Course guide
33109 - SARNMP - Advanced Seminar on Natural Resources as Raw Material

Last modified: 04/05/2023

Unit in charge: Manresa School of Engineering
Teaching unit: 750 - EMIT - Department of Mining, Industrial and ICT Engineering.

Degree: MASTER'S DEGREE IN NATURAL RESOURCE ENGINEERING (Syllabus 2015). (Optional subject).

Academic year: 2023 **ECTS Credits:** 5.0 **Languages:** Catalan, Spanish, English

LECTURER

Coordinating lecturer: Busquets Rubio, Pere
Parcerisa Duocastella, David

Others:

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
1. To design a process to minimise a pollutant, a waste material or a type of pollution.

TEACHING METHODOLOGY

Lectures, conferences, debates and forums are given on the basic content of the subject.

- A research assignment is set and tutored by one of the subject's professors over the course of the semester. Students must present it in public.

LEARNING OBJECTIVES OF THE SUBJECT

To become familiar with the problems associated with the exploitation of natural resources and their application in industry, construction and society in general.

To provide students with the advanced knowledge of researchers working in areas related to sustainable exploitation.

STUDY LOAD

Type	Hours	Percentage
Hours large group	30,0	66.67
Hours medium group	15,0	33.33

Total learning time: 45 h

CONTENTS

-DESCRIPTION

Description:
1. Geological materials for obtaining energy
. Fossil fuels
. Water
. Other

2. Industrial geological materials for the metallurgical and chemical industry
. Minerals
. Rocks
. Carbon, petroleum and natural gas
. Other

Full-or-part-time: 45h
Theory classes: 30h
Practical classes: 15h

GRADING SYSTEM

Assessment takes into account the following:

- Written test (40%)
- Tutored assignment (40%)
- Exercises on the topics (20%)

The following criteria are taken into account:
a) Assessment of the documents obtained: relevance and processing of the information.
b) Assessment of the report.
c) Assessment of the public presentation.

BIBLIOGRAPHY

Basic:
- Consejo de las Comunidades Europeas. "Reglamento (CE) nº 1907/2006 del Parlamento Europeo y del Consejo de 18 de diciembre de 2006". Diario Oficial de la Unión Europea [on line]. 30 diciembre 2006, no. L 396, p. 1-852 [Consultation: 21/12/2020]. Available on: https://www.boe.es/doue/2006/396/L00001-00852.pdf.- MacKay, David J. C. Sustainable energy: without the hot air [on line]. Cambridge: UIT, 2009 [Consultation: 30/05/2022]. Available on: https://ebookcentral-proquest-com.recursos.biblioteca.upc.edu/lib/upcatalunya-ebooks/detail.action?docID=4782654. ISBN 9781906860011.
- Craig, James R.; Skinner, Brian J.; Vaughan, David J. Resources of the earth: origin, use and environmental impact. 3rd ed. Upper Saddle River: Prentice Hall, 2001. ISBN 0130834106.
- Craig, James R; García del Amo, Dolores; García Rodríguez, Manuel; Calvo Pérez, Benjamín; Skinner, Brian J; Vaughan, David J. Recursos de la tierra y el medio ambiente [on line]. Cuarta edición. Madrid: Pearson, 2012Available on: https://www-ingebook-com.recursos.biblioteca.upc.edu/ib/NPcd/IB_BooksVis?cod_primaria=1000187&codigo_libro=1222. ISBN 9788415552178.