|  |  |
| --- | --- |
| Course: | **Applied Informatics** |
| Course id: |
| Number of ECTS: 6 |
| Teacher: | **Bojan M. Srdjevic, Tihomir S. Zoranovic (Teachers) / Bosko D. Blagojevic (Assistant)** |
| Course status | Elective |
| Number of active teaching classes (weekly) |
| Lectures: 2 | Practical classes: 2 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | None |
| 1. Educational goal

Acquiring base knowledge in applied informatics. |
| 1. Educational outcomes

Skills in applying knowledge of informatics in professional career. |
| 1. Course content

*Theory*Measuring quantities of information in one or more messages (Shannon' formula and Hartley's theorem). Discrete information. Mainframes, supercomputers, and personal computers. Operating systems, utilities and application software for PCs. Solving the problems with computer. Programming languages (procedural, descriptive, artificial intelligence, internet languages). Information technologies and multimedia. Computer networks. Internet, protocols and services. Databases. Cryptography. Identification of users and personal data protection. Information systems in agriculture (purposes, development and architectures). Functionalities. Database management systems and software. Application software in agriculture. Examples of utility services, application software, expert systems etc.*Practice*Application of Shannon' formula. Hartley's theorem and applications. PC architecture and characteristics. Discrete values and numeric (base numeric systems). Solving problems with computers. Algorithms (examples). Methods and procedures for solving typical engineering problems. Word processing and spreadsheets. Advanced software tools in agriculture. Examples of application: utilities, linear programming, statistical packages, transportation models, network models for resources allocation, decision support software. |
| 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 on applied informatics posted at the web (selected topics); regularly updated |  |

|  |  |  |
| --- | --- | --- |
| Znak univerziteta | UNIVERSITY OF NOVI SADFACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme AccreditationUNDERGRADUATE ACADEMIC STUDIES RT, VV, H, VM, FM, EK, OP, ST |
| Table 5.2 Course specification |