

SUBJECT TEACHING GUIDE

G632 - Mineral Deposits

Degree in Mining Resources Engineering First Degree in Mining Resources Engineering

Academic year 2024-2025

1. IDENTIFYING DATA					
Degree	Degree in Mining Resources Engineering First Degree in Mining Resources Engineering			Type and Year	Compulsory. Year 4 Compulsory. Year 3
Faculty	School of Mines and Energy Engineering				
Discipline	Subject Area: Technology of Mining Prospection Module: Training in Exploitation of Mines				
Course unit title and code	G632 - Mineral Deposits				
Number of ECTS credits allocated	6	Term	Semester based (2)		
Web					
Language of instruction	Spanish	English Friendly	Yes	Mode of delivery	Face-to-face

Department	DPTO. CIENCIAS DE LA TIERRA Y FISICA DE LA MATERIA CONDENSADA				
Name of lecturer	GEMA FERNANDEZ MAROTO				
E-mail	gema.fernandez@unican.es				
Office	E.P. de Ingeniería de Minas y Energía. Planta: + 0. DESPACHO SUBDIRECTOR (060)				
Other lecturers					

3.1 LEARNING OUTCOMES

- Students will get to know the genetic models of ore deposits, as well as evaluation methods and research techniques.

4. OBJECTIVES

The basic objective of this subject is to provide the student with the knowledge and tools to be able to face in their professional life the resolution of problems related to the study, characterisation, exploration and evaluation of mineral deposits, as well as to know the main problems related to the environmental impact generated by the exploitation of the different types of mineral deposits.

6. SUBJECT PROGRAM	
CONTENTS	
1	General concepts of mining geology
2	Genesis of Mineral Deposits
3	Evaluation and prospecting of ore deposits. Mining cubing methods
4	Environmental impact of the exploitation of mineral resources.

7. ASSESSMENT METHODS AND CRITERIA				
Description	Type	Final Eval.	Reassessn	%
Final report of the practices developed in each block	Work	No	No	20,00
Work group on mineral deposits and oral presentation Practical theoretical exam Practice attendance and report delivery	Work	No	Yes	20,00
Theoretical exam block 1 Written exam 30,00% Theoretical exam block 2 and practical exam (laboratory practicals) Written exam 30,00%	Written exam	Yes	Yes	30,00
Theoretical exam blocks 3-4	Written exam	Yes	Yes	30,00
TOTAL				100,00
Observations				
In September the note obtained during the course remains in the continuous assessment (40% of the grade of the subject) and examination constitutes 60%				
Observations for part-time students				
The part-time student assessment will be made following standards in this respect has the University.				

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

VAZQUEZ, F. (2012). MANUAL DE YACIMIENTOS MINERALES.ED. UD PROFYECTOS. MADRID.

MOON, C.J. ET AL (2006). INTRODUCTION TO MINERAL EXPLORATION. ED. BLACKWELL.

ORCHE, E.(1999). MANUAL DE EVALUACIÓN DE YACIMIENTOS MINERALES. ED. CARLOS LÓPEZ JIMENO.MADRID.

FERNÁNDEZ MAROTO, G. (2010). YACIMIENTOS MINERALES. ED. TGD.

TAYLOR, R.G.(2009). ORE TEXTURES: RECOGNITION AND INTERPRETATION. ED. SPRINGER.BERLIN

ROBB, L.J. (2005). INTRODUCTION TO ORE-FORMING PROCESSES. ED. MALDEN, MA . BLACKWELL PUB

ANNELS, A. E. (1991).MINERAL DEPOSIT EVALUATION : A PRACTICAL APPROACH LONDON. ED. CHAPMAN AND HALL

TAYLOR, R.G. (2009). ORE TEXTURES: RECOGNITION AND INTERPRETATION. ED. SPRINGER. BERLIN.

NEUKIRCHEN, FLORIAN(2020).THE WORLD OF MINERAL DEPOSITS : A BEGINNER'S GUIDE TO ECONOMIC GEOLOGY.
Ed.Springer International Publishing. 371pp

BUSTILLO REVUELTA, MANUEL(2018).MINERAL RESOURCES : FROM EXPLORATION TO SUSTAINABILITY
ASSESSMENT. Springer, cop.