



CELLULAR BIOLOGY

26515 - CELLULAR BIOLOGY (2024-25)

General

Code: 26515

Lecturer responsible:

ROMERO RAMETA, ALEJANDRO

Credits ECTS:	6,00
Theoretical credits:	1,20
Practical credits:	1,20
Distance-base hours:	3,60

Departments involved

■ **Dept:** BIOTECHNOLOGY

Area: CELLULAR BIOLOGY

Theoretical credits: 1,2

Practical credits: 1,2

This Dept. is responsible for the course.

This Dept. is responsible for the final mark record.

Study programmes where this course is taught

■ [DEGREE IN BIOLOGY](#)

Course type: CORE (Year: 1)

Competencies and objectives

Course context for academic year 2024-25

Cell Biology is a subject focused on the study of the structural and functional organization of the eukaryotic cell, not only of each of its parts but also of the relationships between the different organelles and the processes that take place (secretion, transport, signaling, Proliferation, etc.). The practices of the subject are based on the use of the microscope and the realization of different techniques to visualize different cell types and their structures, those of greater pedagogical value. It is also an essential discipline to know the other levels of complexity, both lower (atomic and molecular) and higher (systems, individuals, associations of individuals, etc.) imparted in other subjects (Biochemistry and Molecular Biology, Genetics, Physiology, Microbiology, Botany, Zoology, etc.).

Course content (verified by ANECA in official undergraduate and Master's degrees) for academic year {0}

Generic Degree Course Competences

- **CG1** : Desenvolupar la capacitat d'anàlisi, síntesi i raonament crític.
- **CG10** : Desenvolupar actituds crítiques basades en el coneixement.
- **CG3** : Resoldre problemes de manera efectiva.
- **CG4** : Demostrar capacitat de treball en equip.
- **CG5** : Comprometre's amb l'ètica i els valors d'igualtat, i també en la responsabilitat social com a ciutadà i com a professional.
- **CG6** : Aprendre de manera autònoma.

Specific Competences:>>Theoretical

- **CE1** : Adquirir els fonaments de la terminologia biològica, nomenclatura, convenis i unitats.
- **CE13** : Estudiar l'estructura i la funció de les biomolècules i comprendre la seua funció en els processos biològics.
- **CE14** : Conèixer els fonaments de la replicació, transcripció, traducció i modificació del material genètic.
- **CE15** : Identificar les principals vies metabòliques.
- **CE16** : Comprendre els mecanismes de la senyalització cel·lular.
- **CE18** : Analitzar l'estructura i funció dels virus, cèl·lules, teixits, òrgans i sistemes animals i vegetals.
- **CE4** : Reconèixer diferents nivells d'organització en el sistema viu.
- **CE5** : Comprendre el concepte de vida i conèixer el seu origen i història, juntament amb la de la Terra.
- **CE6** : Entendre els mecanismes de l'herència i els fonaments de la millora genètica.
- **CE7** : Comprendre els mecanismes i models evolutius.
- **CE8** : Comprendre i conèixer les bases genètiques de la biodiversitat.

Specific Competences:>>Ability

- **CE29** : Demostrar el coneixement i comprensió dels fets essencials, conceptes, principis i teories relacionades amb les àrees de la biologia.
- **CE30** : Interpretar, avaluar, processar i sintetitzar dades i informació biològica.
- **CE31** : Reconèixer i implementar bones pràctiques científiques de mesura i experimentació.
- **CE32** : Manipular amb seguretat material biològic, reactius, instruments i dispositius d'aplicació en biologia.
- **CE33** : Dur a terme procediments estàndards de laboratoris implicats en treballs analítics.
- **CE35** : Interpretar les dades procedents d'observacions i mesuraments en el laboratori i camp.
- **CE45** : Realitzar bioassajos i diagnòstics biològics.

Generic UA Competences

- **CGUA2** : Expressar-se correctament en qualsevol de les llengües oficials de la Comunitat Valenciana de manera oral i escrita.
- **CGUA3** : Tenir coneixements d'informàtica relatius a l'àmbit d'estudi.
- **CGUA4** : Adquirir o posseir les habilitats bàsiques en TIC (tecnologies de la informació i comunicació) i gestionar adequadament la informació obtinguda.

Exclusive skill taught in this course

No data

Learning outcomes (Training objectives)

No data

Specific objectives stated by the academic staff for academic year 2024-25

Subject objectives/competences

- 1) To know the functions of the cellular components, relate them and understand that the Functioning of the cell is the result of the functioning of its components.
- 2) To understand the events of the cell cycle, its regulation and the importance of both cell division and apoptosis.
- 3) To understand that cell defects are the basis of pathology.
- 4) To describe and interpret cell structure and ultrastructure from optical and electron microscopy images.
- 5) To master the basic terminology of cellular biology in order to express concepts related to the subject.

Content and bibliography

Content for academic year 2024-25

THEORETICAL CONTENTS

BLOCK 1: INTRODUCTION

T1. The cell: the basic units of life. Structure and organization of the prokaryotic and eukaryotic cell.

T2. Methods and techniques in cell biology. Cells under the microscope. Sample processing. Study of biological models.

BLOCK 2: CELL MEMBRANES AND CYTOSOL.

T3. Structure and composition of the plasma membrane. Membrane models: historical perspective. Lipid bilayer. Integral membrane proteins. Functions of cell membranes. Membrane biosynthesis and turnover. Structure and function of the glycocalyx.

T4. Transport across cell membranes. Principles of transmembrane transport. Microtransport across the plasma membrane. Passive and active transport. Ion channels and membrane potential.

