge and understanding of the subject area; understanding of professional activity (GC 02).
3. Ability to work in a team (GC 06).
4. The ability to make decisions and act in compliance with the principle of inadmissibility of corruption and any other manifestations of dishonesty (GC 10).

– **professional competences of the specialty (PC):**

1. Ability to integrate knowledge and solve complex problems of pharmacy / industrial pharmacy in broad or multidisciplinary contexts (PC 01).
2. The ability to collect, interpret and apply data necessary for professional activity, carrying out research and implementation of innovative projects in the field of pharmacy (PC 02).

Purposes:

- to explain possible essential features of the object of the invention "device";
- to interpret the peculiarities of the structure of the description of the object of the invention "device";
- to analyze the design of graphic materials for the object of the invention "device";
- to classify devices in pharmacy and medicine.

Documentation:

1. Law of Ukraine "On the Protection of Rights to Inventions and Utility Models", Articles 1, 6 and 7. (English translation).
2. Samples of patent documents for inventions and utility models.
3. Samples of patent application inventions and utility models.

Equipment: practical tasks, tests, student's notebook.

Lesson plan and organizational structure

Stage	Description of the stage	Learning levels	Time
Preparatory	Organizational issues (checking the presence of students)	Familiarization	1 min.
	Formation of motivation, activation of cognitive activity	Perception	3 min.
	Control of the initial level of teaching: test control and/or individual survey, verification of the performance of	Reproductive	10 min.

	tasks of extra-auditory independent work		
Main	Discussion of theoretical material according to the subject of the topic	Comprehension Understanding	10 min.
	Solving practical tasks	Application in practice Search creative activity	25 min.
	Independent work of the student under the supervision of the teacher (auditory work of the student)	Application in practice Search creative activity	10 min.
	Generalization of knowledge	Fixing	5 min.
Final	Control of the final level of teaching (test control or practical tasks)	Reproduction	15 min.
	General evaluation of the student's educational activity	Familiarization	10 min.
	Informing students about the topic of the next lesson and tasks for independent work	Familiarization	1 min.

Recommended literature.

Basic

1. Llewelyn, D., & Aplin, T. Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights / Sweet & Maxwell. – London, 2019. – Chapters 3 and 4. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

2. About protection of the rights to inventions and utility models: Law of Ukraine dated December 15, 1993 No. 3684-XII: as amended on 15.06.2020. Articles 1, 6 and 7. URL: <https://zakon.rada.gov.ua/laws/show/3687-12?lang=en#Text> (date of access: 25.07.2024).

3. Public health, innovation and intellectual property rights : report of the Commission on intellectual Property Rights, Innovation and Public Health / World Health Organisation. – Geneva : WHO, 2006. – Chapter 1. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

Additional

1. Bouchoux, D. E. Intellectual property: the law of trademarks, copyrights, patents, and trade secrets / Delmar, Cengage Learning. – USA, 2013. – Chapter 17. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

2. Papadopoulou, F. Evergreening Patent Exclusivity in Pharmaceutical Products: Supplementary Protection Certificates, Orphan Drugs, Paediatric Extensions and ATMPs / Bloomsbury Publishing. – USA, 2021. – Chapter 7. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

Information resources

1. <https://nmuofficial.com/en/zagalni-vidomosti/kafedri/department-medical-general-chemistry/>
2. <https://likar.nmu.kiev.ua/md/course/view.php?id=7413>
3. https://www.wipo.int/web/patents/topics/utility_models

Questions for the student's self-preparation for the practical lesson:

1. Features of the application content of the object of the invention (utility model) “device”.
2. Description of the object of the invention (utility model) “device”.

Developers:

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Yaroslava Pushkarova – Associate Professor of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor.

Topic of lesson No. 4: Object of the invention (utility model) “process” (“method”).

Competencies:

– **integral competence:** ability to solve tasks of research and/or innovative nature in the field of pharmacy;

– **general competencies (GC):**

1. Ability for abstract thinking, analysis and synthesis (GC 01).

2. Knowledge and understanding of the subject area; understanding of professional activity (GC 02).

3. Ability to work in a team (GC 06).

4. The ability to make decisions and act in compliance with the principle of inadmissibility of corruption and any other manifestations of dishonesty (GC 10).

