

Course guide

240EQ323 - 240EQ323 - Pharmaceutical Biotechnology

Last modified: 26/06/2025

Unit in charge: Barcelona East School of Engineering
Teaching unit: 713 - EQ - Department of Chemical Engineering.

Degree: **Academic year:** 2025 **ECTS Credits:** 4.5
Languages: Spanish

LECTURER

Coordinating lecturer: Juan Jesus Perez Gonzalez
Others: Primer quadrimestre:
JUAN JESUS PEREZ GONZALEZ - T10

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Generical:

1. Possess independent learning skills to maintain and enhance the competencies of chemical engineering to enable the continued development of their profession.

Transversal:

2. SUSTAINABILITY AND SOCIAL COMMITMENT: Being aware of and understanding the complexity of the economic and social phenomena typical of a welfare society, and being able to relate social welfare to globalisation and sustainability and to use technique, technology, economics and sustainability in a balanced and compatible manner.

3. EFFECTIVE USE OF INFORMATION RESOURCES: Managing the acquisition, structuring, analysis and display of data and information in the chosen area of specialisation and critically assessing the results obtained.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

STUDY LOAD

Type	Hours	Percentage
Hours small group	40,5	36.00
Self study	72,0	64.00

Total learning time: 112.5 h

CONTENTS

(ENG) 1. LA CIÈNCIA TERAPÈUTICA I LA INDÚSTRIA FARMACÈUTICA

Full-or-part-time: 10h
Theory classes: 4h
Self study : 6h



(ENG) 2. FARMACOCINETICA I FARMACODINAMICA

Full-or-part-time: 15h

Theory classes: 6h

Self study : 9h

(ENG) 3. FARMACS I BIOFARMACS

Full-or-part-time: 50h

Theory classes: 20h

Self study : 30h

(ENG) 4. DISSENY DE FARMACS

Full-or-part-time: 10h

Theory classes: 4h

Self study : 6h

(ENG) 5. BIOPROCÉS FARMACÈUTIC

Full-or-part-time: 27h

Theory classes: 11h

Self study : 16h

ACTIVITIES

(ENG) 1. PRODUCCIÓ D'UN BIOFÀRMAC

Full-or-part-time: 20h

Self study: 20h

GRADING SYSTEM

BIBLIOGRAPHY

Basic:

- Brunton, Laurence L; Chabner, Bruce; Knollmann, Bjorn C; Goodman, Louis S; Gilman, Alfred Goodman. Goodman & Gilman's the pharmacological basis of therapeutics. 12th ed. New York: McGraw-Hill Medical, 2011. ISBN 9780071624428.
- Walsh, Gary. Pharmaceutical biotechnology : concepts and applications. Chichester [etc.]: John Wiley & Sons, cop. 2007. ISBN 9780470012451.
- Shuler, Michael L; Kargi, Fikret. Bioprocess engineering : basic concepts. 2nd ed. Harlow, Essex: Pearson, cop. 2014. ISBN 9781292025995.