ACADEMIC STANDARD

FOR THE DISCIPLINE „TECHNOLOGY OF MEDICAL COSMETICS"

1. Aim

The primary objective of education in the discipline „Technology of medical cosmetics" is to study the theoretical foundations and practical methods for the preparation of medical cosmetic formulations. Medical materials, which are used in the cosmetic practice, are chemically defined compounds or products of plant or animal origin. Processing these materials into formulations involves suitable pharmaceutical operations that are determined by their physical-chemical and pharmacological properties. It is the right choice of working conditions and their dermal route of administration that allow the underlying purpose of medical cosmetics technology to be accomplished - the production of quality medical cosmetic formulations with high stability, effectiveness and safety, which will provide a beneficial effect on the appearance of their users.

This objective correlates with the university mission and vision; the place of the discipline within the overall curriculum in terms of discipline's importance and timing in the curriculum.

The aim of the course is to introduce students to the essence of modern cosmetics, the areas and perspectives of its development, the basic terms and definitions, the specific materials for the medical cosmetic preparations, prescriptions, laboratory techniques, their application and realization.

The acquired knowledge can be used for:

• Preparation of cosmetic products according to medical prescriptions for individual cosmetic care and treatment of specific cosmetic problems of the patients;

• Professional evaluation of commercial cosmetic products and competent consultation of patients for their choice and use of cosmetics;

• Competent participation in creating and editing corporate leaflets, brochures and flyers.

2. Learning

The topics and the hours for lectures and practical exercises are posted on the university website. Learning content is organized chronologically in such a way that each consecutive lection and related practical classes use previously studied topics and terms.

The program of the lectures is divided into two sections: a general and a specialized section. The general section includes:

• Subject and tasks of cosmetology, basic definitions;

• Main organs that are subject to and concern cosmetology - skin, hair, nails, eyes, oral cavity;

• Classification of cosmetic products;

• Technological components - auxiliaries and carriers used in cosmetics;

• Active substances which are used in cosmetics;

• Substances with aesthetic purpose - perfumes, dyes;

• Basic technological operations in the preparation of cosmetic products;

• Packaging and control;

• Quality of cosmetic products - efficiency, safety, stability;

• Contemporary technological approaches to increase cosmetic product efficiency.

The specialized section includes the most widely used cosmetic products classified by application site (skin, hair, nails, oral cavity) and the purpose of their application (cleaning, maintenance, hydrating, etc.). Each group of preparations is divided into subgroups according to their aggregate state and the type of dispersion system in accordance with Eur. Ph.

3. Prerequisites

The students must have obtained basic knowledge in Inorganic chemistry, Organic chemistry, Analytical chemistry, Physicochemistry and Mathematics in order to begin and successfully complete the Technology of medical cosmetics course.

4. Academic resources

The academic staff of the discipline includes 1 professor and 2 assistant professors – 1 of them holding an educational and scientific degree „Doctor (PhD)“; 2 of them having a specialization in Pharmaceutical technology with Biopharmacy.

The lectures are given by a professor or an associate professor with a PhD degree of relevant doctoral program. Practical classes are held by assistant professors, which have a Master of Pharmacy degree and are appointed by competition. .

5. Material resources

For the discipline „Technology of medical cosmetics” the department has two laboratories equipped with basic apparatus - electronic scales, refrigerator, water baths, electromagnetic stirrers and test apparatus - pH meter. All of the necessary substances, glassware and other ancillary materials for the preparation and the control of the studied medical cosmetic preparations are provided for the laboratory exercises.

6. Lecturing

Lectures are prepared and given in the form of multimedia presentations. Lectures' content and format are chosen by the leading lecturer.

7. Laboratory / practical classes

Practical classes are held separately for each student group. Methodological guidelines are provided for every particular practical task within an exercise. Each student works individually and prepares the assigned for the particular exercise medical cosmetic formulations. Tasks may also require working in groups. During the training, examination is carried out, which check student's self-preparation, knowledge and results (obtained knowledge and skills) of the particular exercise.

8. Information resources. Basic literature. Websites

A list of the main reference literature is presented, with a priority being given to the available resources that are published as „basic literature". Internet resources are also recommended, where appropriate materials for the student's preparation can be found.

Literature:

1. **Andre´ O**. Barel, Marc Paye, Howard I. Maibach - Handbook of cosmetic science and technology 3rd ed., Informa Healthcare USA, Inc. 2009

2. **Zoe Diana Draelos**, Lauren A. Thaman - Cosmetic formulation of skin care products, Taylor & Francis Group, New York, 2006

3. **Gabriella Baki**, Kenneth S. Alexander – Introduction to cosmetic formulation and technology, John Wiley & Sons, Inc., New Jersey, 2015

4. **Ernest W**. Flick - Cosmetic and toiletry formulations, Noyes Publications / William Andrew Publishing, LLC, New York, 2001

5. **N. Pieratoni**, „Connaissances de base pour l'étude des soins esthétiques", vol.I, Societe d'édition „Les nouvelles esthétiques", Paris

9. Control assignments

Students are occupied dynamically and intensively during the semester. It is assumed that the way in which knowledge and skills are acquired is an important factor in their depth, durability and applicability. Ongoing control of the students' progress is performed through oral examination.