– **professional competences of the specialty (PC):**

1. Ability to integrate knowledge and solve complex problems of pharmacy / industrial pharmacy in broad or multidisciplinary contexts (PC 01).

2. The ability to collect, interpret and apply data necessary for professional activity, carrying out research and implementation of innovative projects in the field of pharmacy (PC 02).

Purposes:

– to explain the possible essential features of the object of the invention “process” (“method”);

– to interpret the features of the structure of the description of the object of the invention “process” (“method”).

Documentation:

1. Law of Ukraine “On the Protection of Rights to Inventions and Utility Models”, Articles 1, 6 and 7. (English translation).

2. Samples of patent documents for inventions and utility models.

3. Samples of patent application inventions and utility models.

Equipment: practical tasks, tests, student’s notebook.

Lesson plan and organizational structure

Stage	Description of the stage	Learning levels	Time
Preparatory	Organizational issues (checking the presence of students)	Familiarization	1 min.
	Formation of motivation, activation of cognitive activity	Perception	3 min.
	Control of the initial level of teaching: test control and/or individual survey, verification of the performance of tasks of extra-auditory independent work	Reproductive	10 min.

Main	Discussion of theoretical material according to the subject of the topic	Comprehension Understanding	10 min.
	Solving practical tasks	Application in practice Search creative activity	25 min.
	Independent work of the student under the supervision of the teacher (auditory work of the student)	Application in practice Search creative activity	10 min.
	Generalization of knowledge	Fixing	5 min.
Final	Control of the final level of teaching (test control or practical tasks)	Reproduction	15 min.
	General evaluation of the student's educational activity	Familiarization	10 min.
	Informing students about the topic of the next lesson and tasks for independent work	Familiarization	1 min.

Recommended literature.

Basic

1. Llewelyn, D., & Aplin, T. Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights / Sweet & Maxwell. – London, 2019. – Chapters 3 and 4. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

2. About protection of the rights to inventions and utility models: Law of Ukraine dated December 15, 1993 No. 3684-XII: as amended on 15.06.2020. Articles 1, 6 and 7. URL: <https://zakon.rada.gov.ua/laws/show/3687-12?lang=en#Text> (date of access: 25.07.2024).

3. Public health, innovation and intellectual property rights : report of the Commission on intellectual Property Rights, Innovation and Public Health / World Health Organisation. – Geneva : WHO, 2006. – Chapter 1. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

Additional

1. Bouchoux, D. E. Intellectual property: the law of trademarks, copyrights, patents, and trade secrets / Delmar, Cengage Learning. – USA, 2013. – Chapter 17. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

2. Papadopoulou, F. Evergreening Patent Exclusivity in Pharmaceutical Products: Supplementary Protection Certificates, Orphan Drugs, Paediatric Extensions and ATMPs / Bloomsbury Publishing. – USA, 2021. – Chapter 7. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

Information resources

1. <https://nmuofficial.com/en/zagalni-vidomosti/kafedri/departament-medical-general-chemistry/>

2. <https://likar.nmu.kiev.ua/md/course/view.php?id=7413>
3. https://www.wipo.int/web/patents/topics/utility_models

Questions for the student's self-preparation for the practical lesson:

1. Features of the content of the application for the object of the invention (utility model) “process” (“method”).
2. Description of the object of the invention (utility model) “process” (“method”).

Developers:

Galina Zaitseva – Head of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor,

Yaroslava Pushkarova – Associate Professor of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor.

Topic of lesson No. 5: Composing of the invention's formula for various objects

Competencies:

- **integral competence:** ability to solve tasks of research and/or innovative nature in the field of pharmacy;
- **general competencies (GC):**
 1. Ability for abstract thinking, analysis and synthesis (GC 01).
 2. Knowledge and understanding of the subject area; understanding of professional activity (GC 02).
 3. Ability to work in a team (GC 06).
 4. The ability to make decisions and act in compliance with the principle of inadmissibility of corruption and any other manifestations of dishonesty (GC 10).
- **professional competences of the specialty (PC):**
 1. Ability to integrate knowledge and solve complex problems of pharmacy / industrial pharmacy in broad or multidisciplinary contexts (PC 01).
 2. The ability to collect, interpret and apply data necessary for professional activity, carrying out research and implementation of innovative projects in the field of pharmacy (PC 02).

