

MINISTRY OF HEALTH PROTECTION OF UKRAINE

ODESSA NATIONAL MEDICAL UNIVERSITY

Department of Pharmaceutical Chemistry and Drug Technology

APPROVED

Vice-rector for scientific and pedagogical work

Eduard BURYACHKIVSKY

September 1st, 2024



WORKING PROGRAM IN THE DISCIPLINE

«COSMETOLOGY FORMULATION»

Level of higher education: second (master's degree)

Field of knowledge: 22 «Health care»

Specialty: 226 «Pharmacy, industrial pharmacy»

Educational and professional program: Pharmacy, industrial pharmacy

2024

The work program is based on the educational and professional program "Pharmacy, industrial pharmacy" of training specialists of the second (master's) level of higher education in specialty 226 "Pharmacy, industrial pharmacy" field of knowledge 22 "Health care", approved by the Scientific Council of ONMedU (protocol no. 10 of June 27, 2024).

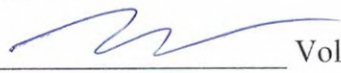
Developers:

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The work program was approved at the meeting of the Department of Pharmaceutical Chemistry and Drug Technology

Protocol No. 1 from "29 " August 2024

Head of Department



Volodymyr HELMBOLDT

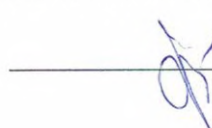
Agreed with the EPP guarantor



Liana UNHURIAN

Approved by the subject cycle methodical commission for pharmaceutical disciplines of ONMedU
Protocol No. 1 from "30 " August 2024

Head of the subject cycle methodical commission for pharmaceutical disciplines of ONMedU



Natalia FIZOR

Reviewed and approved at the department meeting _____

Protocol no ___ from "___" _____ 20__.

Head of the department _____

Reviewed and approved at the department meeting _____

Protocol no ___ from "___" _____ 20__.

Head of the department _____

1. Description of the academic discipline:

Name of indicators	Field of knowledge, specialty, specialization, level of higher education	Characteristics of the academic discipline
Total number: Credits: 3 Hours: 90 Content modules: 1	Field of knowledge 22 "Health care"	<i>Full-time education</i>
		<i>Elective discipline</i>
		<i>Year of preparation: 3</i>
	Specialty 226 "Pharmacy, industrial pharmacy"	<i>Semesters V</i>
		<i>Lectures (0 год.)</i>
		<i>Practical (30 год.)</i>
	Specialization 226.01 "Pharmacy"	<i>Independent work (60 год.)</i>
Level of higher education second (master's)	<i>The form of final control – credit</i>	

2. The purpose and tasks of the educational discipline, competencies, learning outcomes of the program.

Goal: ознайомлення студентів з косметичними засобами різного напрямку дії, найпоширенішими вадами та захворюваннями шкіри, її придатків та їх лікуванням, що сприятиме наданню кваліфікованої допомоги у виборі раціональних, ефективних і безпечних косметичних засобів для гігієнічного догляду та лікування різноманітних захворювань шкіри та волосся.

Task:

- study of quality requirements and safety criteria for the use of cosmetic products;
- study and assimilation of morphological and physiological features of the skin, mechanisms of skin aging;
- familiarization with the etiology, pathogenesis, clinical manifestations of skin diseases;
- familiarization with the composition and properties of the components of medicinal cosmetics;
- familiarization with the varieties of cosmetic forms, the peculiarities of their action;
- mastering the technologies of various forms of cosmetic products;
- familiarization with the principles of cosmetic procedures;
- familiarization with the principles of complex cosmetic care.

The process of studying the discipline is aimed at forming elements of the following competencies:

General competencies (GC):

- GC 01. Ability to think abstractly, analyze and synthesize, learn and be modernly educated.
- GC 02. Knowledge and understanding of the subject area and understanding of professional activity.
- GC 03. Ability to communicate in the national language both orally and in writing.
- GC 04. The ability to communicate in a foreign language (mainly English) at a level that ensures effective professional activity.
- GC 05. The ability to evaluate and ensure the quality of the work performed.
- GC 06. Ability to work in a team.
- GC 10. The ability to act socially responsibly and consciously.
- GC 11. Ability to apply knowledge in practical situations.
- GC 12. The desire to preserve the environment.
- GC 13. Ability to show initiative and entrepreneurship.
- GC 14. Ability to adapt and act in a new situation.