T5. Cytosol. Composition and function. Ribosomes: biogenesis and protein synthesis.

T6. Stress proteins. Cellular systems of protein degradation.

BLOCK 3: CYTOSKELETON AND CELL MOVEMENT.

T7. Actin. Mechanisms of actin polymerization and depolymerization. Actin-associated proteins (ABPs). Protrusions and contractile structures.

T8. Microtubules. Composition, structure and formation. Dynamic instability. Microtubule-associated proteins (MAPs). Drugs and dynamics of polymerization. The centrosome. Cilia and flagella.

T9. Intermediate filaments. Structure, types and localization. Proteins associated with intermediate filaments.

T10. Specializations of the plasma membrane. Interaction of the cell with its environment. Morphological differentiations of the cell surface. Functional significance.

T11. Cellular communities and junctions. Cell adhesion molecules. Cell-cell and cell-extracellular matrix interactions.

BLOCK 4: CELLULAR ENDOMEMBRANE SYSTEM. DISTRIBUTION, CLASSIFICATION AND TRANSPORT OF PROTEINS. CELL SIGNALING.

T12. Endomembrane system. Distribution and classification of proteins. Endoplasmic reticulum and varieties. Localization and identification by microscopic techniques.

T13. Vesicular transport. Golgi apparatus. Structure, location and identification.

T14. Secretory and endocytic pathways. Endosomal system. Lysosomes and cell digestion. Peroxisomes. Autophagy.

T15. Mitochondria. Structure, function and localization. Molecular basis of mitochondrial disease. Plastids. Photosynthesis.

T16. Cell signaling and communication. G-protein and enzyme-coupled receptors. Functional significance.

T17. Intracellular storage of substances. Lipid depots. Intracellular carbohydrates. Deposits of protein nature. Pigments and mineral substances. Classification and characteristics of intracellular inclusions. Functional significance.

BLOCK 5: THE NUCLEUS AND CELL CYCLE

T18. General characteristics of the interphase nucleus. The nuclear envelope. The nucleoplasm. Chromatin and regulation of chromosome structure. Human cytogenetics: the karyotype.

T19. Cell cycle: concept and phases. Regulators of cell cycle progression. Mitosis and meiosis.

T20. Concept and mechanisms of cell growth, differentiation and renewal. Cell viability and cell death. Apoptosis. Cell biology of cancer.

PRACTICAL CONTENTS

Practice 1. Fundamentals, components and handling of the compound optical microscope. Observation of different cell types. Interpretation of cell sizes.

Practice 2. Transport through membranes. Observation of plasmolysis and turgor.

Practice 3. Blood cells: Performing a blood smear. Identification and counting of blood cells.

Practice 4. Introduction to clinical cytology. Exfoliative cytology in the early diagnosis of oncological lesions. Fundamentals of Papanicolaou staining.

Practice 5. Introduction to cell culture. Study of cell count and viability in eukaryotic cells.

Practice 6. Fundamentals and biomedical applications of immunocytochemical techniques. Study of the nucleus and cytoskeleton in eukaryotic cells.

Practice 7. Study of the cell cycle in eukaryotic cells.

Practice 8. Interpretation of electron microscopy images. Recognition and localization of subcellular structures.

Related links

<http://mmejias.webs.uvigo.es/bibliografia.php>

En el siguiente enlace podéis encontrar enlaces a numerosas páginas web, tanto de Biología Celular, como de Histología Animal y de Histología Vegetal

http://www.cytochemistry.net/Cell-biology/membrane_Intro.htm

Página en inglés para estudiar las membranas celulares.

<http://vcell.ndsu.nodak.edu/animations>

La página presenta excelentes animaciones sobre diferentes procesos celulares. Cuenta con una descripción de cada uno de ellos.

<http://www.utm.utoronto.ca/~w3bio315/RME/cholesterol.html>

Animación y descripción de la endocitosis mediada por receptor del colesterol

<http://mmejias.webs.uvigo.es/>

Atlas de Histología Animal y Vegetal. Departamento de Biología Funcional y Ciencias de la Salud. Facultad de Biología. Universidad de Vigo.

<http://youtu.be/GigxU1UXZXo>

Animación sobre el interior de la célula eucariota. Extraordinaria animación, de 8 minutos de duración, sobre la actividad interior de la célula con narración en inglés. Título: Inner Life Of A Cell. Harvard Cell Animation. Dr. Joaquín De Juan.

Bibliography

Biología molecular de la célula

Author(s): Alberts, Bruce

Issue: Barcelona : Omega, 2016;

ISBN: 978-84-282-1638-8

Category: Básico

Molecular biology of the cell

Author(s): Alberts, Bruce

Issue: New York : W Norton & Company, 2022;

ISBN: 978-0-393-88485-2

Category: Básico

Molecular biology of the cell

Author(s): Alberts, Bruce

Issue: New York : W Norton & Company, 2022;

ISBN: 978-0-393-88485-2

Category: Básico

Introducción a la biología celular, 5^a ed

Author(s): Alberts, Bruce

Issue: Madrid : Editorial Médica Panamericana, 2021;

ISBN: 978-607-8546-44-2

Category: Básico

Atlas de histología y organografía microscópica

Author(s): Boya Vegue, Jesús

Issue: Madrid : Médica Panamericana, 2010;

ISBN: 978-84-9835-360-0

Category: Básico

Becker`s world of the cell

Author(s): HARDIN, Jeff ; BERTONI, Gregory Paul ;
KLEINSMITH, Lewis J.