Purposes:

- to classify and explain the components of the claims;
- to analyze single-link and multi-link formulas;
- to interpret the formula of the invention for a chemical compound;
- to interpret the formula of the invention for the use of a known object for a new, non-obvious purpose.

Documentation:

1. Law of Ukraine “On the Protection of Rights to Inventions and Utility Models”, Articles 1, 6 and 7. (English translation).
2. Samples of patent documents for inventions and utility models.
3. Samples of patent application inventions and utility models

Equipment: practical tasks, tests, student's notebook.

Lesson plan and organizational structure

Stage	Description of the stage	Learning levels	Time
Preparatory	Organizational issues (checking the presence of students)	Familiarization	1 min.
	Formation of motivation, activation of cognitive activity	Perception	3 min.
	Control of the initial level of teaching: test control and/or individual survey, verification of the performance of tasks of extra-auditory independent	Reproductive	10 min.

	work		
Main	Discussion of theoretical material according to the subject of the topic	Comprehension Understanding	10 min.
	Solving practical tasks	Application in practice Search creative activity	25 min.
	Independent work of the student under the supervision of the teacher (auditory work of the student)	Application in practice Search creative activity	10 min.
	Generalization of knowledge	Fixing	5 min.
Final	Control of the final level of teaching (test control or practical tasks)	Reproduction	15 min.
	General evaluation of the student's educational activity	Familiarization	10 min.
	Informing students about the topic of the next lesson and tasks for independent work	Familiarization	1 min.

Recommended literature.

Basic

1. Llewelyn, D., & Aplin, T. Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights / Sweet & Maxwell. – London, 2019. – Chapters 3 and 4. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

2. About protection of the rights to inventions and utility models: Law of Ukraine dated December 15, 1993 No. 3684-XII: as amended on 15.06.2020. Articles 1, 6 and 7. URL: <https://zakon.rada.gov.ua/laws/show/3687-12?lang=en#Text> (date of access: 25.07.2024).

Additional

1. Bouchoux, D. E. Intellectual property: the law of trademarks, copyrights, patents, and trade secrets / Delmar, Cengage Learning. – USA, 2013. – Chapter 17. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

Information resources

1. <https://nmuofficial.com/en/zagalni-vidomosti/kafedri/department-medical-general-chemistry/>
2. <https://likar.nmu.kiev.ua/md/course/view.php?id=7413>
3. https://www.wipo.int/web/patents/topics/utility_models

Questions for the student's self-preparation for the practical lesson:

1. Meaning of the formula of the invention.
2. Single-link and multi-link formulas of the invention.

Developers:

Galina Zaitseva – Head of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor,

Yaroslava Pushkarova – Associate Professor of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor.

Topic of lesson No. 6: Industrial designs related to pharmacy and medicine.

Competencies:

– **integral competence:** ability to solve tasks of research and/or innovative nature in the field of pharmacy;

– **general competencies (GC):**

1. Ability for abstract thinking, analysis and synthesis (GC 01).
2. Knowledge and understanding of the subject area; understanding of professional activity (GC 02).
3. Ability to work in a team (GC 06).
4. The ability to make decisions and act in compliance with the principle of inadmissibility of corruption and any other manifestations of dishonesty (GC 10).

– **professional competences of the specialty (PC):**

1. Ability to integrate knowledge and solve complex problems of pharmacy / industrial pharmacy in broad or multidisciplinary contexts (PC 01).
2. The ability to collect, interpret and apply data necessary for professional activity, carrying out research and implementation of innovative projects in the field of pharmacy (PC 02).

Purposes:

- to explain possible essential features for industrial designs;
- to familiarize with samples of patent documents, samples of patent applications, patent certificates for industrial designs;
- to familiarize with the main aspects of the basics of legal protection of industrial designs;
- to analyze the structure of the industrial design application;
- to reveal the meaning of industrial designs in the field of pharmacy and medicine.