GC 15. Knowledge and understanding of the subject area and understanding of professional activity

GC 16. The ability to conduct experimental research at the appropriate level.

Professional competencies (PC):

PC 01. Ability to integrate knowledge and solve complex pharmacy problems in broad or multidisciplinary contexts.

PC 02. Ability to collect, interpret and apply data necessary for professional activity, research and implementation of innovative projects in the field of pharmacy.

PC 08. The ability to consult on prescription and non-prescription drugs and other products of the pharmacy assortment; pharmaceutical care during the selection and sale of medicinal products of natural and synthetic origin by assessing the risk/benefit ratio, compatibility, taking into account biopharmaceutical, pharmacokinetic, pharmacodynamic and physicochemical and chemical features, indications/contraindications for use guided by data on the health status of a specific patient.

PC 12. Ability to ensure proper storage of natural and synthetic drugs and other pharmacy products in accordance with their physico-chemical properties and Good Storage Practice (GSP) rules in healthcare facilities.

PC 16. The ability to organize and carry out the production activities of pharmacies for the manufacture of drugs in various dosage forms according to the prescriptions of doctors and the requirements (orders) of medical and preventive institutions, including the justification of technology and the selection of auxiliary materials in accordance with the rules of Good Pharmacy Practice (GPP).

PC 17. The ability to carry out pharmaceutical development and participate in the production of medicinal products of natural and synthetic origin in the conditions of pharmaceutical enterprises in accordance with the requirements of Good Manufacturing Practice (GMP).

PC 24. Ability to use knowledge of regulatory and legislative acts of Ukraine and recommendations of proper pharmaceutical practices in professional activities.

PC 25. The ability to demonstrate and apply in practical activities communicative communication skills, fundamental principles of pharmaceutical ethics and deontology, based on moral obligations and values, ethical standards of professional behavior and responsibility in accordance with the Code of Ethics of Pharmaceutical Workers of Ukraine and WHO guidelines.

PC 26. The ability to organize and participate in the production of medicinal products in the conditions of pharmaceutical enterprises, in particular the selection and justification of the technological process, equipment in accordance with the requirements of Good Manufacturing Practice (GMP) with the appropriate development and execution of the necessary documentation. Determine the stability of medicines.

Program learning outcomes (PLO):

PLO 01. Have and apply specialized conceptual knowledge in the field of pharmacy and related fields, taking into account modern scientific achievements.

PLO 03. Have specialized knowledge and skills/skills for solving professional problems and tasks, including for the purpose of further development of knowledge and procedures in the field of pharmacy.

PLO 04. Communicate freely in the national and English languages orally and in writing to discuss professional problems and results of activities, presentation of scientific research and innovative projects.

PLO 07. Collect the necessary information on the development and production of medicinal products, using professional literature, patents, databases and other sources; systematize, analyze and evaluate it, in particular, using statistical analysis.

PLO 19. Develop technological documentation for the manufacture of medicinal products, choose a rational technology, manufacture medicinal products in various dosage forms according to the prescriptions of doctors and the requirements (orders) of medical and preventive institutions, prepare them for release.

PLO 20. Carry out pharmaceutical development of medicinal products of natural and synthetic origin in the conditions of industrial production.

PLO 25. Adhere to the norms of the sanitary and hygienic regime and the requirements of safety equipment when carrying out professional activities.

PLO 27. Perform professional activities using creative methods and approaches.

PLO 30. Adhere to the norms of communication in professional interaction with colleagues, management, consumers, work effectively in a team.

PLO 36. Plan and implement professional activities on the basis of normative legal acts of Ukraine and recommendations of proper pharmaceutical practices.

PLO 38. To justify the technology and organize the production of medicinal products at pharmaceutical enterprises and draw up technological documentation for the production of medicinal products at pharmaceutical enterprises.

PLO 43. To organize the required level of individual safety (own and the persons he cares for) in case of typical dangerous situations in the individual field of activity.

