Study program: Integrated academic studies in medicine Type and level of the study program: integrated academic studies Course title: SPECIAL PHARMACOLOGY (M4-SPHAR) Teacher: Momir M. Mikov, Velibor M. Vasović, Ana J. Sabo, Zdenko S. Tomić, Aleksandar L. Rašković, Isidora N. Samojlik, Olga J. Horvat, Saša N. Vukmirović, Boris T. Milijašević, Vesna M. Mijatović, Nebojša P. Stilinović Course status: compulsory ECTS Credits: 5 Condition: General pharmacology Course aim Medical students are acquainted with basic biologic mechanisms of drugs and their effects on organ systems **Expected outcome of the course** Student should know why, how and when to apply particular drugs, general information on drugs, metabolism in the body, site and mechanism of action, interactions and side effects of drugs. Student must be able to describe the effects, therapeutic indications and application of drugs used in the treatment of microbial diseases. Practical classes deal with practical pharmacotherapeutical problems. Student should know to: properly fill a prescription (magistral drugs, officinal drugs, ready-made drugs) and to explain it; use the drug registry; fill the registration form /report onadverse effects of drugs. **Course description** Theoretical education: Transmitters and receptors in the nervous system. Vegetative nervous system. Drugs acting via the VNC receptors. Histamine and antihistamines. Drugs in the treatment of GIS disorders and diseases. Drugs in the treatment of respiratory disorders and diseases of the respiratory system. Drugs in the treatment of CVS disorders and diseases. Thrombolytics, anti aggregation agents, anticoagulants. Hypolipidemic drugs. Treatment of anemia. Treatment of diabetes. Drugs in the treatment of endocrine system disorders and diseases. Treatment of osteoporosis. Total and local anaesthesia.Strong analgesics. Nonsteroidal antiinflammatory drugs. Treatment of epilepsy. Treatment of degenerative diseases of CNS (Alzheimer's and Parkinson's disease). Sedatives and hypnotics. Anxiolytics. Neuroleptics. Antidepressants and therapy of mania. Practical education: exercises, other forms of education, research related activities: Drug prescription according to pharmacotherapeutic classes. Research of drug effects on laboratory animals. Literature Compulsory Rang HP, Dale MM, Ritter JM, Moore PK. Pharmacology. Churchill Livingstone, Edinburgh, New York, 2003. 1 Brenner GM, Stevens C. Pharmacology, 4th edition. Elsevier, 2012 2. Additional Number of active classes Other: Practice: Other types of teaching: Research related activities: Lectures: 45 30 Teaching methods Theoretical and practice Student activity assessment (maximally 100 points) **Pre-exam activities Final exam** points points Lectures 5 Written\* 40 Practices 5 Oral 50 Colloquium\* 2x20 Other \*if the students does not pass both colloquiums, he/she should take the exam in written form