Documentation:

1. Law of Ukraine “On Protection of Rights to Industrial Designs”, Articles 1, 5 and 6. (English translation).
2. Samples of patent documents for industrial designs.
3. International INID codes.
4. Samples of patent applications and industrial designs.
5. Photocopies of the originals of patent-literate industrial samples.

Equipment: practical tasks, tests, student’s notebook.

Lesson plan and organizational structure

Stage	Description of the stage	Learning levels	Time
Preparatory	Organizational issues (checking the presence of students)	Familiarization	1 min.
	Formation of motivation, activation of	Perception	3 min.

	cognitive activity		
	Control of the initial level of teaching: test control and/or individual survey, verification of the performance of tasks of extra-auditory independent work	Reproductive	10 min.
Main	Discussion of theoretical material according to the subject of the topic	Comprehension Understanding	10 min.
	Solving practical tasks	Application in practice Search creative activity	25 min.
	Independent work of the student under the supervision of the teacher (auditory work of the student)	Application in practice Search creative activity	10 min.
	Generalization of knowledge	Fixing	5 min.
Final	Control of the final level of teaching (test control or practical tasks)	Reproduction	15 min.
	General evaluation of the student's educational activity	Familiarization	10 min.
	Informing students about the topic of the next lesson and tasks for independent work	Familiarization	1 min.

Recommended literature.

Basic

1. Llewelyn, D., & Aplin, T. Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights / Sweet & Maxwell. – London, 2019. – Chapter 15. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

2. About protection of the rights to industrial designs: Law of Ukraine dated December 15, 1993 No. 3688-XII: as amended on 16.06.2020. Articles 1, 5 and 6. URL: <https://zakon.rada.gov.ua/laws/show/3688-12?lang=en#Text> (date of access: 25.07.2024).

Additional

1. Public health, innovation and intellectual property rights : report of the Commission on intellectual Property Rights, Innovation and Public Health / World Health Organisation. – Geneva : WHO, 2006. – Chapter 1. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

2. Papadopoulou, F. Evergreening Patent Exclusivity in Pharmaceutical Products: Supplementary Protection Certificates, Orphan Drugs, Paediatric Extensions and ATMPs / Bloomsbury Publishing. – USA, 2021. – Chapter 2. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

Information resources

1. <https://nmuofficial.com/en/zagalni-vidomosti/kafedri/departament-medical-general-chemistry/>
2. <https://likar.nmu.kiev.ua/md/course/view.php?id=7413>
3. <https://www.wipo.int/designs/en/>

Questions for the student's self-preparation for the practical lesson:

1. Objects of industrial designs.
2. Criteria for protection capability of an industrial model.

Developers:

Galina Zaitseva – Head of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor,

Yaroslava Pushkarova – Associate Professor of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor.

Topic of lesson No. 7: Trademarks for goods and services related to pharmacy and medicine.

Competencies:

– **integral competence:** ability to solve tasks of research and/or innovative nature in the field of pharmacy;

– **general competencies (GC):**

1. Ability for abstract thinking, analysis and synthesis (GC 01).

2. Knowledge and understanding of the subject area; understanding of professional activity (GC 02).

3. Ability to work in a team (GC 06).

4. The ability to make decisions and act in compliance with the principle of inadmissibility of corruption and any other manifestations of dishonesty (GC 10).

– **professional competences of the specialty (PC):**

1. Ability to integrate knowledge and solve complex problems of pharmacy / industrial pharmacy in broad or multidisciplinary contexts (PC 01).

2. The ability to collect, interpret and apply data necessary for professional activity, carrying out research and implementation of innovative projects in the field of pharmacy (PC 02).

Purposes:

– to classify trademarks for goods and services;

– to explain the conditions for providing protection of rights to trademarks for goods and services;

– to classify trademarks for goods and services in medicine and pharmacy;

– to interpret the rights of the certificate owner of Ukraine of trademarks for goods and services;

– to familiarize with samples of patent documents, samples of patent applications, patent certificates of trademarks for goods and services.