As a result of studying the academic discipline, the student of higher education should:
to know:

- classification, nomenclature, mechanism and types of action of cosmetic products of hygienic, therapeutic and preventive action.
- the main active ingredients, auxiliary substances used in extemporaneous prescriptions, their properties and medicinal effects based on the study of the articles of the SPhU. Equipment and means of small mechanization in the technology of cosmetic forms, which are used during the production of various prescriptions in the conditions of pharmacies.
- to know the conditions for proper storage of medicines and other products of the pharmacy assortment in accordance with their physical and chemical properties and the rules of Good Storage Practice (GSP) in health care institutions.

be able:

- to study medical prescriptions, to understand the composition of cosmetic pharmacy prescriptions, which consist of the main active ingredients, auxiliary substances, their properties, and to explain the medicinal effect based on the study of the articles of the SPhU, other current normative documents of the Ministry of Health of Ukraine;
- determine the main indicators of the quality of cosmetic products, using the necessary pharmacy equipment and the requirements of analytical and regulatory documentation;
- take a differentiated approach to the choice of cosmetics and medical cosmetics, use them rationally for the prevention and treatment of age-related changes and some skin diseases;
- to provide qualified consultation in the selection of effective and safe medical cosmetics, as well as meet today's needs for a new type of specialists with a high level of knowledge, both in the main specialty and competent in related fields.

3. Content of the academic discipline

Topic 1. Features of the composition, forms of release, application and effect on the skin of various groups of cosmetic products. Standardization of the production and sale of cosmetic products in Ukraine and the world.

Topic 2. Toxicological and hygienic indicators and safety norms of cosmetic products. Certification of cosmetic products.

Topic 3. The structure of the skin and its appendages. Types of skin and hair, their characteristics. Mechanisms of penetration of various substances into the skin.

Topic 4. Skin aging. Acne, seborrhea, allergic rashes, dermatitis, fungal and other skin diseases. Anatomical and physiological features of the skin in the age aspect. Modern theories and mechanisms of skin aging. The influence of exo- and endogenous factors on the condition of the skin and hair.

Topic 5. Ingredients of cosmetics. Cosmetic, technological and biopharmaceutical evaluation of individual groups of ingredients.

Topic 6. Means for cleaning the skin, features of the composition, technology and application.

Topic 7. Cosmetic products for oral hygiene, features of composition, technology and application.

Topic 8. Moisturizing cosmetic products, features of composition, technology and application. Ways to moisturize the skin. Nomenclature of skin moisturizers. High molecular compounds of natural and synthetic origin as the basis of moisturizing creams. Day creams.

Topic 9. Means for carrying out cosmetic procedures. Cosmetic masks. Massage creams. Means for skin depilation. Salon and household cosmetic procedures, their classification and characteristics. Cosmetic masks, forms of mask production and features of their use. Massage creams. Means for skin depilation.

Topic 10. Cosmetic products for hair care. Principles of choosing shampoos, conditioners and other cosmetics depending on the type of hair.

4. The structure of the academic discipline

Names of topics	Number of hours			
	In total	including		
		lectures	practical	IWS
Topic 1. Features of the composition, forms of release, application and effect on the skin of various groups of cosmetic products. Standardization of the production and sale of cosmetic products in Ukraine and the world.	8	0	2	6
Topic 2. Toxicological and hygienic indicators and safety norms of cosmetic products. Certification of cosmetic products.	8	0	2	6
Topic 3. The structure of the skin and its appendages. Types of skin and hair, their characteristics. Mechanisms of penetration of various substances into the skin.	10	0	4	6
Topic 4. Skin aging. Acne, seborrhea, allergic rashes, dermatitis, fungal and other skin diseases. Anatomical and physiological features of the skin in the age aspect. Modern theories and mechanisms of skin aging. The influence of exo- and endogenous factors on the condition of the skin and hair.	8	0	2	6
Topic 5. Ingredients of cosmetics. Cosmetic, technological and biopharmaceutical evaluation of individual groups of ingredients.	10	0	4	6
Topic 6. Means for cleaning the skin, features of the composition, technology and application.	8	0	2	6
Topic 7. Cosmetic products for oral hygiene, features of composition, technology and application.	8	0	2	6
Topic 8. Moisturizing cosmetic products, features of composition, technology and application. Ways to moisturize the skin. Nomenclature of skin moisturizers. High molecular compounds of natural and synthetic origin as the basis of moisturizing creams. Day creams.	10	0	4	6
Topic 9. Means for carrying out cosmetic procedures. Cosmetic masks. Massage creams. Means for skin depilation. Salon and household	10	0	4	6

