

## SUBJECT TEACHING GUIDE

M1646 - Management of a mining investment project

Master's Degree in mining engineering

Academic year 2022-2023

1. IDENTIFYING DATA					
Degree	Master's Degree in mining engineering			Type and Year	Optional. Year 2
Faculty	School of Mines and Energy Engineering				
Discipline	BLOCK I, SPECIALTY EXPLOITATION OF MINES Optional Module				
Course unit title and code	M1646 - Management of a mining investment project				
Number of ECTS credits allocated	3	Term	Semester based (1)		
Web					
Language of instruction	Spanish	English Friendly	Yes	Mode of delivery	Face-to-face

Department	DPTO. TRANSPORTES Y TECNOLOGIA DE PROYECTOS Y PROCESOS				
Name of lecturer	RUBEN PEREZ ALVAREZ				
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Other lecturers					

### 3.1 LEARNING OUTCOMES

- Be able to lead the management of mining investment projects in all their aspects.

### 4. OBJECTIVES

Plan and manage the mining production cycle and investments associated with it, as well as knowledge of the involvement of the mining irrigation investment programming.

## 6. COURSE ORGANIZATION

CONTENTS	
1	CHAPTER I: TECHNICAL FACTORS IN PRODUCTION I.1. Dilution and recovery. Types and sources of dilution. Mineral losses. Dilution and mining recovery as the various methods of exploitation. I.2. Losses in ore processing. Losses in crushing and classification. Losses in concentration. I.3. Handling and transport. I.4. Valuation formulas. I.5. Production and sales volume.
2	CHAPTER II: ANALYSIS OF INVESTMENTS II.1. Investment analysis mutually exclusive. II.2. Analysis not mutually exclusive investments.
3	CHAPTER III: TREATMENT OF inflation
4	CHAPTER IV: Sensitivity Analysis
5	CHAPTER V: SIZING OF MINING THROUGH THE RHYTHM OF PRODUCTION AND THE LAW OF COURT V.1. Curves tonnage-laws. V.2. Empirical formulas for determining the rate of production. V.3. Optimizing production rate. V.4. Optimizing production rate and the cutoff. V.5. Optimization under uncertainty. V.6. Economic optimization of production rates and cutting laws dynamic programming.
6	CHAPTER VI: CASE STUDIES

## 7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Individual work	Work	No	Yes	15,00
Group work	Work	No	Yes	15,00
The continuous evaluation will be taken into account after obtaining a grade of 4.5 in the written exam. According to the new regulation, if a student does not obtain the minimum qualification required to pass a evaluation test, the overall grade of the s	Written exam	Yes	Yes	70,00
TOTAL				100,00
Observations				
In order to pass this subject, the student will be required to get a final score of 5, considering the different activities.				
Observations for part-time students				
Part-time students will be evaluated according to the Regulations of the University of Cantabria. Part-time students will be offered to possibility to develop the individual and group works as individual essays .				

## 8. BIBLIOGRAPHY AND TEACHING MATERIALS

### BASIC

Construction PROJECT MANAGEMENT, S. Keoki Sears, Glenn A. Searas, Richard H. Clough  
 Guia del PMBOK, 2004 Project Management Institute.  
 Organización y gestión de proyectos y obras. G. Martínez Montes, E. Pellicer Almiñana.