Documentation:

1. Law of Ukraine “On Protection of Rights to Trademarks for Goods and Services”, Articles 1, 5 and 6. (English translation).

2. Samples of patent documents of trademarks for goods and services.

3. International INID codes.

4. Samples of patent applications of Trademarks for Goods and Services.

5. Photocopies of original patent legal Trademarks for Goods and Services.

Equipment: practical tasks, tests, student’s notebook.

Lesson plan and organizational structure

Stage	Description of the stage	Learning levels	Time
Preparatory	Organizational issues (checking the presence of students)	Familiarization	1 min.
	Formation of motivation, activation of cognitive activity	Perception	3 min.
	Control of the initial level of teaching: test control and/or individual survey, verification of the performance of tasks of extra-auditory independent work	Reproductive	10 min.
Main	Discussion of theoretical material according to the subject of the topic	Comprehension Understanding	10 min.
	Solving practical tasks	Application in practice Search creative activity	25 min.
	Independent work of the student under the supervision of the teacher (auditory work of the student)	Application in practice Search creative activity	10 min.
	Generalization of knowledge	Fixing	5 min.
Final	Control of the final level of teaching (test control or practical tasks)	Reproduction	15 min.
	General evaluation of the student's educational activity	Familiarization	10 min.
	Informing students about the topic of the next lesson and tasks for independent work	Familiarization	1 min.

Recommended literature.

Basic

1. Bouchoux, D. E. Intellectual property: the law of trademarks, copyrights, patents, and trade secrets / Delmar, Cengage Learning. – USA, 2013. – Chapters 2 and 3. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

2. About protection of the rights to trademarks for goods and services: Law of Ukraine dated December 15, 1993 No. 3689-XII: as amended on 16.06.2020. Articles 1, 5 and 6 URL: <https://zakon.rada.gov.ua/laws/show/3689-12?lang=en#Text> (date of access: 25.07.2024).

Additional

1. Llewelyn, D., & Aplin, T. Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights / Sweet & Maxwell. – London, 2019. – Chapters 16 and 17.

URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

2. Papadopoulou, F. Evergreening Patent Exclusivity in Pharmaceutical Products: Supplementary Protection Certificates, Orphan Drugs, Paediatric Extensions and ATMPs / Bloomsbury Publishing. – USA, 2021. – Chapter 4. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

3. Public health, innovation and intellectual property rights : report of the Commission on intellectual Property Rights, Innovation and Public Health / World Health Organisation. – Geneva : WHO, 2006. – Chapter 3. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

Information resources

1. <https://nmuofficial.com/en/zagalni-vidomosti/kafedri/department-medical-general-chemistry/>
2. <https://likar.nmu.kiev.ua/md/course/view.php?id=7413>
3. <https://www.wipo.int/trademarks/en/>

Questions for the student's self-preparation for the practical lesson:

1. Types and categories of marks.
2. Infringement of trademarks.

Developers:

Galina Zaitseva – Head of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor,

Yaroslava Pushkarova – Associate Professor of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor.

Topic of lesson No. 8: Licensing – as a legal means of using intellectual property objects.

Competencies:

– **integral competence:** ability to solve tasks of research and/or innovative nature in the field of pharmacy;

– **general competencies (GC):**

1. Ability for abstract thinking, analysis and synthesis (GC 01).
2. Knowledge and understanding of the subject area; understanding of professional activity (GC 02).
3. Ability to work in a team (GC 06).
4. The ability to make decisions and act in compliance with the principle of inadmissibility of corruption and any other manifestations of dishonesty (GC 10).

– **professional competences of the specialty (PC):**

1. Ability to integrate knowledge and solve complex problems of pharmacy / industrial pharmacy in broad or multidisciplinary contexts (PC 01).
2. The ability to collect, interpret and apply data necessary for professional activity, carrying out research and implementation of innovative projects in the field of pharmacy (PC 02).

Purposes:

- to interpret the concept of a license for the right to use intellectual property objects;
- to analyze and classify license agreements;
- to explain the pricing and types of payments for obtaining a license.

Equipment: practical tasks, tests, student’s notebook.