Issue: San Francisco : Benjamin Cummings, 2012;

ISBN: 978-0-321-70978-3

Category: Básico

Introducción a las técnicas instrumentales en biología celular

Author(s): JUAN HERRERO, Joaquín de

Issue: Alicante : Club Universitario, 1998;

ISBN: 84-95015-16-1

Category: Sin especificar

¿De qué están hechos los organismos? : el nacimiento de la mirada histológica

Author(s): Juan Herrero, Joaquín de

Issue: Alicante : Universidad de Alicante, 1999;

ISBN: 84-7908-487-1

Category: Sin especificar

Principles of neural science

Author(s): Kandel, Eric R.

Issue: New York : McGraw-Hill, 2021;

ISBN: 978-1-259-64223-4

Category: Básico

Robbins y Cotran, patología estructural y funcional, décima edición

Author(s): Kumar, Vinay

Issue: Barcelona : Elsevier, 2021;

ISBN: 978-84-9113-911-9

Category: Sin especificar

Robbins y Cotran, patología estructural y funcional, décima edición

Author(s): Kumar, Vinay

Issue: Barcelona : Elsevier, 2021;

ISBN: 978-84-9113-911-9

Category: Sin especificar

Robbins and Cotran Pathologic basis of disease

Author(s): KUMAR, Vinay [et al.] (eds.)

Issue: Philadelphia : Elsevier Saunders, 2015;

ISBN: 978-0-323-26616-1

Category: Básico

Molecular cell biology

Author(s): LODISH, Harvey [et al.]

Issue: New York : W. H. Freeman, 2007;

ISBN: 978-0-7167-7601-7

Category: Básico

Biología celular y molecular

Author(s): LODISH, Harvey [et al.]

Issue: Buenos Aires : Editorial Médica Panamericana, 2016;

ISBN: 978-950-06-0626-4 (cartoné)

Category: Básico

Citología e histología vegetal y animal

Author(s): Paniagua, Ricardo

Issue: Madrid : McGraw-Hill Interamericana, 2007;

ISBN: 978-84-481-5593-3 (o. c.)

Category: Básico

Biología celular

Author(s): PLATTNER, Helmut ; HENSTSCHEL, Joachim

Issue: Madrid : Editorial Médica Panamericana, 2014;

ISBN: 978-84-9835-521-5

Category: Básico

Neurociencia, 5^a edición

Author(s): Purves, Dale

Issue: Madrid : Médica Panamericana, 2020;

ISBN: 978-84-9110-762-0

Category: Básico

Neurociencia, 5^a edición

Author(s): Purves, Dale

Issue: Madrid : Médica Panamericana, 2020;

ISBN: 978-84-9110-762-0

Category: Básico

Wheater, anatomía patológica : texto, atlas y revisión de histopatología

Author(s): O'Dowd, Geraldine ; Bell, Sarah

Issue: Barcelona : Elsevier, 2020;

ISBN: 978-84-9113-746-7

Category: Básico

Biología celular : conceptos esenciales

Author(s): Juan Herrero, Joaquín de

Issue: Madrid : Editorial Médica Panamericana, 2022;

ISBN: 978-84-9835-771-4

Category: Básico

Atlas de histología : microscopía óptica y electrónica

Author(s): Martín-Lacave, Inés

Issue: Sevilla : Editorial Universidad de Sevilla, 2020;

ISBN: 978-84-472-2924-6

Category: Complementario

The theory of the design of experiments

Author(s): Cox, David R. ; Reid, N.

Issue: Boca Raton : Chapman & Hall, 2000;

ISBN: 1-58488-195-X (cart.)

Category: Complementario

Los tejidos del hombre y de los mamíferos: un atlas para estudiantes de ciencias médicas y biológicas

Author(s): Krstic, Radivoj

Issue: Madrid : 84-7615-413-5, 1989;

ISBN: 84-7615-413-5

Category: Básico

Brock biology of microorganisms

Author(s): Madigan, Michael T.

Issue: Harlow : Pearson, 2022;

ISBN: 978-1-292-40479-0

Category: Complementario

Brock biology of microorganisms

Author(s): Madigan, Michael T.

Issue: Harlow : Pearson, 2022;

ISBN: 978-1-292-40479-0

Category: Complementario

Técnicas en histología y biología celular

Author(s): Montuenga Badía, Luís

Issue: Barcelona : Elsevier Masson, 2014;

ISBN: 978-84-458-2520-4

Category: Básico

Neuroscience

Author(s): Purves, Dale (ed.)

Issue: New York : Oxford University, 2024;

ISBN: 978-0-19-757251-1

Category: Complementario

Histología : texto y atlas : correlación con biología celular y molecular, 9^a edición

Author(s): Pawlina, Wojciech

Issue: L'Hospitalet de Llobregat : Wolters Kluwer, 2024;

ISBN: 978-84-19663-92-4

Category: Básico

Histología : texto y atlas : correlación con biología celular y molecular, 9^a edición

Author(s): Pawlina, Wojciech

Issue: L'Hospitalet de Llobregat : Wolters Kluwer, 2024;

ISBN: 978-84-19663-92-4

Category: Básico

Histología : texto y atlas : correlación con biología celular y molecular, 9^a edición

Author(s): Pawlina, Wojciech

Issue: L'Hospitalet de Llobregat : Wolters Kluwer, 2024;

ISBN: 978-84-19663-92-4

Category: Básico

Langman, embriología médica, 15^a edición

Author(s): Sadler, T.W.

Issue: Barcelona : Wolters Kluwer, 2023;

ISBN: 978-84-19284-86-0

Category: Básico

Langman, embriología médica, 15^a edición

Author(s): Sadler, T.W.

Issue: Barcelona : Wolters Kluwer, 2023;

ISBN: 978-84-19284-86-0

Category: Básico

Histología, Atlas en color y texto, 8^a edición

Author(s): Gartner, Leslie P.

