

Course guide

310221 - 310221 - Physical Geodesy

Last modified: 06/06/2024

Unit in charge: Barcelona School of Building Construction
Teaching unit: 748 - FIS - Department of Physics.
751 - DECA - Department of Civil and Environmental Engineering.

Degree: **Academic year:** 2024 **ECTS Credits:** 4.5
Languages: Spanish

LECTURER

Coordinating lecturer: Nuñez Andres, Maria Amparo

Others: Blas Echebarría Domínguez
Nuñez Andres, Maria Amparo

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

1. Knowledge and application of the methods and techniques of the physics and spatial geodesy; geomagnetism; sismology and seismic engineering; gravimetry.
2. (ENG) Planificació, projecte, direcció, execució i gestió de processos de mesura, sistemes d'informació, explotació d'imatges, posicionament i navegació; modelització, representació i visualització de la informació territorial en, sota i sobre la superfície terrestre.
3. (ENG) Reunir i interpretar informació del terreny i tota aquella relacionada geogràficament i econòmicament amb ell.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

STUDY LOAD

Type	Hours	Percentage
Hours small group	6,8	6.04
Hours medium group	18,0	15.99
Hours large group	20,3	18.03
Self study	67,5	59.95

Total learning time: 112.6 h

CONTENTS

(ENG) Campo Gravitatorio de la Tierra

Description:

xx

Full-or-part-time: 29h 35m

Theory classes: 6h 30m

Practical classes: 4h

Self study : 19h 05m

(ENG) Nivel del mar

Description:

z

Full-or-part-time: 13h 48m

Theory classes: 1h 48m

Practical classes: 2h

Laboratory classes: 2h

Self study : 8h

(ENG) Modelos de Geoide

Description:

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Full-or-part-time: 15h 25m

Theory classes: 2h

Practical classes: 3h

Laboratory classes: 2h

Self study : 8h 25m

(ENG) Gravimetría

Description:

xx

Full-or-part-time: 11h 15m

Theory classes: 3h 30m

Practical classes: 1h

Self study : 6h 45m

(ENG) Reducciones Gravimétricas

Description:

xx

Full-or-part-time: 18h 45m

Theory classes: 3h 30m

Practical classes: 4h

Self study : 11h 15m



title english

Description:

content english

Full-or-part-time: 23h 28m

Theory classes: 3h

Practical classes: 4h

Laboratory classes: 2h 28m

Self study : 14h

GRADING SYSTEM

BIBLIOGRAPHY

Basic:

- Torge, Wolfgang. Geodesy. 4a ed. Berlin [etc.]: Walter de Gruyter, 2012.
- Hofmann-Wellenhof, Bernhard ; Moritz, Helmut. Physical Geodesy. 2a ed. Wien ; New York: Springer, 2006. ISBN 3211335447.