After completing the course students must have aquired the following knowledge and skills:

• Anatomical and physiological characteristics of the application site and pathological changes leading to cosmetic defects;

• Definition, characteristics, basic composition - additives and active substances;

• Technology;

• Packaging, control, storage;

• Application methods.

10. Individual work and commitment of the students

The individual work of the students must be led by the assistant professors, who have to guide them in the literary sources, and methods for learning, as well.

11. Collaboration between students and the teaching staff

This collaboration consists of:

● The teacher's commitment to the students' preparation on current difficulties in learning the subject and the opportunities with an individual learning program.

● Use of meeting hours for consultations.

● Including students in teams for scientific tasks, research projects, etc.

12. Exams

Ongoing assessments provided on the curriculum of the specialty are given for:

1. Student's results in practical classes, individual tasks, work of the student with the lecturer in scientific research etc.

2. At least two (in the middle and at the end of the semester) oral examinations.

13. Standards of evaluation:

The final grade in the discipline „Technology of medical cosmetics" is determined on the basis of two main elements:

The first one includes the assessment of the student's academic activity throughout the semester (no more than 30%). It includes all the assessments from the ongoing control - oral examinations.

The second one includes the theoretical exam grade (no more than 70%). The exam regulations are designed to minimize the possibility of manipulating the results.

Clear standards for evaluation are developed for the discipline.

The level of reproduction and use of knowledge by students is defined as information-reproductive, technological-productive, problem-productive, innovative-creative. Based on the above, the standards for evaluation are developed as follows:

Poor (2) – for showing scant knowledge and gross errors that cannot be the basis for the next levels of training;

Satisfactory (3) – simple reproduction and key knowledge of the subject; not ready for analysis of the knowledge gained; poor language culture with a lot of mistakes;

Good (4) – for developed additional knowledge, good knowledge of the subject; but without being able to develop learning to analysis; comparatively good language culture; but with inaccuracies in the use of different concepts and terms;

Very good (5) – for well-developed key and additional knowledge, thinking and understanding the subject, good skills to apply the knowledge, adequate use of scientific concepts from the studied field, good language culture.

Excellent (6) – for shown individual and logical thinking, additional knowledge and skills, for excellent knowledge of the subject, creativity, interpretation of the concepts, skills to solve complex tasks and right argumentation for the decisions taken, accuracy and rich language culture of the presentation

When starting classes, students should be familiar with the evaluation standards, the procedures for conducting ongoing control, and the opportunities to receive feedback on their progress during the semester.

14. Final grade formation

Forms of evaluation:

Ongoing control – oral examination during the practical exercises;

Final control – written examination (semester exam).

Formation of a final grade:

A final grade is formed as a result of the the examinations during the semester and the final exam at the end of the semester.

The Final Grade (FG) of the acquired knowledge in the course is rounded to a whole unit and is derived from the equation:

FG = 0.2 OG + 0.8 EG

where: OG - ongoing grade from the control throughout the semester (must not be „Poor 2“); and – EG - exam grade (must not be „Poor 2“).

If OG and/or EG is „Poor 2”, the final grade is „Poor 2”.

The final grade is rounded to a whole unit and is written in the documentation.

Semester examination:

The semester exam includes a written examination and an oral examination.

The written examination includes questions in the form of a test.

Aspects of the evaluation:

The system for controlling the preparation of the students during the semester includes their presence at lectures and practical exercises, questions on the topic of the exercise. At the end of each exercise, the acquired knowledge is monitored and a control is performed by discussing the exercise.

The laboratory exercises are performed by the students independently. The grade for each student is formed on the basis of his/her theoretical preparation for the developed exercise and the accomplishment of the assigned tasks. The semester grade is formed through a written examination and an oral examination.

15. Documentation, result storage and control of the assessment procedure

• Assessed students have the right and obligation to be informed about the assessment regulation procedures and results, and to make claims and complaints in case of violation of the current rules.

• The students' rights, in accordance with the meaning of the preceding paragraph, are guaranteed provided that technical omissions or errors have occurred (e.g. in the calculation or assessment) or that there are reasons for a vast contrast between the knowledge, skills and competencies the student have actually shown and his/her final grade.

• Corrections of the grades in cases regarding the provisions of the previous paragraph shall be made in the Student Book, the examination report or the account in the General Registry only by the leader of the discipline.

• Potential disagreements and claims on the part of the students should be directed in a written form to the assessment team, whose responsibility is to provide an argumented answer by the end of the next working day.

• Revealed and proven cases of serious violation of the rights of the student in terms of assessing his / her knowledge, skills and competences are directed with a written complaint to the Vice-rector for quality and accreditation.

Exam materials are preserved and the students are informed about them. The period during which the students have access to the examination tests and results is up to 3 working days after the examination.

This requirement shall be in accordance with the Higher Education Act Art. 56. par. 1, „The members of the academic board shall be obliged to develop and announce in an appropriate way a description of the provided by them course of lectures, including number, titles and sequence of topics of the curriculum, recommended literature, method of evaluation of the mark and form of checking of knowledge and skills.“.

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The Academic Standard for the discipline „Technology of medical cosmetics" was approved by the Department council with a Protocol No. 01/15.01.2020