Issue: Madrid : Ovid Technologies, 2023;

ISBN: 978-84-18892-85-1

Category: Complementario

Histología, Atlas en color y texto, 8^a edición

Author(s): Gartner, Leslie P.

Issue: Madrid : Ovid Technologies, 2023;

ISBN: 978-84-18892-85-1

Category: Complementario

Assessment

Assessment procedures and criteria 2024-25

-Evaluation of theoretical contents (50%). Written test on theoretical contents. Call (C3), official ordinary period for semester and annual subjects. The test will consist of multiple-choice questions (PEM) and/or short open-ended essay questions (PRAC). For this test to average with the continuous evaluation grades the grade must be equal to or higher than 4.00.

-Evaluation of the practical contents (40%). Tests consisting of multiple-choice questions (PEM) and/or short open-ended essay questions (PRAC). Attendance to the practical laboratory activities will be a prerequisite for passing the course (the student will be considered to have fulfilled this requirement if he/she completes 80% of the practical activities). The absences, in any case, will have to be properly justified. There will be two evaluation tests (20% per test) of the practical contents, within the timetable assigned to the theory or practical classes. The first test will be carried out on the contents of the first practices (1-4) and the second one will be carried out on the contents of the practices (5-8), although in this second test the contents of the practices (1-4) may also be asked about. In order to average the practical contents, it will be necessary to obtain a grade higher or equal to 4 in the average of the two tests. The practical activities will not be recoverable neither in the ordinary nor in the extraordinary period due to the nature of this activity. The practical contents may be recovered with a single exam of all the practical activities, in the extraordinary period (on the date proposed by the Faculty for the exam), provided that the student has completed more than 80% of the practical activities. In the specific case of this activity and once passed, the grade will be kept for the following academic year.

-Evaluation of theoretical-practical seminars (10%). Oral presentations and/or performance of directed work or case studies, individually or in small groups, related to the theoretical contents of the course. The activity will be carried out in person within the timetable assigned to the lecture classes. The grade of the activity will not be kept for the following academic year. The theoretical and practical work must be original. The detection of copying or plagiarism will result in a grade of "0" in the corresponding test.

In case of not passing the evaluations carried out during the semester, students may take an extraordinary test (C4) to recover the part or parts not passed. In this sense, if the student does not pass any of the evaluation activities during the semester, he/she will not be able to pass the course, being his/her final grade 4.5 (C3).

Particular aspects of evaluation or curricular adaptation can be consulted in the Regulation for the Evaluation of Learning (BOUA 9/12/15) and Regulation of Curricular Adaptation (BOUA 28-07-2015) of the University of Alicante.

Description	Criteria	Type	Weighting system
Written tests on laboratory practices.	Written tests on the practices carried out in the laboratory, both on the contents and on the experimental development. The tests will consist of multiple-choice multiple-choice questions (PEM) and/or short open-ended essay questions (PRAC).	ACTIVITIES OF EVALUATION DURING THE SEMESTER	40
Performance of directed work or case studies.	Completion of work directed by the professor during group tutorials and/or seminars.	ACTIVITIES OF EVALUATION DURING THE SEMESTER	10
Written tests on the theoretical contents.	Final exam of the theoretical contents in the ordinary exam. The test will consist of multiple-choice questions (PEM) and/or short open-ended essay questions (PRAC).	FINAL TEST	50

Official exam dates for academic year 2024-25

Exam session	Date	Time	Group - Classroom(s) allocated	Comments
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(C3) Periodo ordinario 29/05/2025

para asignaturas de
segundo semestre y
anuales

(C4) Pruebas 09/07/2025

extraordinarias para
asignaturas de grado y
máster

Academic staff



ROMERO RAMETA, ALEJANDRO
Lecturer responsible

THEORY CLASS: Groups: 1
LAB PRACTICALS: Groups: L1
GROUP TUTORIALS: Groups: T1



COBO VELACORACHO, RAUL

LAB PRACTICALS: Groups: L1 , L3 , L6 , L7
CLINICAL PRACTICALS: Groups: CL1 , CL3 , CL4 , CL6



GIRELA LOPEZ, JOSE LUIS

THEORY CLASS: Groups: 3
LAB PRACTICALS: Groups: L9
CLINICAL PRACTICALS: Groups: CL9
GROUP TUTORIALS: Groups: T3
THEORETICAL/PRACTICAL SEMINAR / WORKSHOP: Groups: S3



GOMEZ TORRES, JOSEFA

THEORY CLASS: Groups: 1
GROUP TUTORIALS: Groups: T1
THEORETICAL/PRACTICAL SEMINAR / WORKSHOP: Groups: S1



MEDRANO LOPEZ-TELLO, MARIA DE LOS LLANOS

LAB PRACTICALS: Groups: L2
CLINICAL PRACTICALS: Groups: CL2 , CL5 , CL7



ROBLES GOMEZ, MARIA LAURA

LAB PRACTICALS: Groups: L2 , L5
CLINICAL PRACTICALS: Groups: CL1 , CL3 , CL4 , CL6 , CL7

**SEGOVIA HUERTAS, YOLANDA**

THEORY CLASS: Groups: 2

GROUP TUTORIALS: Groups: T2

THEORETICAL/PRACTICAL SEMINAR / WORKSHOP: Groups: S2

Groups

THEORY CLASS

Group	Semester	Morning or afternoon session	Language	No. of enrolled students	On registration, distribution
Gr. 1 (THEORY CLASS) : 1	2S	Morning	Spanish	89	<ul style="list-style-type: none"> ▪ Not allowed DEGREE IN MARINE SCIENCES From ID document number A - To ID document number N
Gr. 2 (THEORY CLASS) : 2	2S	Morning	Spanish	83	<ul style="list-style-type: none"> ▪ Not allowed DEGREE IN MARINE SCIENCES From ID document number P - To ID document number Z
Gr. 3 (THEORY CLASS) : 3(ARA)	2S	Morning	English	14	<ul style="list-style-type: none"> ▪ Not allowed DEGREE IN MARINE SCIENCES

