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| Course: | *Mechanics 1* |
| Course id:3OUV1O02 |
| Number of ECTS: 8 |
| 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 statics. |
| 1. Educational outcomes

Student’s ability in solving statics problems. |
| 1. Course content
* Fundamentals of statics
* Coplanar and non-coplanar concurrent force system (equilibrium and resultant)
* System of couples (equilibrium and resultant couple)
* Coplanar non concurrent force system (equilibrium and resultant)
* System of bodies (free body diagrams and equilibrium conditions)
* Structures (plane trusses, methods for solving)
* Beams. Internal forces (shear and axial forces, bending moment)
* Three-dimensional force systems (moments and couples in three dimensions, equilibrium and simpler equivalent systems)
* Dry friction (Coulomb’s law)
* Rolling friction
* Center of gravity
 |
| 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 | 50 |  |
| Exercise attendance | Yes | 5 |
| *Term paper* | Yes/No | 10 |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Radomirović Dragi | Mechanics-part 1 (in Serbian) | Faculty of Agriculture, Novi Sad | 2001 |
|  | Kovačić IvanaZvonko Rakarić | Collection of Problems in Statics I (in Serbian) | Faculty of Technical Sciences, Novi Sad | 2006 |
|  | Kovačić IvanaZvonko Rakarić | Collection of Problems in Statics II (in Serbian) | Faculty of Technical Sciences, Novi Sad | 2006 |

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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* |
| Table 5.2 Course specification |