Study program: Integrated academic studies in dentistry

Type and level of the study program: integrated academic studies

## Course title: Pharmacotherapy of infections in dentistry (DIV-PHTID)

**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, Ivan F. Tušek

Course status: elective

ECTS Credits: 3
Condition: Course aim

To acquire skills in applying knowledge in general and special pharmacology in dentistry

## **Expected outcome of the course:**

Students should be aware of the importance of antiseptics, disinfectants and antibiotics in everyday dentistry practice with an aim of preventing outbreak and spread of the infection, as well as the development of bacterial resistance to antimicrobial agents. Student should learn to select the appropriate antiseptic, disinfectant or antibiotic in his everyday practice, to be acquainted with the pharmacotherapeutical approach to infection treatment, the pain in dentistry, to know the importance of adequate administration of sedatives in everyday practice and to be in line with information sources pertaining to novel drugs applied in practice with particular emphasis on drugs that can manifest undesirable and adverse effects in the oral cavity. Student should be trained for appropriate application of disinfectants and antiseptics in everyday practice, adequate use of antibiotics in both prophylaxis and treatment, applying data sources on drugs commonly used in dental medical practice and identifying and recognizing adverse effects of the drugs in the micro-environment of the oral cavity.

## **Course description**

Theoretical education: Importance of appropriate hygienic regimen related to working environment, instrumentation and personnel in dentistry practice. Knowing the spectrum of antimicrobials, efficacy and adverse effects of antiseptics and disinfectants in dentistry. Appropriate selection of dermoantseptics, mucosal antiseptics, disinfectant for items and working premises, instrumentation and operation area. Appropriate selection of antibiotics in dentistry on the basis of knowledge of bacterial flora of oral cavity, spectrum of antimicrobials and their pharmacokinetics, adverse effects of antibiotics and their interactions with other drugs with an aim of preventing development of bacterial resistance to antibiotics and preserving the effectiveness of commonly applied antibiotics. Prophylactic application of antibiotics in dentistry. Therapy of dentogenic infections. Therapy of periodontal infections. Appropriate selection of analgesics in dentistry. Appropriate selection of sedatives in dentistry. Therapy of pain characteristic for patients in dental medicine. Data sources on drugs applied in dental medical practice. Importance of drugs and their effects on the micro-environment of the oral cavity.

Practical education: exercises, other forms of education, research related activities:

Practical application of disinfectants for working surfaces, instruments, principles of asepsis in personnel (hand hygiene) aimed at preventing infection outbreak and spread in dental medical practice. Practical application of antiseptics in patients. Proper selection of antibiotics for prophylaxis of most common procedures in dentistry. Practical application of antibiotics in most common infections in dentistry. Practical application of analgesics based on knowing the action mechanisms and pharmacokinetics of the analgesics, their adverse effects and interactions with other drugs in most prevalent painful conditions in dentistry. Practical application of sedatives based on knowing the action mechanisms and pharmacokinetics of these drugs, their adverse effects and interactions with other drugs. Using available data sources on drugs available in everyday practice. Knowing the drugs that can manifest adverse effects on teeth and the oral cavity.

## Literature

Compulsory:

- 1. Rang HP, Dale MM, Ritter JM, Moore PK. Pharmacology. Churchill Livingstone, Edinburgh, New York, 2003.
- 2. Brenner GM, Stevens C. Pharmacology, 4<sup>th</sup> edition. Elsevier, 2012

Additional

Number of active classes						Other:
Lectures:	Practice:	Other types of teaching:		Research related activities:		
30	15					
Teaching methods Theoretical and practical						
Student activity assessment (maximally 100 points)						
Pre-exam activities			points	Final exam		points
Lectures			5	Written*		
Practices			5	Oral		40
Colloquium*						
Essay			50			