



Study program: Doctoral Academic Studies in Biomedical Sciences		
Name of the subject: OCCUPATIONAL DISEASES AND WORK SAFETY		
Teacher(s): Ivan M. Mikov		
Status of the subject: elective		
Number of ECTS points: 20		
Condition: -		
Goal of the subject Education in field of occupational diseases and work safety.		
Outcome of the subject Students should adopt knowledge concerning occupational hazards, occupational diseases, workplace injuries, preventive health surveillance at work and health protection of various occupational groups. Students should adopt skills related to: evaluation of working environment, occupational diseases and work ability assessments, prevention of injuries at work, prevention of work disability and application of work safety measures.		
Content of the subject		
<i>Theoretical lectures</i> Principles of occupational medicine, Physical hazards at work environment, Chemical and biological hazards at work environment, Occupational diseases, Work related diseases, Occupational traumatism, Occupational toxicology – general, Occupational toxicology – metals, Occupational toxicology – toxic gases, Occupational toxicology – organic solvents, Occupational toxicology – pesticides, Occupational respiratory diseases, Carcinogens at workplace, Work conditions and work safety in some industries, Effect of working conditions on women and youth health		
<i>Practical lectures</i> Microclimate of working environment, Heat indices,. Air pollution of working environment – dust,. Air pollution of working environment – gasses and vapors, Noise at working environment, Workplace injuries, Pneumoconiosis – radiology classification, Work ability assessment in diseases due to organic dust, Work ability assessment in diseases due to vibrations, Work ability assessment in occupational skin and infectious diseases, Work ability assessment in intoxications due to organophosphorous pesticides, Work ability assessment in occupational liver and haematopoetic disorders, Work ability assessment in occupational musculoskeletal disorders, Work ability assessment in persons exposed to ionizing radiation, Characteristics of work conditions and work safety in some branches of industry		
Recommended literature		
1. Levy BS, Wegman DH, Baron SL, Sokas SR. Occupational and environmental health. New York: Oxford University Press, 2017. 2. Koh D, Aw TC. Textbook of occupational medicine practice. Singapore: World Scientific Publishing, 2016.		
Number of active classes	Theory: 60	Practice: 45
Methods of delivering lectures Lectures and seminar		
Evaluation of knowledge (maximum number of points 100) theory: 15 practice: 30 seminar: 20 oral exam: 35.		