LAB PRACTICALS

Group	Semester	Morning or afternoon session	Language	No. of enrolled students	On registration, distribution
Gr. L1 (LAB PRACTICALS) : L1	2S	All day	Spanish	25	<ul style="list-style-type: none"> ▪ Not allowed DEGREE IN MARINE SCIENCES From ID document number A - To ID document number C
Gr. L2 (LAB PRACTICALS) : L2	2S	All day	Spanish	20	<ul style="list-style-type: none"> ▪ Not allowed DEGREE IN MARINE SCIENCES From ID document number D - To ID document number F
Gr. L3 (LAB PRACTICALS) : L3	2S	All day	Spanish	22	<ul style="list-style-type: none"> ▪ Not allowed DEGREE IN MARINE SCIENCES From ID document number G - To ID document number J
Gr. L4 (LAB PRACTICALS) : L4	2S	All day	Spanish	21	<ul style="list-style-type: none"> ▪ Not allowed DEGREE IN MARINE SCIENCES From ID document number K - To ID document number N

Group	Semester	Morning or afternoon session	Language	No. of enrolled students		On registration, distribution
Gr. L5 (LAB PRACTICALS) : L5	2S	All day	Spanish	27	▪ Not allowed DEGREE IN MARINE SCIENCES	From ID document number P - To ID document number R
Gr. L6 (LAB PRACTICALS) : L6	2S	All day	Spanish	27	▪ Not allowed DEGREE IN MARINE SCIENCES	From ID document number S - To ID document number V
Gr. L7 (LAB PRACTICALS) : L7	2S	All day	Spanish	30		From ID document number W - To ID document number Z
Gr. L9 (LAB PRACTICALS) : L9(ARA)	2S	All day	English	14	▪ Not allowed DEGREE IN MARINE SCIENCES	

CLINICAL PRACTICALS

Group	Semester	Morning or afternoon session	Language	No. of enrolled students		On registration, distribution
Gr. CL1 (CLINICAL PRACTICALS) : CL1	2S	All day	Spanish	25	▪ Not allowed DEGREE IN MARINE SCIENCES	From ID document number A - To ID document number C
Gr. CL2 (CLINICAL PRACTICALS) : CL2	2S	All day	Spanish	20	▪ Not allowed DEGREE IN MARINE SCIENCES	From ID document number D - To ID document number F
Gr. CL3 (CLINICAL PRACTICALS) : CL3	2S	All day	Spanish	23	▪ Not allowed DEGREE IN MARINE SCIENCES	From ID document number G - To ID document number J
Gr. CL4 (CLINICAL PRACTICALS) : CL4	2S	All day	Spanish	22	▪ Not allowed DEGREE IN MARINE SCIENCES	From ID document number K - To ID document number N

Group	Semester	Morning or afternoon session	Language	No. of enrolled students		On registration, distribution
Gr. CL5 (CLINICAL PRACTICALS) : CL5	2S	All day	Spanish	27	▪ Not allowed DEGREE IN MARINE SCIENCES	From ID document number P - To ID document number R
Gr. CL6 (CLINICAL PRACTICALS) : CL6	2S	All day	Spanish	26	▪ Not allowed DEGREE IN MARINE SCIENCES	From ID document number S - To ID document number V
Gr. CL7 (CLINICAL PRACTICALS) : CL7	2S	All day	Spanish	29		From ID document number W - To ID document number Z
Gr. CL9 (CLINICAL PRACTICALS) : CL9(ARA)	2S	All day	English	14	▪ Not allowed DEGREE IN MARINE SCIENCES	

GROUP TUTORIALS

Group	Semester	Morning or afternoon session	Language	No. of enrolled students		On registration, distribution
Gr. T1 (GROUP TUTORIALS) : T1	2S	All day	Spanish	89	▪ Not allowed DEGREE IN MARINE SCIENCES	From ID document number A - To ID document number N
Gr. T2 (GROUP TUTORIALS) : T2	2S	All day	Spanish	83	▪ Not allowed DEGREE IN MARINE SCIENCES	From ID document number P - To ID document number Z
Gr. T3 (GROUP TUTORIALS) : T3(ARA)	2S	All day	English	14	▪ Not allowed DEGREE IN MARINE SCIENCES	

THEORETICAL/PRACTICAL SEMINAR / WORKSHOP

Group	Semester	Morning or afternoon session	Language	No. of enrolled students	On registration, distribution
Gr. S1 (THEORETICAL/PRACTICAL SEMINAR / WORKSHOP) : S1	2S	All day	Spanish	89	▪ Not allowed DEGREE IN MARINE SCIENCES From ID document number A - To ID document number N
Gr. S2 (THEORETICAL/PRACTICAL SEMINAR / WORKSHOP) : S2	2S	All day	Spanish	83	▪ Not allowed DEGREE IN MARINE SCIENCES From ID document number P - To ID document number Z
Gr. S3 (THEORETICAL/PRACTICAL SEMINAR / WORKSHOP) : S3(ARA)	2S	All day	English	14	▪ Not allowed DEGREE IN MARINE SCIENCES