cosmetic procedures, their classification and characteristics. Cosmetic masks, forms of mask production and features of their use. Massage creams. Means for skin depilation.				
Topic 10. Cosmetic products for hair care. Principles of choosing shampoos, conditioners and other cosmetics depending on the type of hair.	10	0	4	6
Total in hours	90	0	30	60

5. Topics of lectures / seminars / practical / laboratory lessons

5.1. Topics of lectures

Not provided for in the curriculum.

5.2. Topics of seminar lessons

Seminar lessons are not provided.

5.3. Topics of practical lessons

№	Topic name	Number of hours
1.	Cosmetics and medicated cosmetics, their characteristics. Features of the composition, forms of release, application and effect on the skin of various groups of cosmetic products. State regulation of the production and sale of cosmetic products in Ukraine and the world.	2
2.	Sanitary and hygienic examination of cosmetics. Toxicological and hygienic indicators and safety norms of cosmetic products. Certification of cosmetic products	2
3.	Biological role of the skin, functions and physiological properties of the skin and its appendages. The general principle of skin care.	2
4.	The most common diseases of the skin and its appendages. Acne, seborrhea, allergic rashes, dermatitis, fungal and other skin diseases. Formulation of prescriptions of cosmetic and medical products for individual use for problematic facial skin.	2
5.	Skin aging. Factors provoking aging mechanisms. Physiology and types of skin aging. General principles of formulation, technology and quality control of antiaging cosmetics.	2
6.	The principles of choosing ingredients depending on the type of skin and the purpose of the cosmetic product. Ingredients of cosmetic products, their classification and characteristics. Natural and synthetic ingredients in cosmetics. Biologically active substances of plant origin as active components of cosmetics. Cosmetic, technological and biopharmaceutical evaluation of individual groups of ingredients.	4
7.	Cleansing creams and cosmetic milk. Scrub creams and peeling creams. Features of the composition of skin cleansers and their influence on the effectiveness of cosmetic and medicinal products. General principles of formulation, technology, quality control of cosmetics for cleaning purpose.	2
8.	Cosmetic products for the care of the oral cavity and teeth. Toothpastes, powders, elixirs. Peculiarities of formulation of recipes of cosmetic preparations for the care of oral cavity and teeth. Different directions of action.	2
9.	Ways to moisturize the skin. Nomenclature of skin moisturizers. High molecular compounds of natural and synthetic origin as the basis of	4

	moisturizing creams. Features of formulation of cosmetic preparations for moisturizing the skin. Day creams. Characteristics and cosmetic effect. Formulation principles, production technology and quality assessment.	
10.	Massage creams. Means for skin depilation. Salon and household cosmetic procedures, their classification and characteristics. General principles of formulation, technology, quality control of cosmetic masks, massage creams and hair removal products.	2
11.	Cosmetic masks, forms of mask production and features of their use. The main components of the formulation of cosmetic masks (emollients, hydrotropes, dermatotropes, BAA, etc.).	2
12.	Means for skin depilation. Recipe. Assessment of quality and consumer characteristics. Container, packaging and storage conditions.	2
13.	Cosmetic products for hair care. The principles of choosing cosmetics depending on the type of hair. Cosmetic effect, general principles of formulation, technology, quality control and evaluation of their quality.	2
<i>The number of hours of practical lessons in the discipline</i>		30

6. Independent work of a student of higher education

№	Title of the topic / types of tasks	Number of hours
1.	Cosmetology as a science. Standardization of the production and sale of cosmetic products in Ukraine and the world.	6,0
2.	Safety of use of cosmetic products and methods of its research.	6,0
3.	Ingredients of cosmetics. The principles of choosing ingredients depending on the type of skin and the purpose of the cosmetic product.	6,0
4.	Means for cleaning the skin, features of the composition.	6,0
5.	Means for cleaning the skin, features of the composition.	6,0
6.	Cosmetic means of protective action, features of the composition. Photoprotective means.	6,0
7.	Cosmetic products for oral hygiene, composition features.	6,0
8.	Means for carrying out cosmetic procedures.	6,0
9.	Cosmetic products for hair care.	6,0
10.	Cosmetic products for children, features of the composition Forms of release of cosmetic products for children. Features of the composition and research of cosmetic products for children under 3 years of age.	6,0
<i>The number of hours of independent work on the discipline</i>		60

7. Teaching methods.

Lectures: multimedia lectures with elements of discussion communication with students of higher education.

