

**Faculty of Medicine / HIGHER MEDICAL SCHOOL / METHODOLOGY OF THE RESEARCH IN HEALTHCARE**

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| <b>Course:</b>                       | METHODOLOGY OF THE RESEARCH IN HEALTHCARE                                                                                                                                                                                                                                                                            |                 |                     |                                               |
| <b>Course ID</b>                     | <b>Course status</b>                                                                                                                                                                                                                                                                                                 | <b>Semester</b> | <b>ECTS credits</b> | <b>Lessons</b> (Lessons+Exercises+Laboratory) |
| 10739                                | Mandatory                                                                                                                                                                                                                                                                                                            | 5               | 2                   | 2+2+0                                         |
| <b>Programs</b>                      | HIGHER MEDICAL SCHOOL                                                                                                                                                                                                                                                                                                |                 |                     |                                               |
| <b>Prerequisites</b>                 | There are no requirements for listening and registering subjects.                                                                                                                                                                                                                                                    |                 |                     |                                               |
| <b>Aims</b>                          | Acquisition of basic knowledge of research methodology and application of statistical methods and procedures.                                                                                                                                                                                                        |                 |                     |                                               |
| <b>Learning outcomes</b>             | 1. Adopts and knows the logic of the scientific-research approach in health care 2. Knows different quantitative and qualitative data collection methods 3. Knows the basic measures of descriptive statistics 4. Tests the statistical significance of the difference 5. Examines the association between variables |                 |                     |                                               |
| <b>Lecturer / Teaching assistant</b> | Assistant professor Aleksandra Klisic Dr med Mirjana Nedović Vuković                                                                                                                                                                                                                                                 |                 |                     |                                               |
| <b>Methodology</b>                   | Lectures, exercises, seminar work, colloquium, consultations.                                                                                                                                                                                                                                                        |                 |                     |                                               |
| <b>Plan and program of work</b>      |                                                                                                                                                                                                                                                                                                                      |                 |                     |                                               |
| Preparing week                       | Preparation and registration of the semester                                                                                                                                                                                                                                                                         |                 |                     |                                               |
| I week lectures                      | Introduction to scientific research methodology in healthcare (science, scientific way of thinking).                                                                                                                                                                                                                 |                 |                     |                                               |
| I week exercises                     |                                                                                                                                                                                                                                                                                                                      |                 |                     |                                               |
| II week lectures                     | Methodology of scientific research                                                                                                                                                                                                                                                                                   |                 |                     |                                               |
| II week exercises                    |                                                                                                                                                                                                                                                                                                                      |                 |                     |                                               |
| III week lectures                    | Scientific research technology (hypothesis, variables, inference)                                                                                                                                                                                                                                                    |                 |                     |                                               |
| III week exercises                   |                                                                                                                                                                                                                                                                                                                      |                 |                     |                                               |
| IV week lectures                     | Types of research                                                                                                                                                                                                                                                                                                    |                 |                     |                                               |
| IV week exercises                    |                                                                                                                                                                                                                                                                                                                      |                 |                     |                                               |
| V week lectures                      | Sample and population, sampling                                                                                                                                                                                                                                                                                      |                 |                     |                                               |
| V week exercises                     |                                                                                                                                                                                                                                                                                                                      |                 |                     |                                               |
| VI week lectures                     | Research planning, data collection and measurement                                                                                                                                                                                                                                                                   |                 |                     |                                               |
| VI week exercises                    |                                                                                                                                                                                                                                                                                                                      |                 |                     |                                               |
| VII week lectures                    | Statistical methods of data processing in scientific research work, interpretation of results.                                                                                                                                                                                                                       |                 |                     |                                               |
| VII week exercises                   |                                                                                                                                                                                                                                                                                                                      |                 |                     |                                               |
| VIII week lectures                   | Colloquium                                                                                                                                                                                                                                                                                                           |                 |                     |                                               |
| VIII week exercises                  |                                                                                                                                                                                                                                                                                                                      |                 |                     |                                               |
| IX week lectures                     | Presentation of data, written formulation of research results.                                                                                                                                                                                                                                                       |                 |                     |                                               |
| IX week exercises                    |                                                                                                                                                                                                                                                                                                                      |                 |                     |                                               |
| X week lectures                      | The nature and arrangement of medical information.                                                                                                                                                                                                                                                                   |                 |                     |                                               |
| X week exercises                     |                                                                                                                                                                                                                                                                                                                      |                 |                     |                                               |
| XI week lectures                     | Medical information available on the Internet                                                                                                                                                                                                                                                                        |                 |                     |                                               |
| XI week exercises                    |                                                                                                                                                                                                                                                                                                                      |                 |                     |                                               |
| XII week lectures                    | Information seeking in medicine                                                                                                                                                                                                                                                                                      |                 |                     |                                               |
| XII week exercises                   |                                                                                                                                                                                                                                                                                                                      |                 |                     |                                               |
| XIII week lectures                   | Evidence-based medicine                                                                                                                                                                                                                                                                                              |                 |                     |                                               |
| XIII week exercises                  |                                                                                                                                                                                                                                                                                                                      |                 |                     |                                               |
| XIV week lectures                    | Control of application of research results                                                                                                                                                                                                                                                                           |                 |                     |                                               |
|                                      |                                                                                                                                                                                                                                                                                                                      |                 |                     |                                               |

