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|  | **Course title:** **SELECTED TOPICS IN CLINICAL BIOCHEMISTRY - BIOMARKERS** |
| **Level: Undergraduate**  | **Year:** **V**  | **Semester:** **IX** | **ECTS credits:** **2** |
| **Status:** **Elective** | **Number of hours weekly: 1+1**  | **Total hours of teaching: 30** |
| **Teaching staff:** | Responsible professor: Dr. Sci. Tamer Bego, assistant professor Other teaching staff: Tenure professor Adlija Čaušević PhD**,** Associate professor Maja Malenica. PhD, Associate professor Tanja Dujić, teaching assistant Neven Meseldžić |
| **1. Course objectives** |  |
| **1.1 Curriculum****a) Lectures** This course studies the diagnostic significance of biomarker determination with special reference to biomarkers in cancer screening, heart disease, diabetes, prediabetes and metabolic syndromes, acute and chronic kidney disease, oxidative stress, Alzheimer's desease, neurological diseases with the analytical aspects of the used tests.**b) Seminar** - selected on a topic related to the issues covered in theoretical teaching |
| **1.2. Learning outcomes** | Upon completion of this course, the student should be able to know the principles and basic analytical aspects related to the interpretation of routine related findings for the application of biomarkers for both diagnostic and prognostic purposes and in screening for a number of pathologies that can be easily identified at their stage of emergence, development and progression. |
| **2. Course organisation** |
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| **2.1. Structure of the course** | 1. Theoretical lessons2. Seminars | 1. 50%2. 50% |
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| **2.2. Grading**  | 1. Seminar2. Final exam3. Attendance and participation in class |  1. 50 % 2. 40 % 3. 10 % |
| **3. LITERATURE** |  |
| Mandatory:1. Powerpoint presentations (PP), different handoutsAdditional:1.Roger L. Lundblad: ,,Development and Application of Biomarkers” 2011. 2. Jain, Kewal K: ,,The handbook of biomarkers” ebook, 2010. 3. Vishal S. Vaidya, Joseph V. Bonventre : Biomarkers: In Medicine, Drug Discovery, and Environmental Health, 2010. |
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