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| Course: | **Informatics** |
| Course id: |
| Number of ECTS: 8 |
| Teacher: | **Bojan M. Srdjevic, Tihomir S. Zoranovic (Teachers) / Bosko D. Blagojevic (Assistant)** |
| Course status | Mandatory |
| Number of active teaching classes (weekly) |
| Lectures: 3 | Practical classes: 4 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | None |
| 1. Educational goal

Acquiring base knowledge in informatics and information technologies for agriculture. |
| 1. Educational outcomes

Skills in informatics and using information technologies in agriculture. |
| 1. Course content

*Theory*Introduction. Discrete information and data. Digital computers. Hardware platforms (mainframes, supercomputers, personal computers). Hardware and software. Operating systems. Numeric and semantic systems. Solving problems with computer. Algorithms. Programming languages. Information and communication technologies and multimedia. Networks and protocols. Internet. Internet services. Information systems in agriculture. Data organization (logical and physical). Relation models and data bases. Data base management systems. Software tools in agriculture. Examples (linear programming, statistical methods and packages, transportation models, networks and resources allocation, decision making etc.).*Practice*Measuring quantities of information (Shannon' formula and Hartley's theorem). Architecture and components of digital computer. Numerical, alphabetical and alphanumerical environments of personal computers and systems (examples). Algorithms - examples. Computer languages overview. Information technologies and multimedia. Examples. Web search and e-mail. Protocols. Information systems in agriculture. Examples from domestic and international practice. Data organization (entities, classes, attributes and data, domains). Logical and physical organization of data in databases. Database management systems - overview. Software tools in agriculture. Examples. |
| 1. Teaching methods

Lectures, Practical classes |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam | Mandatory | Points |
| Lecture attendance | Yes | 5 | Oral part of the exam | Yes | 40 |
| Exercise attendance | Yes | 5 |  |  |  |
| Colloquium x 2 | Yes | 2x25=50 |  |  |  |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Srdjevic B. | Informatics | Textbook, 226 pages  | 1996 |
| 2. | B.Srdjevic T. Zoranovic | Informatics | Lectures posted at the web (selected topics) |  |

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| Znak univerziteta | UNIVERSITY OF NOVI SADFACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme AccreditationUNDERGRADUATE ACADEMIC STUDIES *WATER MANAGEMENT**AGROECONOMICS**AGRIBUSINESS*  |
| Table 5.2 Course specification |