Lesson plan and organizational structure

Stage	Description of the stage	Learning levels	Time
Preparatory	Organizational issues (checking the presence of students)	Familiarization	1 min.
	Formation of motivation, activation of cognitive activity	Perception	3 min.
	Control of the initial level of teaching: test control and/or individual survey, verification of the performance of tasks of extra-auditory independent work	Reproductive	10 min.
Main	Discussion of theoretical material according to the subject of the topic	Comprehension Understanding	10 min.
	Solving practical tasks	Application in practice Search creative	25 min.

		activity	
	Independent work of the student under the supervision of the teacher (auditory work of the student)	Application in practice Search creative activity	10 min.
	Generalization of knowledge	Fixing	5 min.
Final	Control of the final level of teaching (test control or practical tasks)	Reproduction	15 min.
	General evaluation of the student's educational activity	Familiarization	10 min.
	Informing students about the topic of the next lesson and tasks for independent work	Familiarization	1 min.

Recommended literature.

Basic

1. Llewelyn, D., & Aplin, T. Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights / Sweet & Maxwell. – London, 2019. – Chapter 2. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

Additional

1. Bouchoux, D. E. Intellectual property: the law of trademarks, copyrights, patents, and trade secrets / Delmar, Cengage Learning. – USA, 2013. – Chapter 5. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

2. Public health, innovation and intellectual property rights : report of the Commission on intellectual Property Rights, Innovation and Public Health / World Health Organisation. – Geneva : WHO, 2006. – Chapter 2. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

Information resources

1. <https://nmuofficial.com/en/zagalni-vidomosti/kafedri/department-medical-general-chemistry/>
2. <https://likar.nmu.kiev.ua/md/course/view.php?id=7413>
3. <https://www.wipo.int/sme/en/assignment-licensing.html>

Questions for the student's self-preparation for the practical lesson:

1. License agreement as a legal form of transfer of rights to objects of industrial property.
2. Procedure for settlements under license agreements.

Developers:

Galina Zaitseva – Head of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor,

Yaroslava Pushkarova – Associate Professor of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor.

Topic of lesson No. 9: Patents search.

Competencies:

– **integral competence:** ability to solve tasks of research and/or innovative nature in the field of pharmacy;

– **general competencies (GC):**

1. Ability for abstract thinking, analysis and synthesis (GC 01).

2. Knowledge and understanding of the subject area; understanding of professional activity (GC 02).

3. Ability to work in a team (GC 06).

4. The ability to make decisions and act in compliance with the principle of inadmissibility of corruption and any other manifestations of dishonesty (GC 10).

– **professional competences of the specialty (PC):**

1. Ability to integrate knowledge and solve complex problems of pharmacy / industrial pharmacy in broad or multidisciplinary contexts (PC 01).

2. The ability to collect, interpret and apply data necessary for professional activity, carrying out research and implementation of innovative projects in the field of pharmacy (PC 02).

Purposes:

– to explain the concept of “patent search” and its meaning;

– to classify search criteria in patent databases;

– to analyze the resources of patent information;

– to analyze the possibilities of the Internet as a source of information for patent search.

Equipment: practical tasks, tests, student’s notebook.

Lesson plan and organizational structure

Stage	Description of the stage	Learning levels	Time
Preparatory	Organizational issues (checking the presence of students)	Familiarization	1 min.
	Formation of motivation, activation of cognitive activity	Perception	3 min.
	Control of the initial level of teaching: test control and/or individual survey, verification of the performance of tasks of extra-auditory independent work	Reproductive	10 min.
Main	Discussion of theoretical material according to the subject of the topic	Comprehension Understanding	10 min.
	Solving practical tasks	Application in practice Search creative	25 min.

		activity	
	Independent work of the student under the supervision of the teacher (auditory work of the student)	Application in practice Search creative activity	10 min.
	Generalization of knowledge	Fixing	5 min.
Final	Control of the final level of teaching (test control or practical tasks)	Reproduction	15 min.
	General evaluation of the student's educational activity	Familiarization	10 min.
	Informing students about the topic of the next lesson and tasks for independent work	Familiarization	1 min.

Recommended literature.