Practical training: conversation, solving situational tasks, demonstration and practice of manipulation skills (including demonstration films, visual equipment, means of small mechanization, operations and processes of manufacturing drugs in the conditions of a pharmacy and an industrial enterprise, practicing practical skills using pharmacy and industrial equipment.

Independent work: independent work with the textbook, independent work with the bank of test tasks, independent solution of situational tasks.

8. Forms of control and assessment methods (Including criteria for evaluating learning outcomes)

Current control: oral survey, testing, assessment of performance of practical skills, problem solving.

Final control: credit.

Evaluation of the current educational activity in a practical session:

1. Assessment of theoretical knowledge on the topic of the lesson:
 - methods: survey, solving a situational problem
 - maximum score – 5, minimum score – 3, unsatisfactory score – 2.
2. Assessment of practical skills on the subject of the lesson:
 - methods: assessment of the correctness of the performance of practical skills
 - maximum score – 5, minimum score – 3, unsatisfactory score – 2.

The grade for one practical lesson is the arithmetic average of all components and can only have an integer value (5, 4, 3, 2), which is rounded according to the statistical method.

Criteria for current assessment in a practical lesson

Assessment	Assessment criteria
«5»	The applicant actively participates in the discussion of the most difficult questions on the topic of the lesson, gives at least 90% correct answers to standardized test tasks, answers written tasks without errors, performs practical work and draws up a protocol.
«4»	The applicant participates in the discussion of the most difficult questions on the topic, gives at least 75% correct answers to standardized test tasks, makes some minor mistakes in the answers to written tasks, performs practical work and draws up a protocol.
«3»	The applicant participates in the discussion of the most difficult questions on the topic, gives at least 60% correct answers to standardized test tasks, makes significant mistakes in answers to written tasks, performs practical work and draws up a protocol.
«2»	The applicant does not participate in the discussion of complex questions on the topic, gives less than 60% correct answers to standardized test tasks, makes gross mistakes in answers to written tasks or does not give answers to them at all, does not perform practical work and does not draw up a protocol.

Credit is given to the applicant who completed all the tasks of the work program of the academic discipline, took an active part in practical classes, completed and defended an individual assignment and has an average current grade of at least 3.0 and has no academic debt.

Assessment is carried out: at the last lesson before the beginning of the examination session - with the tape system of learning, at the last lesson - with the cyclical system of learning. The credit score is the arithmetic average of all components on a traditional four-point scale and has a value that is rounded according to the statistics method with two decimal places after the decimal point.

9. Distribution of points received by higher education applicants

The obtained average score for the academic discipline for applicants who successfully mastered the work program of the academic discipline is converted from a traditional four-point scale to points on a 200-point scale, as shown in the table:

Conversion table of a traditional assessment into a multi-point scale

Traditional four-point scale	Multipoint 200-point scale
Perfectly («5»)	185 – 200
Good («4»)	151 – 184
Satisfactorily («3»)	120 – 150
Unsatisfactorily («2»)	Less than 120

A multi-point scale (200-point scale) characterizes the actual success of each applicant in mastering the educational component. The conversion of a traditional assessment (average score for an academic discipline) into a 200-point one is performed by the information and technical department of the University.

According to the obtained points on a 200-point scale, the achievements of the applicants are

evaluated according to the ECTS rating scale. Further ranking according to the ECTS rating scale makes it possible to evaluate the achievements of students in the educational component who are studying in the same course of the same specialty, in accordance with the points they received.

