**Course Syllabus**

Academic year: 2018-2019

|  |  |
| --- | --- |
| Institution | University of Petroşani |
| Faculty | Mines |
| Field of study | Mine, Oil and Gas; Civil Engineering |
| Level | Bachelor |
| Program of study | Mining Engineering; Mining Constructions |

|  |  |
| --- | --- |
| Course | **Underground Mining Constructions** |
| Code | MNTCSO229; ICCMSO337; ICCMSO345 |
| Year of study (semester) | II (III); III (III, IV) |
| Number of hours | 56; 70 / 28 / 28 P |
| Number of credits | 4; 5 / 4 / 2 |
| Professor | Professor Ph.D. TODERAS Mihaela |

|  |  |
| --- | --- |
| **No.** | **Topic** |
|  | The constructive and functional features of underground mining constructions |
|  | Geotechnical documentation required for design and execution of underground mining constructions |
|  | Technology to achieve the underground mining constructions using the energy of explosives |
|  | Technology to achieve the underground mining constructions using entry driving machines |
|  | Stability analysis of the horizontal mine workings and assessment criteria |
|  | Horizontal mine workings and support systems |
|  | Inclined planes and inclined shafts |
|  | Stability analysis of shafts and technology of shaft sinking |
|  | Achievement technology of blind shaft |
|  | Support systems of shafts |