Basic

1. Bouchoux, D. E. Intellectual property: the law of trademarks, copyrights, patents, and trade secrets / Delmar, Cengage Learning. – USA, 2013. – Chapter 18. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

Additional

1. Public health, innovation and intellectual property rights : report of the Commission on intellectual Property Rights, Innovation and Public Health / World Health Organisation. – Geneva : WHO, 2006. – Chapter 5. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

Information resources

1. <https://nmuofficial.com/en/zagalni-vidomosti/kafedri/departament-medical-general-chemistry/>
2. <https://likar.nmu.kiev.ua/md/course/view.php?id=7413>
3. <https://patentscope.wipo.int/search/en/search.jsf>

Questions for the student's self-preparation for the practical lesson:

1. The concept of “patent search”.
2. Resources of finding patent information.

Developers:

Galina Zaitseva – Head of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor,

Yaroslava Pushkarova – Associate Professor of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor.

Topic of lesson No. 10: Search of scientific information.

Competencies:

– **integral competence:** ability to solve tasks of research and/or innovative nature in the field of pharmacy;

– **general competencies (GC):**

1. Ability for abstract thinking, analysis and synthesis (GC 01).
2. Knowledge and understanding of the subject area; understanding of professional activity (GC 02).
3. Ability to work in a team (GC 06).
4. The ability to make decisions and act in compliance with the principle of inadmissibility of corruption and any other manifestations of dishonesty (GC 10).

– **professional competences of the specialty (PC):**

1. Ability to integrate knowledge and solve complex problems of pharmacy / industrial pharmacy in broad or multidisciplinary contexts (PC 01).
2. The ability to collect, interpret and apply data necessary for professional activity, carrying out research and implementation of innovative projects in the field of pharmacy (PC 02).

Purposes:

- to explain the characteristics of the information search process;
- to analyze the meaning of scientific information;
- to classify information sources;
- to analyze the peculiarities of searching for scientific information on the Internet;
- to analyze the specifics of the activities of national libraries and databases of scientific literature.

Equipment: practical tasks, tests, student's notebook, list of national libraries and databases of scientific information with indicated electronic addresses and a brief description.

Lesson plan and organizational structure

Stage	Description of the stage	Learning levels	Time
Preparatory	Organizational issues (checking the presence of students)	Familiarization	1 min.
	Formation of motivation, activation of cognitive activity	Perception	3 min.
	Control of the initial level of teaching: test control and/or individual survey, verification of the performance of tasks of extra-auditory independent work	Reproductive	10 min.
Main	Discussion of theoretical material according to the subject of the topic	Comprehension Understanding	10 min.

	Solving practical tasks	Application in practice Search creative activity	20 min.
	Independent work of the student under the supervision of the teacher (auditory work of the student)	Application in practice Search creative activity	10 min.
	Generalization of knowledge	Fixing	5 min.
Final	Control of the final level of teaching (test control or practical tasks)	Reproduction	10 min.
	General evaluation of the student's educational activity	Familiarization	10 min.
	Calculation of the sum of points for the current activity.	Familiarization	11 min.

Recommended literature.

Basic

1. Bouchoux, D. E. Intellectual property: the law of trademarks, copyrights, patents, and trade secrets / Delmar, Cengage Learning. – USA, 2013. – Chapter 18. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

Additional

1. Papadopoulou, F. Evergreening Patent Exclusivity in Pharmaceutical Products: Supplementary Protection Certificates, Orphan Drugs, Paediatric Extensions and ATMPs / Bloomsbury Publishing. – USA, 2021. – Chapter 1. URL: <https://likar.nmu.kiev.ua/md/course/view.php?id=7413> (date of access: 25.07.2024).

Information resources

1. <https://nmuofficial.com/en/zagalni-vidomosti/kafedri/department-medical-general-chemistry/>
2. <https://likar.nmu.kiev.ua/md/course/view.php?id=7413>

Questions for the student's self-preparation for the practical lesson:

1. Concepts of “scientific information” and “information search”.
2. Electronic search of scientific information.

Developers:

Galina Zaitseva – Head of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor,

Yaroslava Pushkarova – Associate Professor of the Analytical, Physical and Colloid Chemistry Department, PhD, Associate Professor.