



Faculty of Pharmacy

Department I

University Clinic of Toxicology, Drug Industry, Management and Legislation

Associate Professor, Position 39

Topics

1. Development of cosmetic and pharmaceutical products: stages and technologies.
2. Regulations and standards in the cosmetic and pharmaceutical industries.
3. Recent innovations in pharmaceutical ingredients and packaging.
4. Marketing strategies for pharmaceutical and cosmetic products.
5. Safety and side effects of pharmaceutical and cosmetic products.
6. From conception to production: the life cycle of a drug.
7. Good Manufacturing Practices (GMP) in the pharmaceutical industry.
8. Design and analysis of pharmaceutical quality.
9. Technological processes in the pharmaceutical industry.
10. Materials used in pharmaceutical product conditioning.
11. Toxicology of food and pharmaceutical additives: risks and effects.
12. Toxicology of detergents: composition and health impacts.
13. Mechanisms of toxic action: damage to cellular structure and function.
14. Toxicology of gaseous substances: carbon monoxide, carbon dioxide, nitrogen compounds.
15. Toxicology of mineral substances: corrosive acids, bases, and metals.
16. Pharmaceutical entrepreneurship: legal aspects and organizational forms.
17. Planning a pharmaceutical business: legal status and accreditation.
18. Social entrepreneurship and pharmaceutical innovation for vulnerable groups.
19. Pharmaceutical entrepreneurship in European and international contexts.
20. Managing pharmaceutical crises during pandemics.
21. Industrial drug production: basic notions.
22. Evaluation of compositional and process variations in pharmaceuticals.
23. Types of materials used in the pharmaceutical industry.
24. Materials for pharmaceutical equipment: selection and usage.
25. Genetic biotechnology and recombinant DNA technology.

Bibliography

1. Karchin, L., & Horvath, D. (2023). *Cosmetics Marketing: Strategy and Innovation in the Beauty Industry*. Bloomsbury Publishing.
2. Baki, G. (2022). *Introduction to Cosmetic Formulation and Technology*. John Wiley & Sons.
3. Bhat, R. (Ed.). (2021). *Valorization of Agri-Food Wastes and By-Products: Recent Trends, Innovations and Sustainability Challenges*.
4. Gamage, N. D., et al. (2022). Global Perspective of Plant-Based Cosmetic Industry and Possible Contribution of Sri Lanka to Herbal Cosmetics Development. *Evidence-Based Complementary and Alternative Medicine*.
5. Amberg, N., & Fogarassy, C. (2019). Green Consumer Behavior in the Cosmetics Market. *Resources*, 8(3), 137.
6. Dragoș, D. (2006). *Pharmaceutical Industry and Biotechnologies*. Mirton Publishing House, Timișoara.
7. Dăescu, C. (1999). *Pharmaceutical Industry*. Uni-Press, Bucharest.
8. Dăescu, C. (2006). *Bio and Semi-Synthesis Products*. Politehnica Publishing House, Timișoara.
9. Jurcoane, Ș. (2006). *Biotechnology Treatise*. Tehnică Publishing House, Bucharest.



10. Andrieș, A. A., et al. (2006). Industrial Pharmaceutical Substance Processes. Carol Davila University Press, Bucharest.
11. Aiache, J.-M., et al. (2008). Introduction to Drug Knowledge. Elsevier Masson SAS.
12. Dehelean, C. A., et al. (2013). General Toxicology Concepts. Victor Babeș Publishing, Timișoara.
13. Electronic course support – Elements of Toxicology – Revised 2023.
14. Coricovac, D., et al. (2018). New Aspects of Toxic Plants Utilization. Victor Babeș Publishing, Timișoara.
15. Ionescu, D., et al. (2008). Toxicology Practical Works. Mirton Publishing, Timișoara.
16. Majhi, S., & Das, D. (2021). Chemical Derivatization of Natural Products: Semisynthesis and Pharmacological Aspects. Tetrahedron, 78, 131801.
17. Ausländer, S., et al. (2017). Synthetic Biology: The Synthesis of Biology. Angewandte Chemie International Edition.
18. Austin, M. (2016). Business Development for the Biotechnology and Pharmaceutical Industry. Routledge.
19. Walsh, G. (2013). Pharmaceutical Biotechnology: Concepts and Applications.
20. De la Torre, B. G., & Albericio, F. (2018). Analysis of FDA Drug Approvals from the Perspective of Molecules. Molecules, 23(3), 533.
21. De la Torre, B. G., & Albericio, F. (2020). FDA Drug Approvals in 2019: Molecules and Trends. Molecules, 25(3), 745.
22. De la Torre, B. G., & Albericio, F. (2017). FDA Drug Approvals in 2016: Molecule Types and Implications. Molecules, 22(3), 368.
23. Xu, J. (2017). The Pharmaceutical Industry at Risk from Brexit. LSE Brexit.
24. Peters, S. A. (2021). Physiologically Based Pharmacokinetic (PBPK) Modeling in the Pharmaceutical Industry. John Wiley & Sons.
25. Updated PowerPoint course materials for fifth-year students (2022)