The ECTS scale is a relative-comparative rating, which establishes the applicant's belonging to the group of better or worse among the reference group of fellow students (faculty, specialty). An "A" grade on the ECTS scale cannot be equal to an "perfectly" grade, a "B" grade to a "good" grade, etc. When converting from a multi-point scale, the limits of grades "A", "B", "C", "D", "E" according to the ECTS scale do not coincide with the limits of grades "5", "4", "3" according to the traditional scale. Acquirers who have received grades of "FX" and "F" ("2") are not included in the list of ranked acquirers. The grade "FX" is awarded to students who have obtained the minimum number of points for the current learning activity, but who have not passed the final examination. A grade of "F" is given to students who attended all lessons in the discipline, but did not receive an average score (3.00) for the current academic activity and were not admitted to the final examination.

Applicants who study on one course (one specialty), based on the number of points scored in the discipline, are ranked on the ECTS scale as follows:

Conversion of the traditional grade from the discipline and the sum of points on the ECTS scale

Assessment on the ECTS scale	Statistical indicator
A	Top 10% students
B	The next 25% students
C	The next 25% students
D	The next 25% students
E	The next 25% students

10. Methodical support:

- Working program of the academic discipline
- Syllabus of the academic discipline
- Textbooks:
- Multimedia presentations
- Situational tasks
- Methodical development of practical lessons
- Electronic bank of test tasks by subdivisions of the discipline.

11. Questions for final control

1. The structure of the epidermis. Structural features and functions of the layers of the epidermis. Mitotic activity of basal epidermocytes. Factors affecting mitotic activity.
2. The structure of the dermis and hypodermis. Structural features and functions of these layers.
3. Sweat and sebaceous glands. Structure and functions.
4. Levels and ways of penetration of cosmetic preparations. Lipid barrier. Factors contributing to increased penetration of substances through the skin.
5. Normative documents regulating the production and sale of perfumery and cosmetic preparations. Definition. Categories. The structure and content of the sections of the technical conditions.
6. The procedure for obtaining a permit for the production and sale of perfumery and cosmetic preparations.
7. Certification: concept and procedure. The procedure for importing imported products into the territory of Ukraine. Sanitary and hygienic examination of perfumery and cosmetic products.
8. Cosmetic effect of individually prepared preparations. Features of the formulation and technology depending on the purpose and form of release.
9. Biologically active components in the formulation of cosmetic products. Classification. Cosmetic effect of BAV (on the example of vitamins and proteins).

10. Classification of drugs with foaming action and representatives. Cosmetic effect and mechanism of cleansing action of foaming cosmetic preparations.
11. Classification, functional purpose and features of the cosmetic action of surface-active substances (surfactants). Field of use in cosmetology.
12. Shampoos: definition, classification, cosmetic effect. Active and auxiliary components of the formulation. Their characteristics and recommended concentration.
13. Quality control of shampoos according to NTD requirements.
14. Definition, classification and cosmetic effect of rinses and balms. Formulation of rinses and hair balms for different types of hair, taking into account the direction of action.
15. Technological stages of production of balms and rinses. Quality control of balms and rinses according to NTD requirements.
16. Definition, classification and cosmetic effect of toilet soap. Characteristics of raw materials used in the production of solid toilet soap.
17. The technology of toilet soap in solid form.
18. Quality control of liquid toilet soap, according to NTD requirements.
19. Classification, cosmetic effect of cosmetic lotions. Characterization and concentration of the components of the recommended lotion formulation.
20. Technology and quality control of lotions and tonics.
21. Classification and characteristics of dental elixir formulation components. Technology and quality indicators of dental elixirs.
22. Components of the liquid formulation for removing varnish. Technology and quality indicators.
23. Cosmetic creams: classification, cosmetic effect, features and benefits of action on the skin. Technological methods of stabilization of emulsion-based cosmetic creams.
24. Formulation requirements, characteristics of ingredients of cosmetic creams based on emulsions of the 1st kind.
25. Formulation requirements, characteristics of ingredients of cosmetic creams based on type 2 emulsions.
26. Technology of oil-in-water cosmetic emulsions.
27. Technology of water-in-oil cosmetic emulsions.
28. Quality indicators of cosmetic creams on an emulsion basis (water in oil) of a thick consistency.
29. Quality indicators of cosmetic creams on an emulsion basis (oil in water)
30. Characteristics of the formulation of fat-based cosmetic creams. Cosmetic effect, features of use. Technology of preparation of fatty creams.
31. The cosmetic effect of suspension-based cosmetic creams depends on the fillers used. Characterization of the components of the formulation of cosmetic suspension-based creams. Technology of suspension creams.
32. Cosmetic effect, classification and representatives of cosmetic preparations for skin care. Lipstick: classification and cosmetic effect. Characteristics of the formulation components, recommended concentration.
33. Nail polish: classification and requirements. Characteristics of the formulation components, recommended concentration.
34. Technology and quality indicators of nail polish.
35. Preparations for chemical curling. The mechanism of hair shape change under the influence of chemical curling. Characteristics of the formulation components, recommended concentration.
36. Hair dyes: classification and requirements. Classification and nomenclature of dyes. Mechanism of hair dyeing. Characteristics of the formulation components, recommended concentration.
37. Mascara: classification and requirements. The main components of the mascara formulation, the recommended concentration.
38. Technology and indicators of the quality of mascara for eyelashes. Technology and quality indicators of mascara in a creamy form of release.
39. Technology and indicators of the quality of lipsticks.

