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| Course: | | *Mechanics 2* | | | | | | | | |
| Course id:3OUV2O08 | |
| Number of ECTS: 7 | |
| Teacher: | | Dragi M. Radomirović | | | | | | | | |
| 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/navesti ako ima | | | | | | | | |
| 1. Educational goal   Learning about the basic concepts and principles of kinematics and dynamics. | | | | | | | | | | |
| 1. Educational outcomes   Student’s ability in solving kinematics and dynamics problems. | | | | | | | | | | |
| 1. Course content  * Kinematics of a particles (trajectory, velocity, acceleration and the radius of curvature of the path) Kinematics of rigid bodies (rotation about a fixed axis, translational motion and general plane motion) * Kinematics of relative motion * Newton's second law * Kinetic energy, linear momentum and angular momentum * Work, energy and power * Work-energy principle for a particle * Dynamics of a system of particles * Momentum and energy principles * Work-energy principle for a system of particles * Dynamics of rigid bodies | | | | | | | | | | |
| 1. Teaching methods   Lectures, Practical classes, Consultations. | | | | | | | | | | |
| Knowledge evaluation (maximum 100 points) | | | | | | | | | | |
| Pre-examination obligations | | | Mandatory | Points | | Final exam | | Mandatory | | Points |
| Lecture attendance | | | Yes | 5 | | *Written part of the exam-tasks and theory* | | Yes | | 30 |
| Test | | | Yes | 60 | |  | | | | |
| Exercise attendance | | | Yes | 5 | |
| Literature | | | | | | | | | | |
| Ord. | Author | | Title | | | Publisher | | | | Year |
|  | Đukić Đorđe  Cvetićanin Livija | | Kinematics (in Serbian) | | | Faculty of Technical Sciences, Novi Sad | | | | 2005 |
|  | Maretić Ratko | | Collection of solved Problems in Kinematics (in Serbian) | | | Faculty of Technical Sciences, Novi Sad | | | | 2007 |
|  | Đukić Đorđe  Cvetićanin Livija  Zuković Miodrag | | Dynamics (in Serbian) | | | Faculty of Technical Sciences, Novi Sad | | | | 2014 |

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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 | | |