

TOPICS FOR THE PROMOTION EXAM ON ASSOCIATE PROFESSOR

THE DISCIPLINES:

Physical Chemistry I (Pharmacy, 2nd year, course)

Physical Chemistry II (Pharmacy, 3rd year, course, laboratory practical work)

Dietotherapy in food intolerances and allergies (Nutrition, 3rd year, course)

Position 13 of the State of functions of the Pharmacy Department FACULTY OF MEDICINE AND PHARMACY, University of Oradea

1. Physical Chemistry I

- 1.1. Electrical, optical and magnetic properties of molecules. Physical research methods.
- 1.2. Spectral methods in drug analysis.
- 1.3. Chemical thermodynamics. Elements of chemical thermodynamics applied to the study of the drug.
- 1.4. Physical and chemical methods of improvement solubility.

2. Physical Chemistry II

- 2.1. Reaction kinetics. Applications to the evaluation of drug substance degradation in pharmaceutical forms. Stability of medicinal products.
- 2.2. Physical chemistry of surfaces. Interfacial phenomena. Adsorption. Applications in preformulation and pharmaceutical formulation studies.
- 2.3. Dispersed systems. Colloidal systems. Applications to drug design and study.
- 2.4. Elements of rheology. Applications to pharmaceutical systems of interest. Rheological characteristics and availability of drug substances.

3. Dietotherapy in food intolerances and allergies

- 3.1. Laboratory investigations for food allergies and intolerances.
- 3.2. Role of food hypersensitivity in skin diseases.
- 3.3. Lactose intolerance.
- 3.4. Gluten intolerance.

BIBLIOGRAPHY

1. Dinu-Pîrvu C. E., *Physical chemistry of medicine elements of chemical thermodynamics*, Ed. Printech, Bucharest, 2013
2. Dinu-Pîrvu C. E., *Methods of investigation in the physical chemistry of medicine*, Ed. Printech, Bucharest, 2013
3. Daneş F. E., Daneş S., Petrescu V., Ungureanu E.-M., *Chemical thermodynamics or thermodynamics of matter*, Ed. AGIR, Bucharest, 2013

4. Predescu I., Pîrvu C., *Electrical and optical properties of molecules, applications for structural-molecular investigations*, Ed. Tehnoplast Company, Bucharest, 2004
5. Predescu I., Pîrvu C., *Elements by physical chemistry. Applications in pharmacy*, Ed. Tehnoplast Company SRL., Bucharest, 2004
6. Lăcrăioara Popa, Mihaela Violeta Ghica, *Chemistry - Physics of the drug, Chemical Kinetics, Dispersed Systems*, Ed. Printech, Bucharest, 2013
7. Gherasim A, Niță O, Onofriescu A. *Practical guide of nutrition and dietetics* „Gr.T.Popa" Publishing House, Iași 2017.
8. Graur M. *Guide for healthy nutrition - tips for the population 2nd edition* „Gr.T.Popa" Publishing House Iași 2014.
9. Graur M. *Nutrition in prevention and therapy of chronic non-communicable diseases, publishing house „Gr.T.Popa"*, Iași 2020.
10. Mărginean O. *Nutrition of healthy and sick children*, University Press, Tg. Mures, 2010.
11. Mihai B.M. (editor) *Practical guide to healthy nutrition*, Gr.T.Popa Publishing House, Iași 2018.
12. Moldovan G. *Practical guide of nutrition in communities*, University Press, Târgu Mureș, 2018.
13. Mota M, Popa S. *Nutrition & Dietetics in clinical practice*, Agir Publishing House, 2015.
14. Negrișanu G. *Treatise on nutrition*. Editura Brumar, Timisoara, 2005.
15. Serafinceanu C. *Human clinical nutrition. Manual for students and residents*, Editura Medicală, Bucharest, 2016.

29.11.2022

Head of Department,

Full.Prof.PhD.- BPharm.Habil. Laura GrațIELA Vicaș