SYLLABUS

1. Course title:

Analysis and Quality Control of Cosmetic Products

2. Code:

3. Cycle of study:

1

4. ECTS credits:

8

5. Type of course:

Mandatory

6. Prerequisites:

None

7. Class restrictions:

None

8. Duration / semester(s):

1 4

9. Weekly contact hours and student workload:

	Semester (1)	Semester (2)	(for two-semester courses)	Workload: (hours)
9.1. Lectures	4		Classes:	78.75
9.2. Seminars	0		Individual work:	146.08
9.3. Laboratory / Practice classes	3		In total:	224.83

10. Faculty:

Faculty of Pharmacy

11. Department/study program:

Cosmetology

12. Lecturer:

Dr sci. Maida Šljivić Husejnović°°°°°

13. Course aims:

To acquire theoretical and practical knowledge in the analysis and testing of cosmetic products, with a focus on understanding the requirements, methodologies, and procedures for their quality control.

14. Learning outcomes:

By the end of the course, successful students who have consistently fulfilled their obligations throughout the semester will be able to:
• analyze and interpret the results of quality control of cosmetic products,
• apply methods for the identification and quantification of raw materials and active substances,
• understand the stability, biopharmaceutical effectiveness, and health safety of formulations,
• recognize health risks and professional responsibility in cosmetic product analysis,
• work in accordance with legal regulations and the principles of Good Laboratory Practice (GLP) and Good Manufacturing Practice (GMP).

15. Course content:

• Introduction to the Analysis and Quality Control of Cosmetic Products
• The Role of the Cosmetologist in Ensuring the Safety and Efficacy of Cosmetic Products
• Differences Between Cosmetics, Medical Devices, and Medicinal Products – The Regulatory Boundary
• Health Significance of Quality Control in Cosmetics
• Cosmetovigilance
• Analysis of Raw Materials and Excipients
• Formulation Development Analysis in Cosmetic Product Design
• Specific Aspects of Analysis and Quality Control Depending on the Cosmetic Form and Its Intended Use
• Pharmaceutical Aspects of Quality Control of Cosmetics for Special Purposes
• Evaluation of Declared and Functional Active Ingredients
• Stability Testing and Biopharmaceutical Evaluation of Cosmetic Products
• In Vitro Models for Testing the Penetration and Release of Active Substances
• Rheological and Sensory Analysis in the Evaluation of Cosmetic Products Aimed at Achieving Adequate Compliance and Adherence
• Regulatory Framework and Good Manufacturing Practices (GMP) in Cosmetic Product Manufacturing

16. Learning methods:

Teaching methods: Lectures, consultations, laboratory exercises, independent seminar work.

- **Lectures – Students are required to attend lectures regularly and actively participate in discussions.**
- **Consultations – Through individual or group consultations, students can clarify uncertainties and deepen their acquired knowledge.**
- **Laboratory exercises – Students are required to complete the prescribed number of experimental exercises and pass the midterm test.**
- **Seminar work – Students prepare a seminar paper based on literature research on a given topic and present it orally.**

17. Assessment methods:

Pre-examination activities (minimum 54, maximum 100 points):
- **Class participation – 0–5 points**
- **Seminar paper – 5.5–10 points**
- **Midterm test (colloquium) – 8–15 points**
- **First partial exam – 16–30 points**
- **Second partial/final exam – up to 40 points**

Class participation:
Active student involvement during lectures and/or practical sessions is evaluated with 0–5 points, based on engagement and motivation demonstrated in class.

Seminar paper:
Students are required to write an independent seminar paper based on relevant literature on a given topic and defend it orally. This activity is graded with 5.5–10 points.

Midterm test (Colloquium):
Students take a written test based on the content covered during laboratory exercises. A maximum of 15 points is awarded, with 8 points being the threshold for satisfactory performance.

Examination:
Students may take the final examination in two parts, written and/or oral.
- **The first partial exam covers approximately 40% of the course content and is taken during the semester after the relevant units have been completed. A passing grade requires 16–30 points.**
- **The second partial/final exam covers the remaining 60% of the course content and is taken at the end of the semester after all lectures are completed. Students accumulate points toward their final grade in this phase.**

To receive a passing grade, students must earn a sufficient total number of points through all pre-examination activities

and knowledge assessments.
If the required number of points is not achieved during the semester, the final exam and any failed components may be retaken during the regular or remedial examination periods.

18. Assessment components:

Student performance is continuously monitored throughout the course and expressed in points.

The final student success, based on all forms of knowledge assessment, is evaluated and graded as follows:

- **10 (A) – 95-100 points: Excellent performance without errors or with negligible errors.**
- **9 (B) – 85-94 points: Above average performance with occasional errors.**
- **8 (C) – 75-84 points: Performance with noticeable errors.**
- **7 (D) – 65-74 points: Generally good performance with significant deficiencies.**
- **6 (E) – 54-64 points: Meets the minimum criteria.**
- **5 (F, FX) – less than 54 points: Does not meet the minimum criteria.**

19. Mandatory reading list:

Lectures Authorized by the Course Lecturer/Course Professor

20. Additional reading list:

Vuleta G. et al. Farmaceutska tehnologija I, Farmaceutski fakultet, Beograd, 2012
Nikolin B, Šober M. Analitika lijekova, Sarajevo, 2003
Živanović Lj. Odabrane metode za farmaceutsku analizu, Zemun, 2003

21. Web sources:

22. Applicable from the academic year:

2025/2026

23. Adopted in the Faculty/Academy session: