Course guide
330424 - H - Hidrogeology

Last modified: 04/05/2023

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

Degree: BACHELOR'S DEGREE IN MINING ENGINEERING (Syllabus 2016). (Compulsory subject).

Academic year: 2023 **ECTS Credits:** 6.0 **Languages:** Catalan

LECTURER

Coordinating lecturer: Font Soldevila, Jose

Others:

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
1. (ENG) Conèixer la climatologia com a primer eslavó de la cadena del cicle de l'aigua.
2. (ENG) Saber com es comporta l'aigua superficial que serà l'element que repercutirà en l'aigua subterrània.
3. (ENG) Comprendre la hidrogeoquímica i qualitat de l'aigua subterrània.
4. (ENG) Conèixer el comportament de l'aigua subterrània.
5. (ENG) Què s'ha de fer per captar l'aigua subterrània.

Transversal:
6. TEAMWORK - Level 3. Managing and making work groups effective. Resolving possible conflicts, valuing working with others, assessing the effectiveness of a team and presenting the final results.
7. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 3. Communicating clearly and efficiently in oral and written presentations. Adapting to audiences and communication aims by using suitable strategies and means.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

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STUDY LOAD

Type	Hours	Percentage
Hours medium group	60,0	40.00
Self study	90,0	60.00

Total learning time: 150 h

CONTENTS

title english

Description:
content english

Full-or-part-time: 40h
Theory classes: 6h
Laboratory classes: 4h
Self study : 30h

title english

Description:
content english

Full-or-part-time: 60h
Theory classes: 15h
Laboratory classes: 15h
Self study : 30h

title english

Description:
content english

Full-or-part-time: 50h
Theory classes: 9h
Laboratory classes: 11h
Self study : 30h

ACTIVITIES

name english

Full-or-part-time: 20h
Theory classes: 20h

name english

Full-or-part-time: 28h
Laboratory classes: 10h
Self study: 18h

name english

Full-or-part-time: 22h
Theory classes: 4h
Laboratory classes: 8h
Self study: 10h

GRADING SYSTEM

BIBLIOGRAPHY

Basic:
- Comisión docente, Curso Internacional de Hidrología Subterránea. Hidrogeología: conceptos básicos de hidrología subterránea. Barcelona: Fundación Centro Internacional de Hidrología Subterránea, 2009. ISBN 9788492146918.

Complementary:
- López Jimeno, Carlos, ed.. Manual de sondeos. Vol. 1, Tecnologia de perforación. Madrid: l'autor, 2006. ISBN 8496140180.
- Custodio, Emilio; Llamas, Manuel Ramón, eds. Hidrología subterránea. 2a ed. corr. Barcelona: Omega, 2001. ISBN 8428204462.
- Bourgoyne, Adam T. Applied drilling engineering. Richardson: Society of Petroleum Engineers, 1986. ISBN 9781555630010.
- Younger, Paul L.; Banwart, Steven A.; Hedin, Robert S. Mine water: hydrology, pollution, remediation. Dordrecht: Kluwer Academic Publishers, 2002. ISBN 140200138X.