40. Powder: purpose, classification and requirements. Characteristics of components and recommended concentration.
41. Powder technology is powdery and compact.
42. Quality indicators of decorative cosmetics in powdered and compact form.
43. Tonal creams. General characteristics. Functional purpose, nomenclature and comparative characteristics of the main components of the formulation of tonal creams.
44. Quality control of emulsion-based make-up products.
45. Hair dye production technology.
46. Quality control of hair dyes, according to NTD.
47. Quality control of chemical hair perms, according to NTD.
48. Hair sprays: classification and cosmetic effect. Characteristics of the formulation components, recommended concentration.
49. Technology and quality control of hair varnishes.
50. Hair mousses and foams: classification and cosmetic effect. Characteristics of the formulation components, recommended concentration.
51. Technology and quality control of hair styling products.
52. Hair styling gels: classification and cosmetic effect. Characteristics of the formulation components, recommended concentration.
53. Technology and quality control of hair styling gels.
54. Classification and cosmetic effect of toothpastes. Characterization of the active and auxiliary substances of the formulation of toothpastes. The recommended concentration of the components of the composition.
55. Toothpaste technology.
56. Quality indicators of toothpastes according to NTD requirements.
57. Definition of the term "perfume". Classification of perfume products. Degrees of odors in perfumery. Classification of smells according to "Zhyvaudan".
58. Technology of perfume compositions and products. Indicators of the quality of perfumery products.
59. Classification of aromatic substances depending on the nature of origin. Characteristics of aromatic substances of synthetic and semi-synthetic origin.
60. Classification and characteristics of aromatic substances of natural origin. Classification and nomenclature of odor fixers.

12. Recommended literature

Basic:

1. Sharma, Gaurav & Gadhiya, Jayesh & Dhanawat, Meenakshi. Textbook of Cosmetic Formulations. 2018
2. A-Z of Natural Cosmetic Formulation: The definitive beginners' guide to the essential terminology, theories and ingredient types needed to formulate professional cosmetic products / Gail Francombe. 2019. – 304 p.
3. Natural Skin Care and Cosmetic Formulation: How You Can Make Toners, Moisturizers, Body Butters, Lotions, Balms, Scrubs, Masks, Cleansers, Serums, Haircare Products, Cosmetics, and Perfumes. Kindle Edition. 2022. – 334 p.
4. Introduction to Cosmetic Formulation and Technology 2nd Edition / Gabliella Baki. 2023. – 832 p.
5. Skincare & Cosmetic Ingredients Dictionary & Workbook: How to Make Skincare Products, Skincare Ingredients Workbook, Formulation Secrets & Lecture ... Skin Masters Program) / Teo Wan Lin. 2023. – 594 p.

Additional:

1. Технологія косметичних засобів : підручник для студ. вищ. навч. закладів / О. Г. Башура, О. І. Тихонов, В. В. Россіхін [та ін.] ; за ред. О. Г. Башури і О. І. Тихонова. — Х. : НФаУ ; Оригінал, 2017. — 552 с.
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