

# SUBJECT TEACHING GUIDE

G597 - Safety and Energy Legislation

# Degree in Energy Resources Engineering

# Academic year 2023-2024

| 1. IDENTIFYING DATA              |  |                  |     |               |                    |              |  |  |  |  |
|----------------------------------|--|------------------|-----|---------------|--------------------|--------------|--|--|--|--|
| Degree                           | Degree in Energy Resources Engineering   |                  |     | Type and Year | Compulsory. Year 3 |              |  |  |  |  |
| Faculty                          | School of Mines and Energy Engineering   |                  |     |               |                    |              |  |  |  |  |
| Discipline                       | Subject Area: Mining Pre-Technology<br>Module: Training in Common with the Mining Branch |                  |     |               |                    |              |  |  |  |  |
| Course unit title and code       | G597 - Safety and Energy Legislation   |                  |     |               |                    |              |  |  |  |  |
| Number of ECTS credits allocated | 6  | Term Semes       |     | Semeste       | ster based (2)     |              |  |  |  |  |
| 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 | BEATRIZ MALAGON PICON  |  |  |
| E-mail           | beatriz.malagon@unican.es  |  |  |
| Office           | E.P. de Ingeniería de Minas y Energía. Planta: + 2. DESPACHO (234) |  |  |
| Other lecturers  | RAQUEL MARTINEZ TORRE  |  |  |

### **3.1 LEARNING OUTCOMES**

- Define the basic concepts and principles of security, having to know the basic terminology, as well as the applicable legislation.
- $\cdot$  Acquire knowledge of mechanisms and techniques for the prevention of occupational hazards, as well as responsibilities, safety standards, protections and specific techniques for different risks.
- · Know the fundamental principles of ergonomics, its current trends and its application to machine design, as well as prevention management in the mining company and in the industry in general.



# 4. OBJECTIVES

There are three main objectives:

The first one consists of the definition of basic concepts and principles of safety, paying special atention to the basic terminology as well as the current laws.

The second one is related to the acquisition of knowledge on mechanisms and techniques of prevention of occupational risks, as well as the responsibilities, safety standards, protections and the specific techniques to minimize each risk.

The third objective implies the analysis of the main principles of ergonomics, current trends and their application to machine design and management of prevention in the mining company and the industry in general.

| 6. COL | 6. COURSE ORGANIZATION   |  |  |  |  |  |
|--------|--|--|--|--|--|--|
|        | CONTENTS   |  |  |  |  |  |
| 1      | Chapter I: Legal framework. Introduction. Legal framework. Mining laws and Mining Rights.  |  |  |  |  |  |
| 2      | Chapter II: Safety and prevention. General Regulation on Mining Safety. Law on Occupational Risk Prevention.  Normalization.                                     |  |  |  |  |  |
| 3      | Chapter III: Energetic markets and laws. Hidrocarbon Law. Market of petroleum products. Electricity market. Electrotechnical Regulation on Low and High Voltage. |  |  |  |  |  |

| 7. ASSESSMENT METHODS AND CRITERIA |  |              |  |             |           |        |  |  |
|------------------------------------|--|--------------|--|-------------|-----------|--------|--|--|
| Description                        |  | Туре         |  | Final Eval. | Reassessn | %      |  |  |
| Final exam                         |  | Written exam |  | Yes         | Yes       | 60,00  |  |  |
| Individual essay                   |  | Work         |  | No          | Yes       | 20,00  |  |  |
| Group work essay                   |  | Work         |  | No          | Yes       | 20,00  |  |  |
| TOTAL                              |  |              |  |             |           | 100.00 |  |  |

# Observations

In the event that the minimum mark is not exceeded in any of the parts, the final mark will be the minimum of 4.9 and the average obtained counting all the evaluation activities. The marks of the approved parts will be kept until the extraordinary call

### Observations for part-time students

Partial-time students will be evaluated according to the normative of the University of Cantabria. In addition to the final exam, part-time students will be offered to develop both the individual and group work as individual essays



# **8. BIBLIOGRAPHY AND TEACHING MATERIALS**

#### **BASIC**

#### APUNTES DE LA ASIGNATURA

FORMACIÓN EN INDUSTRIAS EXTRACTIVAS. Manual Para Operario de Planta. Establecimiento de Beneficio y puestos comunes en actividades extractivas de exterior. INREMIN, S.L. 2012 FORMACIÓN MINERA. FORMACIÓN PARA LA ACREDITACIÓN DE CALIFICACIÓN INDIVIDUAL DE MAQUINISTA MINERO DE MAQUINARIA FIJA Y MÓVIL. PERFORADORA. INREMIN, S.L. 2012

FORMACIÓN MINERA. FORMACIÓN PARA LA ACREDITACIÓN DE CALIFICACIÓN INDIVIDUAL DE MAQUINISTA MINERO DE MAQUINARIA FIJA Y MÓVIL. JUMBO. INREMIN, S.L. 2012 Manual de seguridad laboral. Ibermutuamur. Ed. P y CH Asociados. Madrid 2002 Manual de Prevención de Riesgos Laborales. Fernando Rescalvo Santiago y Rosa María de Diego López. Ibermutuamur. Ed. P y CH Asociados. Madrid 2002.

Higiene Industrial Aplicada. Manuel Jesús Falagán Rojo. Fundación Fernández Velasco. Oviedo, 2001 Manual de Hergonomía. Fernando Rescalvo Santiago y otros. Ibermutuamur. Madrid 2002 Ley 31/1995 de Prevención de Riesgos Laborales. Ley 34/1998, de 7 de octubre, del sector de hidrocarburos.

Reglamento electrotécnico de Baja Tensión.