Timetables

THEORY CLASS

Group	Start date	End date	Day	Start time	End time	Lecture room
1	27/01/2025	27/01/2025	LUN	08:00	09:00	A1/1-50X 
1	29/01/2025	29/01/2025	MIE	10:00	11:00	A1/1-50X 
1	03/02/2025	03/02/2025	LUN	08:00	09:00	A1/1-50X 
1	05/02/2025	05/02/2025	MIE	10:00	11:00	A1/1-50X 
1	10/02/2025	10/02/2025	LUN	08:00	09:00	A1/1-50X 
1	12/02/2025	12/02/2025	MIE	10:00	11:00	A1/1-50X 
1	17/02/2025	17/02/2025	LUN	08:00	09:00	A1/1-50X 
1	19/02/2025	19/02/2025	MIE	10:00	11:00	A1/1-50X 
1	24/02/2025	24/02/2025	LUN	08:00	09:00	A1/1-50X 
1	25/02/2025	25/02/2025	MAR	10:00	11:00	A1/1-50X 
1	26/02/2025	26/02/2025	MIE	10:00	11:00	A1/1-50X 
1	03/03/2025	03/03/2025	LUN	08:00	09:00	A1/1-50X 
1	05/03/2025	05/03/2025	MIE	10:00	11:00	A1/1-50X 
1	07/03/2025	07/03/2025	VIE	09:00	10:00	A1/1-50X 
1	10/03/2025	10/03/2025	LUN	08:00	09:00	A1/1-50X 
1	12/03/2025	12/03/2025	MIE	10:00	11:00	A1/1-50X 
1	14/03/2025	14/03/2025	VIE	09:00	10:00	A1/1-50X 
1	17/03/2025	17/03/2025	LUN	08:00	09:00	A1/1-50X 
1	24/03/2025	24/03/2025	LUN	08:00	09:00	A1/1-50X 
1	26/03/2025	26/03/2025	MIE	10:00	11:00	A1/1-50X 

Group	Start date	End date	Day	Start time	End time	Lecture room
1	28/03/2025	28/03/2025	VIE	10:00	11:00	A1/1-50X 
1	31/03/2025	31/03/2025	LUN	08:00	09:00	A1/1-50X 
1	02/04/2025	02/04/2025	MIE	10:00	11:00	A1/1-50X 
1	04/04/2025	04/04/2025	VIE	09:00	10:00	A1/1-50X 
1	07/04/2025	07/04/2025	LUN	08:00	09:00	A1/1-50X 
1	08/04/2025	08/04/2025	MAR	10:00	11:00	A1/1-50X 
1	09/04/2025	09/04/2025	MIE	10:00	11:00	A1/1-50X 
1	14/04/2025	14/04/2025	LUN	08:00	09:00	A1/1-50X 
1	05/05/2025	05/05/2025	LUN	08:00	09:00	A1/1-50X 
1	12/05/2025	12/05/2025	LUN	08:00	09:00	A1/1-50X 
2	27/01/2025	27/01/2025	LUN	10:00	11:00	A1/1-51X 
2	29/01/2025	29/01/2025	MIE	09:00	10:00	A1/1-51X 
2	03/02/2025	03/02/2025	LUN	10:00	11:00	A1/1-51X 
2	05/02/2025	05/02/2025	MIE	09:00	10:00	A1/1-51X 
2	10/02/2025	10/02/2025	LUN	10:00	11:00	A1/1-51X 
2	12/02/2025	12/02/2025	MIE	09:00	10:00	A1/1-51X 
2	17/02/2025	17/02/2025	LUN	10:00	11:00	A1/1-51X 
2	19/02/2025	19/02/2025	MIE	09:00	10:00	A1/1-51X 
2	24/02/2025	24/02/2025	LUN	10:00	11:00	A1/1-51X 
2	26/02/2025	26/02/2025	MIE	09:00	10:00	A1/1-51X 
2	27/02/2025	27/02/2025	JUE	10:00	11:00	A1/1-51X 

Group	Start date	End date	Day	Start time	End time	Lecture room
2	03/03/2025	03/03/2025	LUN	10:00	11:00	A1/1-51X 
2	05/03/2025	05/03/2025	MIE	09:00	10:00	A1/1-51X 
2	07/03/2025	07/03/2025	VIE	10:00	11:00	A1/1-51X 
2	10/03/2025	10/03/2025	LUN	10:00	11:00	A1/1-51X 
2	12/03/2025	12/03/2025	MIE	09:00	10:00	A1/1-51X 
2	14/03/2025	14/03/2025	VIE	10:00	11:00	A1/1-51X 
2	17/03/2025	17/03/2025	LUN	10:00	11:00	A1/1-51X 
2	24/03/2025	24/03/2025	LUN	10:00	11:00	A1/1-51X 
2	26/03/2025	26/03/2025	MIE	09:00	10:00	A1/1-51X 
2	27/03/2025	27/03/2025	JUE	08:00	09:00	A1/1-51X 
2	31/03/2025	31/03/2025	LUN	10:00	11:00	A1/1-51X 
2	02/04/2025	02/04/2025	MIE	09:00	10:00	A1/1-51X 
2	04/04/2025	04/04/2025	VIE	10:00	11:00	A1/1-51X 
2	07/04/2025	07/04/2025	LUN	10:00	11:00	A1/1-51X 
2	09/04/2025	09/04/2025	MIE	09:00	10:00	A1/1-51X 
2	10/04/2025	10/04/2025	JUE	10:00	11:00	A1/1-51X 
2	14/04/2025	14/04/2025	LUN	10:00	11:00	A1/1-51X 
2	05/05/2025	05/05/2025	LUN	10:00	11:00	A1/1-51X 
2	12/05/2025	12/05/2025	LUN	10:00	11:00	A1/1-51X 
3	27/01/2025	27/01/2025	LUN	09:00	10:00	A1/1-28M 
3	29/01/2025	29/01/2025	MIE	08:00	09:00	A1/1-28M 

