

330345 - NRM - New Mineral Resources

Coordinating unit: 330 - EPSEM - Manresa School of Engineering
 Teaching unit: 750 - EMIT - Department of Mining, Industrial and ICT Engineering
 Academic year: 2019
 Degree: MASTER'S DEGREE IN MINING ENGINEERING (Syllabus 2013). (Teaching unit Optional)
 ECTS credits: 5 Teaching languages: Spanish, English

Teaching staff

Coordinator: Hoffmann Sampaio, Carlos

Degree competences to which the subject contributes

Specific:

1. (ENG) Capacitat per planificar, dissenyar i gestionar instal·lacions de tractaments de recursos minerals.
2. (ENG) Coneixement adequat de la tecnologia d'explotació de recursos minerals.

Transversal:

3. SUSTAINABILITY AND SOCIAL COMMITMENT - Level 3. Taking social, economic and environmental factors into account in the application of solutions. Undertaking projects that tie in with human development and sustainability.
4. 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.
5. EFFECTIVE USE OF INFORMATION RESOURCES - Level 3. Planning and using the information necessary for an academic assignment (a final thesis, for example) based on a critical appraisal of the information resources used.

Learning objectives of the subject

Study load

| | | | |
|---------------------------|---------------------|-----|--------|
| Total learning time: 125h | Hours large group: | 0h | 0.00% |
| | Hours medium group: | 45h | 36.00% |
| | Hours small group: | 0h | 0.00% |
| | Guided activities: | 0h | 0.00% |
| | Self study: | 80h | 64.00% |

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Content

| | |
|---------------------------------|---|
| title english | Learning time: 33h 18m Theory classes: 12h Self study : 21h 18m |
| Description: content english | |

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|---------------------------------|---|
| title english | Learning time: 91h 42m Theory classes: 33h Self study : 58h 42m |
| Description: content english | |

Planning of activities

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| (ENG) | Hours: 35h Theory classes: 15h Self study: 20h |
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| (ENG) | Hours: 33h Theory classes: 3h Self study: 30h |
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Bibliography

Basic:

- Mular, Andrew L; Halbe, Doug N; Barratt, Derek J. Mineral processing plant design, practice, and control : proceedings. Littleton: Society for Mining, Metallurgy and Exploration, cop. 2002. ISBN 0873352238.
- Wills, B. A; Napier-Munn, Tim. Wills' mineral processing technology [Recurs electrònic] : an introduction to the practical aspects of ore treatment and mineral recovery [on line]. 7th ed. Amsterdam [etc.]: Elsevier, cop. 2005 [Consultation: 25/10/2019]. Available on: <<https://www.sciencedirect.com/science/book/9780750644501>>. ISBN 0750644508.
- Kelly, Errol G; Spottiswood, David J. Introduction to mineral processing. New York [etc.]: John Wiley and sons, cop. 1982. ISBN 0471033790.
- King, R. P; Schneider, C. L; King, E. A. Modeling and simulation of mineral processing systems. 2nd ed. Englewood: Society for Mining, Metallurgy and Exploration, 2012. ISBN 9780873353458.
- Gupta, A; Yan, D. S. Mineral processing design and operations : an introduction [on line]. Second edition. Amsterdam: Elsevier, [2016] [Consultation: 25/10/2019]. Available on: <<https://www.sciencedirect.com/science/book/9780444516367>>. ISBN 9780444635891.
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- Mular, Andrew L; Halbe, Doug N; Barratt, Derek J. Mineral processing plant design, practice, and control : proceedings. Littleton: Society for Mining, Metallurgy and Exploration, cop. 2002. ISBN 0873352238.
- Darling, Peter. SME mining engineering handbook. 3rd ed. Littleton, Col.: Society for Mining, Metallurgy and Exploration, 2011. ISBN 9780873352642.

Complementary:

- Lynch, Alban J. ; Rowland, Chester A. History of grinding. Littleton: Society for Mining, Metallurgy, and Exploration, 2005. ISBN 9780873352444.
- Evertsson, Carl Magnus. Cone crusher performance [on line]. Göteborg, Sweden: Department of Machine and Vehicle Design, Chalmers University of Technology, 2000 [Consultation: 25/10/2019]. Available on: <<http://publications.lib.chalmers.se/records/fulltext/759/759.pdf>>. ISBN 9171978569.
- Kawatra, S. Komar. Advances in comminution. Littleton: Society for Mining, Metallurgy and Exploration, cop. 2006. ISBN 0873352467.
- Drelich, Jaroslaw. Water in mineral processing. Englewood: Society for Mining, Metallurgy, and Exploration, 2012. ISBN 9780873353496.
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