**Course Syllabus**

Academic year: 2018-2019

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| Institution | University of Petroşani |
| Faculty | of Mines |
| Field of study | Mines, Oil and Gas |
| Level | Bachelor |
| Program of study | Mining Engineering |

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| Course | **RISK ASSESSMENT IN THE MINING INDUSTRY** |
| Code | MNIMSA816 |
| Year of study (semester) | IV (VIII) |
| Number of hours | 50 42 |
| Number of credits | 4 |
| Professor | Lecturer. Ph.D. POPESCU-STELEA Mihai |

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| **No.** | **Topic** |
|  | National and European legislation concerning occupational risk assessment |
|  | The structure of risk factors for occupational accidents and diseases |
|  | Basic concepts. Acceptable risk. Analysis level required. Analysis methods (a priori and a posteriori deductive, inductive) |
|  | The INCDPM method for occupational risk assessment in work microsystems. Principles, structure, tools and application mode |
|  | The A.P.M.R method for risk assessment of occupational injury and disease |
|  | Integrated methods for industrial risk analysis. LOPA, MOSAR, ARAMIS methods and butterfly-node method |
|  | Fault tree and events tree. The diagram method and space conditions method. Methods based on system ergonomics for risk assessment for health and safety of workers |
|  | Ways to capitalize the results of occupational risk assessment in mining industry |