Group	Start date	End date	Day	Start time	End time	Lecture room
3	03/02/2025	03/02/2025	LUN	09:00	10:00	A1/1-28M 
3	05/02/2025	05/02/2025	MIE	08:00	09:00	A1/1-28M 
3	10/02/2025	10/02/2025	LUN	09:00	10:00	A1/1-28M 
3	12/02/2025	12/02/2025	MIE	08:00	09:00	A1/1-28M 
3	17/02/2025	17/02/2025	LUN	09:00	10:00	A1/1-28M 
3	19/02/2025	19/02/2025	MIE	08:00	09:00	A1/1-28M 
3	24/02/2025	24/02/2025	LUN	09:00	10:00	A1/1-28M 
3	25/02/2025	25/02/2025	MAR	10:00	11:00	A1/1-28M 
3	26/02/2025	26/02/2025	MIE	08:00	09:00	A1/1-28M 
3	03/03/2025	03/03/2025	LUN	09:00	10:00	A1/1-28M 
3	05/03/2025	05/03/2025	MIE	08:00	09:00	A1/1-28M 
3	07/03/2025	07/03/2025	VIE	08:00	09:00	A1/1-28M 
3	10/03/2025	10/03/2025	LUN	09:00	10:00	A1/1-28M 
3	12/03/2025	12/03/2025	MIE	08:00	09:00	A1/1-28M 
3	14/03/2025	14/03/2025	VIE	08:00	09:00	A1/1-28M 
3	17/03/2025	17/03/2025	LUN	09:00	10:00	A1/1-28M 
3	24/03/2025	24/03/2025	LUN	09:00	10:00	A1/1-28M 
3	26/03/2025	26/03/2025	MIE	08:00	09:00	A1/1-28M 
3	28/03/2025	28/03/2025	VIE	09:00	10:00	A1/1-28M 
3	31/03/2025	31/03/2025	LUN	09:00	10:00	A1/1-28M 
3	02/04/2025	02/04/2025	MIE	08:00	09:00	A1/1-28M 

Group	Start date	End date	Day	Start time	End time	Lecture room
3	04/04/2025	04/04/2025	VIE	08:00	09:00	A1/1-28M 
3	07/04/2025	07/04/2025	LUN	09:00	10:00	A1/1-28M 
3	08/04/2025	08/04/2025	MAR	10:00	11:00	A1/1-28M 
3	09/04/2025	09/04/2025	MIE	08:00	09:00	A1/1-28M 
3	14/04/2025	14/04/2025	LUN	09:00	10:00	A1/1-28M 
3	05/05/2025	05/05/2025	LUN	09:00	10:00	A1/1-28M 
3	12/05/2025	12/05/2025	LUN	09:00	10:00	A1/1-28M 

LAB PRACTICALS

Group	Start date	End date	Day	Start time	End time	Lecture room
L1	03/02/2025	03/02/2025	LUN	11:30	14:30	0009PB019 
L1	10/02/2025	10/02/2025	LUN	11:30	14:30	0009PB019 
L1	24/02/2025	24/02/2025	LUN	11:30	14:30	0009PB019 
L1	03/03/2025	03/03/2025	LUN	11:30	14:30	0009PB019 
L2	03/02/2025	03/02/2025	LUN	11:30	14:30	0009PB018 
L2	10/02/2025	10/02/2025	LUN	11:30	14:30	0009PB018 
L2	24/02/2025	24/02/2025	LUN	11:30	14:30	0009PB018 
L2	03/03/2025	03/03/2025	LUN	11:30	14:30	0009PB018 
L3	05/02/2025	05/02/2025	MIE	11:30	14:30	0009PB019 
L3	14/02/2025	14/02/2025	VIE	11:30	14:30	0009PB019 
L3	26/02/2025	26/02/2025	MIE	11:30	14:30	0009PB019 

Group	Start date	End date	Day	Start time	End time	Lecture room
L3	05/03/2025	05/03/2025	MIE	11:30	14:30	0009PB019 
L4	06/02/2025	06/02/2025	JUE	11:30	14:30	0009PB019 
L4	13/02/2025	13/02/2025	JUE	11:30	14:30	0009PB019 
L4	27/02/2025	27/02/2025	JUE	11:30	14:30	0009PB019 
L4	06/03/2025	06/03/2025	JUE	11:30	14:30	0009PB019 
L5	05/02/2025	05/02/2025	MIE	11:30	14:30	0009PB018 
L5	12/02/2025	12/02/2025	MIE	11:30	14:30	0009PB019 
L5	26/02/2025	26/02/2025	MIE	11:30	14:30	0009PB018 
L5	05/03/2025	05/03/2025	MIE	11:30	14:30	0009PB018 
L6	04/02/2025	04/02/2025	MAR	11:30	14:30	0009PB019 
L6	11/02/2025	11/02/2025	MAR	11:30	14:30	0009PB019 
L6	25/02/2025	25/02/2025	MAR	11:30	14:30	0009PB019 
L6	04/03/2025	04/03/2025	MAR	11:30	14:30	0009PB019 
L7	06/02/2025	06/02/2025	JUE	11:30	14:30	0009PB018 
L7	12/02/2025	12/02/2025	MIE	11:30	14:30	0009PB018 
L7	27/02/2025	27/02/2025	JUE	11:30	14:30	0009PB018 
L7	06/03/2025	06/03/2025	JUE	11:30	14:30	0009PB018 
L9	04/02/2025	04/02/2025	MAR	11:30	14:30	0009PB018 
L9	11/02/2025	11/02/2025	MAR	11:30	14:30	0009PB018 
L9	25/02/2025	25/02/2025	MAR	11:30	14:30	0009PB018 
L9	06/05/2025	06/05/2025	MAR	11:30	14:30	0009PB019 