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| XIV week exercises                                                                                                                                                                              |                     |                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                            |                                                            |                                    |
| XV week lectures                                                                                                                                                                                |                     | Scientific research integrity                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                            |                                                            |                                    |
| XV week exercises                                                                                                                                                                               |                     |                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                            |                                                            |                                    |
| Student workload                                                                                                                                                                                |                     | In the semester Teaching and final exam: (2.66 hours) x 16 = 42.56 hours Necessary preparations before the beginning of the semester (administration, enrollment, certification): (2.66 hours) x 2 = 5.32 hours Total workload for the course: 2 x 30 = 60 hours Load structure: 42.56 hours (classes and final exam) + 5.32 hours (preparation) + 12 hours (additional work). |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                            |                                                            |                                    |
| Per week                                                                                                                                                                                        |                     |                                                                                                                                                                                                                                                                                                                                                                                | Per semester                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                            |                                                            |                                    |
| 2 credits x 40/30=2 hours and 40 minuts<br>2 sat(a) theoretical classes<br>0 sat(a) practical classes<br>2 excercises<br>-2 hour(s) i 40 minuts<br>of independent work, including consultations |                     |                                                                                                                                                                                                                                                                                                                                                                                | Classes and final exam:<br>2 hour(s) i 40 minuts x 16 =42 hour(s) i 40 minuts<br>Necessary preparation before the beginning of the semester (administration, registration, certification):<br>2 hour(s) i 40 minuts x 2 =5 hour(s) i 20 minuts<br>Total workload for the subject:<br>2 x 30=60 hour(s)<br>Additional work for exam preparation in the preparing exam period, including taking the remedial exam from 0 to 30 hours (remaining time from the first two items to the total load for the item)<br>12 hour(s) i 0 minuts<br>Workload structure: 42 hour(s) i 40 minuts (cources), 5 hour(s) i 20 minuts (preparation), 12 hour(s) i 0 minuts (additional work) |                                                            |                                                            |                                    |
| Student obligations                                                                                                                                                                             |                     |                                                                                                                                                                                                                                                                                                                                                                                | Attendance at theoretical and practical classes - interdisciplinary approach, checking knowledge at the colloquium, writing a seminar paper                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                            |                                                            |                                    |
| Consultations                                                                                                                                                                                   |                     |                                                                                                                                                                                                                                                                                                                                                                                | Additional information about the subject can be obtained from the subject teacher.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                            |                                                            |                                    |
| Literature                                                                                                                                                                                      |                     |                                                                                                                                                                                                                                                                                                                                                                                | Jovan Savić, Stela Filipi Matutinović. Metodologija naučnog saznanja I. Beograd. Data Status, 2013; Jovan Savić, Stela Filipi Matutinović. Metodologija naučnog saznanja II. Beograd. Data Status, 2014                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                            |                                                            |                                    |
| Examination methods                                                                                                                                                                             |                     |                                                                                                                                                                                                                                                                                                                                                                                | Class attendance - 6 points Engagement in class - 4 points Colloquium - 20 points Seminar paper - 20 points Final exam - 50 points A passing grade is obtained if 50 points are accumulated cumulatively                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                            |                                                            |                                    |
| Special remarks                                                                                                                                                                                 |                     |                                                                                                                                                                                                                                                                                                                                                                                | /                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                            |                                                            |                                    |
| Comment                                                                                                                                                                                         |                     |                                                                                                                                                                                                                                                                                                                                                                                | Additional information about the subject can be obtained from the subject teacher, the head of the study program and the vice dean for teaching.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                            |                                                            |                                    |
| Grade:                                                                                                                                                                                          | F                   | E                                                                                                                                                                                                                                                                                                                                                                              | D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | C                                                          | B                                                          | A                                  |
| Number of points                                                                                                                                                                                | less than 50 points | greater than or equal to 50 points and less than 60 points                                                                                                                                                                                                                                                                                                                     | greater than or equal to 60 points and less than 70 points                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | greater than or equal to 70 points and less than 80 points | greater than or equal to 80 points and less than 90 points | greater than or equal to 90 points |