


University of Nis Faculty of Medicine	STUDY PROGRAM: INTEGRATED ACADEMIC STUDIES OF MEDICINE	
Course: Herbal medicines		
Course head: Prof. Dr. Dragana Pavlović, specialist in Medicinal plant control and application		
Case status:	Elective	
Semester: VII	Year of study: IV	
ECTS: 4	Course code: M-IV-27.g	
Course objective:		
<ul style="list-style-type: none"> • Introduction to herbal medicine and traditional herbal medicine (herbal medicine - HM), their properties, mechanisms of action, interactions, and harmful effects, as well as the principles of rational phytotherapy. • Recognition of therapeutic indications, knowledge of dosage, administration methods, and specific warnings and precautions (contraindications, special warnings, precautions, interactions, and side effects) for HM. • Analysis of herbal and traditional medicines from the market to properly select the appropriate product and give appropriate advice to the patient. • Raising awareness of the possibilities and limitations of the herbal medicinal products use alongside the role of health professionals in promoting their efficient and safe use. 		
Course outcome:		
<p>The acquired knowledge will enable future doctors of medicine to correctly apply herbal medicines and traditional herbal medicines while respecting rational therapeutic attitudes and the latest scientific evidence.</p>		
<ul style="list-style-type: none"> • Adoption of basic rules of HM treatment and critical attitude about the possibilities for their safe and rational use. • Knowledge of the characteristics of herbal medicinal products that can be used for self-treatment and symptoms that can be treated with self-treatment. • Assessing the possibility of using HM to solve specific health problems. • Critical selection of the appropriate HM for specific indications and ability to instruct the patient to use that HM in the correct way in adequate therapeutic doses. • Training to find the latest relevant data on HM. 		
Number of hours of active teaching: 60		
Lectures: 30	Exercises: 30	
Course content		
Active teaching:		
1. Lectures		The number of classes:
1.	Concept and brief historical overview of the development of herbal medicines. The distinction between herbal medicine and traditional herbal medicine from other categories of herbal and natural products.	1
2.	Current legislation related to herbal medicine and traditional herbal medicine. Requirements for registration and possibilities of prescribing, dispensing, and advertising these categories of drugs.	2
3.	Pharmaceutical forms of herbal and traditional herbal medicines.	1
4.	HATC (Herbal ATC) classification. Quality control of medicinal plants and herbal medicinal products.	2
5.	Adverse drug reactions and interactions. Importance of pharmacovigilance.	2
6.	Herbal remedies and traditional herbal remedies in the treatment of central nervous system disorders.	4
7.	Herbal remedies and traditional herbal remedies in the treatment of gynecological disorders.	2
8.	Herbal remedies and traditional herbal remedies in the treatment of benign prostatic hyperplasia and male reproductive health.	1
9.	Herbal remedies and traditional herbal remedies in the treatment of urinary disorders.	2
10.	Herbal remedies and traditional herbal remedies in the treatment of respiratory diseases.	4
11.	Herbal remedies and traditional herbal remedies for cardiovascular disorders.	2

12.	Herbal remedies and traditional herbal remedies in the treatment of digestive disorders	2
13.	Herbal remedies and traditional herbal remedies in the treatment of liver and biliary tract disorders.	2
14.	Herbal remedies and traditional herbal remedies in the treatment of diseases and injuries of the skin and mucous membranes.	2
15.	Herbal remedies and traditional herbal remedies in the treatment of rheumatism and pain.	1
	In total	30
2. Exercises		The number of classes:
1.	Panel discussion on the possibility of rational application of herbal medicinal products - examples from practice. Understanding the criteria for categorization of herbal medicinal products and places of herbal medicine, traditional herbal medicine, herbal food supplement, and other herbal products from the market.	4
2.	Round tables and example analysis: advertising of herbal medicines, traditional herbal medicines, and other herbal products; importance of education of health workers and their inclusion in the rational application of herbal medicinal products; the importance of herbal pharmacovigilance medicines and traditional herbal medicines.	2
3.	Analysis of registered herbal medicines and traditional herbal medicines, review of their indications, contraindications, precautions, possible side effects, and usual dosing in target patient populations.	4
4.	Workshop with examples of conversations with the patient on the topic of plants the product he is currently using, giving appropriate advice to the patient and prescribing registered herbal medicines and traditional herbal remedies drugs in appropriate therapeutic indications.	2
5.	Independent research work on the topic of adequate therapy of the concrete health problems with herbal or traditional herbal medicine (inappropriate indication, patient population, pharmaceutical form, dose, and duration of use with reference to contraindications, possibly undesirable reactions and interactions, special warnings and precautions).	18
	In total	30
Recommended literature:		
<p>1. European Medicines Agency, http://www.ema.europa.eu</p> <p>2. Agency for Medicines and Medical Devices of Serbia, https://www.alims.gov.rs</p> <p>3. Schulz V., Hänsel R., Blumenthal M., Tyler V.E. Rational Phytotherapy, A Reference Guide for Physicians and Pharmacists, 5th ed., Berlin, Heidelberg: Springer Verlag, 2004.</p> <p>4. PDR for herbal medicines, Tomson, Montvale, 2004.</p> <p>5. Bone K., Mills S. Principles and Practice of Phytotherapy, Modern Herbal Medicine, 2nd ed., Churchill Livingstone, Elsevier, 2013.</p>		
Teaching methods:		
<ul style="list-style-type: none"> ▪ Interactive theoretical classes ▪ Practical small group work (workshops, panel discussions, and round tables on given topics) ▪ Seminar paper (research work in small groups) ▪ Consultations 		
Required previously passed exams:		
<ul style="list-style-type: none"> ▪ None 		
Knowledge assessment:		
Pre-exam obligations		
<ul style="list-style-type: none"> ▪ Activity in theoretical classes: up to 10 points ▪ Active participation in discussions on given topics: up to 10 points ▪ Seminar paper (research work in small groups): up to 30 points 		
Final exam		
<ul style="list-style-type: none"> ▪ Written exam / Oral exam: up to 50 points 		