CLINICAL PRACTICALS

Group	Start date	End date	Day	Start time	End time	Lecture room
CL1	10/03/2025	10/03/2025	LUN	11:30	14:30	0009PB019 
CL1	07/04/2025	07/04/2025	LUN	11:30	14:30	0009PB019 
CL1	14/04/2025	14/04/2025	LUN	11:30	14:30	0009PB019 
CL1	05/05/2025	05/05/2025	LUN	11:30	14:30	0009PB019 
CL2	10/03/2025	10/03/2025	LUN	11:30	14:30	0009PB018 
CL2	07/04/2025	07/04/2025	LUN	11:30	14:30	0009PB018 
CL2	14/04/2025	14/04/2025	LUN	11:30	14:30	0009PB018 
CL2	05/05/2025	05/05/2025	LUN	11:30	14:30	0009PB018 
CL3	12/03/2025	12/03/2025	MIE	11:30	14:30	0009PB019 
CL3	09/04/2025	09/04/2025	MIE	11:30	14:30	0009PB019 
CL3	30/04/2025	30/04/2025	MIE	11:30	14:30	0009PB019 
CL3	09/05/2025	09/05/2025	VIE	11:30	14:30	0009PB019 
CL4	13/03/2025	13/03/2025	JUE	11:30	14:30	0009PB019 
CL4	10/04/2025	10/04/2025	JUE	11:30	14:30	0009PB019 
CL4	29/04/2025	29/04/2025	MAR	11:30	14:30	0009PB019 
CL4	07/05/2025	07/05/2025	MIE	11:30	14:30	0009PB019 
CL5	12/03/2025	12/03/2025	MIE	11:30	14:30	0009PB018 
CL5	09/04/2025	09/04/2025	MIE	11:30	14:30	0009PB018 
CL5	30/04/2025	30/04/2025	MIE	11:30	14:30	0009PB018 
CL5	07/05/2025	07/05/2025	MIE	11:30	14:30	0009PB018 
CL6	14/03/2025	14/03/2025	VIE	11:30	14:30	0009PB019 

Group	Start date	End date	Day	Start time	End time	Lecture room
CL6	08/04/2025	08/04/2025	MAR	11:30	14:30	0009PB019 
CL6	15/04/2025	15/04/2025	MAR	11:30	14:30	0009PB019 
CL6	08/05/2025	08/05/2025	JUE	11:30	14:30	0009PB019 
CL7	13/03/2025	13/03/2025	JUE	11:30	14:30	0009PB018 
CL7	10/04/2025	10/04/2025	JUE	11:30	14:30	0009PB018 
CL7	29/04/2025	29/04/2025	MAR	11:30	14:30	0009PB018 
CL7	08/05/2025	08/05/2025	JUE	11:30	14:30	0009PB018 
CL9	04/03/2025	04/03/2025	MAR	11:30	14:30	0009PB018 
CL9	11/03/2025	11/03/2025	MAR	11:30	14:30	0009PB019 
CL9	08/04/2025	08/04/2025	MAR	11:30	14:30	0009PB018 
CL9	15/04/2025	15/04/2025	MAR	11:30	14:30	0009PB018 

GROUP TUTORIALS

Group	Start date	End date	Day	Start time	End time	Lecture room
T1	30/01/2025	30/01/2025	JUE	08:00	09:00	A1/1-50X 
T1	18/03/2025	18/03/2025	MAR	10:00	11:00	A1/1-50X 
T1	07/05/2025	07/05/2025	MIE	10:00	11:00	A1/1-50X 
T2	30/01/2025	30/01/2025	JUE	09:00	10:00	A1/1-51X 
T2	18/03/2025	18/03/2025	MAR	09:00	10:00	A1/1-51X 
T2	07/05/2025	07/05/2025	MIE	09:00	10:00	A1/1-51X 
T3	30/01/2025	30/01/2025	JUE	10:00	11:00	A1/1-28M 

Group	Start date	End date	Day	Start time	End time	Lecture room
T3	18/03/2025	18/03/2025	MAR	08:00	09:00	A1/1-28M 
T3	07/05/2025	07/05/2025	MIE	08:00	09:00	A1/1-28M 

THEORETICAL/PRACTICAL SEMINAR / WORKSHOP

Group	Start date	End date	Day	Start time	End time	Lecture room
S1	29/04/2025	29/04/2025	MAR	08:00	09:00	A1/1-50X 
S1	09/05/2025	09/05/2025	VIE	09:00	10:00	A1/1-50X 
S1	14/05/2025	14/05/2025	MIE	10:00	11:00	A1/1-50X 
S2	29/04/2025	29/04/2025	MAR	09:00	10:00	A1/1-51X 
S2	09/05/2025	09/05/2025	VIE	10:00	11:00	A1/1-51X 
S2	14/05/2025	14/05/2025	MIE	09:00	10:00	A1/1-51X 
S3	29/04/2025	29/04/2025	MAR	10:00	11:00	A1/1-28M 
S3	09/05/2025	09/05/2025	VIE	08:00	09:00	A1/1-28M 
S3	14/05/2025	14/05/2025	MIE	08:00	09:00	A1/1-28M 