1. GENERAL INFORMATION				
1.1. Course teacher	Full Professor Daria Karasalihović Sedlar, PhD		1.6. Year of the study	II.
1.2. Name of the course	Project economic evaluation		1.7. ECTS credits	5
1.3. Associate teachers	Teaching Assistant Lucija Jukić, MSc		1.8. Type of instruction (number of hours L + E + S + e-learning)	28L+0E+28S+4e-learning
1.4. Study programme (undergraduate, graduate, integrated)	graduate		1.9. Expected enrolment in the course	30
1.5. Status of the course	☒ mandatory	☐ elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	level 3, 6,67% online
2. COUSE DESCRIPTION				
2.1. Course objectives	The students will be able to determine the importance and the purpose of feasibility studies and cost-benefit analyses as well as distinguish terms of pre-feasibility study, feasibility study and cost-benefit analysis. They will learn how to present the steps in an investment study, show the methods for investment assessment in the energy sector and demonstrate the workflow in the project's economic evaluation software.			
2.2. Enrolment requirements and/or entry competences required for the course	No specific requirements.			
2.3. Learning outcomes at the level of the programme to which the course contributes	Supervise projects in petroleum engineering and geoenergy engineering; Appraise projects in petroleum engineering and geoenergy engineering.			
2.4. Expected learning outcomes at the level of the course (3 to 10 learning outcomes)	Analyse feasibility studies and cost-benefit analysis; Explain the terms pre-feasibility study, feasibility study and cost-benefit analysis; Design a project investment study in energy sector; Demonstrate the steps in software; Evaluate the concessions and fiscal regimes for energy sources exploitation; Rank the projects.			
2.5. Course content (syllabus)	**The importance and the purpose of feasibility studies and cost-benefit analysis:** answer the question why feasibility study and cost-benefit analysis are made; Show an investment study as a part of the project cycle; **Terms pre-feasibility study, feasibility study and cost-benefit analysis:** pre-feasibility study, feasibility study and cost-benefit analysis definitions; Comparison of a feasibility study and a cost-benefit analysis; Examples of competitions where (pre)feasibility studies and cost-benefit analyses are necessary;			

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<table>
<tr><td></td><td colspan="9">Steps in an investment study: socio-economic context. Identification of the project; Feasibility and options analysis; Financial analysis – fundamental terms and financial analysis indicators, financial return on investment, financial gap, financial sustainability financial return on national equity; Economic analysis; Risk analysis;
Methods for investment assessment in the energy sector: method of energy production cost calculation; Energy economics; Equity and expenditures; Working period and cost of equipment; Benefits and costs of a project; Evaluation of a project proposal; Average rate of return, payback period and present value method; Investment uncertainty; Depreciation; Inflation; Fixed and operational expenditures;
Project's economic evaluation software: review of the parameters for the calculation (fundamental cash flow calculation, production prediction, prices, taxes, operational and capital expenditures, depreciation, reserves estimation); Fiscal regimes types. Time value of money; Browsing through software options; Creating a simple case and calculating the NPV, IRR and other economic indicators.</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="4">☒ lectures
☒ seminars and workshops
☐ exercises
☐ online in entirety
☒ partial e-learning
☐ field work</td><td colspan="3">☒ independent assignments
☒ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td colspan="2">2.7. Comments:
-</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="9">Very active participation required. Class attendance, team work on a case study, making and presentation of the study, oral exam.</td></tr>
<tr><td rowspan="6">2.9. Monitoring student work</td><td>Class attendance</td><td>YES</td><td></td><td>Research</td><td>YES</td><td></td><td>Oral exam</td><td>YES</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>NO</td><td>Report</td><td></td><td>NO</td><td></td><td></td><td></td></tr>
<tr><td>Essay</td><td></td><td>NO</td><td>Seminar paper</td><td></td><td>NO</td><td></td><td></td><td></td></tr>
<tr><td>Preliminary exam</td><td></td><td>NO</td><td>Practical work</td><td></td><td>NO</td><td></td><td></td><td></td></tr>
<tr><td>Project</td><td>YES</td><td></td><td>Written exam</td><td></td><td>NO</td><td>ECTS credits (total)</td><td colspan="2">5</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td rowspan="2">2.10. Required literature (available in the library and/or via other media)</td><td colspan="6">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td colspan="6">Dekanić, I, Karasalihović Sedlar, D. (2016.): Ekonomika energije, Golden Marketing.</td><td>YES</td><td>YES</td></tr>
<tr><td>2.11. Optional literature</td><td colspan="9">Guide to Cost-Benefit Analysis of Investment Projects - Economic appraisal tool for Cohesion Policy 2014-2020.</td></tr>
<tr><td>2.12. Other (as the proposer wishes to add)</td><td colspan="9">-</td></tr>
</table>

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