

SYLLABUS

1. Course title:

MINING ECONOMICS

2. Code:

LRUDEKR

3. Cycle of study:

1

4. ECTS credits:

4

5. Type of course:

Elective

6. Prerequisites:

No

7. Class restrictions:

No

8. Duration / semester(s):

1

2

9. Weekly contact hours and student workload:

	Semester (1)	Semester (2)	(for two-semester courses)	Workload: (hours)
9.1. Lectures	2			Classes: 22,5
9.2. Seminars	0			Individual work: 78,50
9.3. Laboratory / Practice classes	0			In total: 101

10. Faculty:

Mining, Geology and Civil Engineering

11. Department/study program:

Mining Engineering

12. Lecturer:

PhD Samir Nurić Full Professor

13. Course aims:

The goals of the course are to:

- Introduce students to basic knowledge in mining economics.
- Transfer theoretical and practical knowledge and experiences characteristic of mining business operations.

- Train and prepare students for work in mining, focusing on basic economic principles.
- Develop intellectual skills in applying acquired knowledge to solve engineering problems.
- Improve communication skills in both written and verbal forms.
- Enhance individual and team/group work skills.
- Improve students' skills for continuous work throughout the academic year.
- Prepare students for teamwork and open communication with professors to improve the teaching process.

14. Learning outcomes:

At the end of the semester/course, successful students, who have consistently completed their tasks throughout the teaching period, will be able to:

- Use available (written/electronic) literature related to solving various problems in the "Mining economics" course,
- Solve both simple and relatively more complex problems that require knowledge of economics in mining,
- Solve problems of varying complexity, individually and in teams, and present them in written or verbal form,
- Understand the importance of this course in solving various problems in engineering practice related to the studied field,
- Pass the final exam in the first exam periods at the end of the semester.

15. Course content:

Introduction part; Mine planning; Significance of ores; Basic terms and definitions; Phases of mine development; List of required initial input data; Phases of planning; Content of the average value assessment report; Content of the feasibility report; Cost planning; Accuracy estimation; Quantity and content of ore (mineral raw materials); Costs; Price and revenue; Preparation of feasibility study; Typical structure of an open-pit mining project; Activity network for the feasibility study; Mining reclamation; Content of reclamation plan; Reclamation standards; Costs and revenues in mining; Economic concepts including cash flow; Future value; Present value; Payback period; Cash flow and expenditure (depreciation); Revenue calculation; Econometric models; Price-cost relationship; Cost calculation; Types of costs; Operating costs; Original O'Hara method for cost estimation; Current equipment, suppliers, and labor costs.

16. Learning methods:

In order to efficiently conduct the course and achieve the expected course objectives and student competencies by the end of the semester, various teaching methods are used in the course:

- Lectures
- Seminar papers
- Consultations

The student is required to attend lectures throughout the entire semester.

17. Assessment methods:

The methods of evaluating students include the following criteria:

1. Attendance and participation in lectures
2. Oral/written exam or part of the exam (Test)
3. Final oral/written exam

Based on the mentioned criteria, at the end of the course, the instructor will form the final grade by scoring individual activities.

18. Assessment components:

The total number of points is calculated by summing the maximum possible points from all activities during the semester: attendance and participation in class, written/oral exam. Points are awarded as follows:

- Attendance: 5 points
- Participation: 5 points
- Test: 40 points
- Pre-exam obligations: 50 points
- Final exam: 50 points

Total: 100 points

The final grade of the student, after all forms of knowledge assessment, is evaluated and graded according to the ECTS grading scale as follows:

- a) 10 (A) - Excellent performance with no or minimal errors, 95-100 points;
- b) 9 (B) - Above average, with a few errors, 85-94 points;
- c) 8 (C) - Average, with noticeable errors, 75-84 points;
- d) 7 (D) - Generally good, but with significant shortcomings, 65-74 points;
- e) 6 (E) - Meets the minimum criteria, 54-64 points;
- f) 5 (F, FX) - Does not meet the minimum criteria, less than 54 points.

19. Mandatory reading list:

1. W. Hustrulid, M. Kuchta, Open Pit Mine Planning & Design, A.A. Balkema, Rotterdam, Brookfield, 2006.
2. A. R. Hajjar, Business Engineers, By Abdel Rahim Hajjar, Copyright 2008.

3. Anton Hauc, Projektni menadžment & projektno poslovanje, Visoka škola za poslovanje i upravljanje, Baltazar Adam Krčelić, Zaprešić, Zagreb, 2007.

20. Additional reading list:

21. Web sources:

22. Applicable from the academic year:

2025/26

23. Adopted in the Faculty/Academy session: