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| Course: | | **Water Resources Systems Analysis** | | | | | | | | |
| Course id: | |
| Number of ECTS: 5 | |
| Teacher: | | **Bojan M. Srdjevic (Teacher) / Bosko D. Blagojevic (Assistant)** | | | | | | | | |
| Course status | | Mandatory | | | | | | | | |
| Number of active teaching classes (weekly) | | | | | | | | | | |
| Lectures: 3 | | Practical classes: 3 | | | Other teaching types: | | Study research work: | | Other classes: | |
| Precondition courses | | None | | | | | | | | |
| 1. Educational goal   Acquiring knowledge on systems and systems analysis techniques for assessing dynamical performance of water resources systems and related complex decision making methodologies | | | | | | | | | | |
| 1. Educational outcomes   Skills in using methods and methodologies of contemporary systems analysis. | | | | | | | | | | |
| 1. Course content   *Theory*  Introduction and classifications. Water resources systems. Systems modeling. Systems techniques. Dynamic performance of water systems. Systems control. Decision making support.  *Practice*  Example water systems and systems modeling. Modeling by different models. Performance indicators and their aggregation. Methods and models of decision making. Examples of applications of decision making tools within a framework of systems analysis of complex water systems. | | | | | | | | | | |
| 1. Teaching methods   Lectures, Practical classes | | | | | | | | | | |
| Knowledge evaluation (maximum 100 points) | | | | | | | | | | |
| Pre-examination obligations | | | Mandatory | Points | | Final exam | | Mandatory | | Points |
| Lecture attendance | | | Yes | 10 | | Written part of the exam | | Yes | | 30 |
| Exercise attendance | | | Yes | 20 | | Oral part of the exam | | Yes | | 40 |
| Literature | | | | | | | | | | |
| Ord. | Author | | Title | | | Publisher | | | | Year |
|  | Srdjevic B. | | Water Resources Systems Analysis | | | Lecture notes (In Serbian) Faculty of Agriculture | | | | 2007 |
| 2. | Srdjevic B. | | Systems Analysis Methods in Engineering With Extensions in Environmental Engineering | | | Federal University of Bahia, Salvador, Brazil Lecture notes (in English) | | | | 2003 |
| 3. | Loucks D.P., van Beek E. | | Water Resources Systems Planning and Management: An Introduction to Methods, Models & Applications | | | UNESCO Publ. | | | | 2005 |
| 4. | Saaty T.L. | | The Analytic Hierarchy Process | | | McGraw-Hill, Inc.,Reprinted by RWS Publications, Pittsburgh (selected chapters) | | | | 1980 |
| 5. |  | |  | | | INTERNET SOURCES | | | |  |

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| Znak univerziteta | UNIVERSITY OF NOVI SAD  FACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme Accreditation  UNDERGRADUATE ACADEMIC STUDIES *WATER MANAGEMENT* |
| Table 5.2 Course specification | | |