

College: Comenius University in Bratislava	
Faculty: Faculty of Pharmacy	
Course code: KGF/05-Mgr-A/00	Course title: Pharmaceutical Technology (1)
Type, scope and method of educational activities: 4 hours of lectures / 5 hours of laboratory practical exercises, weekly, obligatory attendance	
Number of credits: 10 credits	
Recommended term/trimester of study: 7 th and 8 th semester (Mgr.)	
Study degree: 1 st + 2 nd degree (Mgr.)	
Prerequisite courses: Recommended: KFCHL/08-Mgr-A/00 Physical Chemistry; KFANF/02-Mgr-A/00 Analytical Chemistry (2); KFB/05-Mgr-A/00 Pharmacognosy (2); KFCH/06-Mgr-A/00 Pharmaceutical Chemistry (2)	
Conditions for the completion of the course: Assessment through a written examination, for successful completion at least 70 % . Assessment A: 95-100%, B: 88-94%, C: 82-87%, D: 76-81%, E: 70-75%.	
Learning outcomes: By passing the course, the student will have a complex theoretical knowledge of the drugs as dispersion and application systems and practical experience in compounding of dosage forms.	
Brief course outline: <ul style="list-style-type: none"> • Pharmaceutical Technology, Biotechnology. • The drug as a dispersion and an application system. • Systematic classification of the drugs and dosage forms. • Technological procedures and equipments for the preparation and production of the drugs. • Pharmaceutical adjuvants – excipients. • Colloidal dispersion systems, lyophobic and lyophilic colloids. • Dispersion systems – emulsions and suspensions. • Preparations obtained by extraction methods. • Liquid preparations for oral use. • Preparations for inhalation. • Parenteral preparations – injections, infusions – production, use. • Parenteral controlled release drug delivery systems. • Eye, nasal and ear preparations. • Liposomes and microemulsion as a new drug delivery systems. 	
Recommended literature: Aulton, M. E.: Aulton's Pharmaceutics: the design and manufacture of medicines. Edinburgh: Churchill Livingstone, 2018 European Pharmacopoeia 10th edition Lectures in Pharmaceutical technology Tichý E., Starýchová L., Čuchorová M.: Solid dosage forms – Laboratory practices, Bratislava UK, 2015 Tichý E., Špaglová M., Bartoníková K.: Liquid dosage forms – Laboratory practices, Bratislava UK, 2016 Tichý E., Šimunková V., Halenárová A.: Emulsions, suspensions, ointments, creams, pastes, suppositories and pessaries – Laboratory practices, Bratislava UK, 2017	
Language of the course: English	
Assessment of the courses: A= 12 %, B= 19 %, C=21 %, D=22 %, E=20 % Fx=6 %	
Teachers: <i>Lectures:</i> M. K. Lawson, MSc., PhD., PharmDr. A. Lengyelová, PharmDr. V. Mikušová, PhD., PharmDr. M. Molitorisová, PhD., PharmDr., ThLic. M. Raučinová, PhD., PharmDr. V. Šimunková, PhD., RNDr. A. Vrána, Mgr. Jarmila Ferková, PharmDr. M. Špaglová, PhD. <i>Practical exercises:</i> M. K. Lawson, MSc., PhD., PharmDr. A. Lengyelová, PharmDr. V. Šimunková, PhD., PharmDr. M. Špaglová, PhD., PharmDr. Veronika Mikušová, PhD.	
Last modified date: 5. 07. 2021	
Approved by: PharmDr. Veronika Mikušová, PhD.	