

**COURSE DATA****DATA SUBJECT**

**Code:** 34366  
**Name:** Fundamentals biology and biochemistry  
**Cycle:** Undergraduate Studies  
**ECTS Credits:** 9  
**Academic year:** 2025-26

**STUDY (S)**

Degree	Center	Acad. year	Period
1200 - Degree in Nursing	Facultat d'Infermeria i Podologia	1	Annual
1213 - Grado en Enfermería (Ontinyent)	Facultat d'Infermeria i Podologia	1	Annual

**SUBJECT-MATTER**

Degree	Subject-matter	Character
1200 - Degree in Nursing	Biology	BASIC
1213 - Grado en Enfermería (Ontinyent)	Biología	BASIC

**COORDINATION**

CABALLERO LUNA OSCAR

PEIRO SALVADOR TERESA DEL CARMEN

**SUMMARY****PREVIOUS KNOWLEDGE****RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE**

There are no specified enrollment restrictions with other subjects of the curriculum.

**OTHER REQUIREMENTS****COMPETENCES / LEARNING OUTCOMES**

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Bachelor's thesis. Cross-disciplinary subject area involving work related to different subjects.



Know and assess the nutritional needs of healthy people and of those with health problems, throughout the life cycle and according to physical activity, in order to promote and reinforce healthy eating behaviour patterns. Identify the nutrients and the foods in which they are found. Identify the most prevalent nutritional problems in women and men and select appropriate dietary recommendations.

Know and identify the structure and function of the human body. Understand the molecular and physiological basis of cells and tissues. Know the specific biological characteristics (chromosomal, gonadal, hormonal, brain dimorphic and genital differentiation).

Maintain and update professional skills, with particular emphasis on independent learning of new knowledge and skills and motivation for quality in health care.

Work as a team, understood as a basic unit into which professionals and other workers of health care organisations are integrated, structured and organised in single- or multi-disciplinary and inter-disciplinary teams, as a way of ensuring the quality of health care.

## DESCRIPTION OF CONTENTS

1.

2.

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7.

**WORKLOAD****PRESENCIAL ACTIVITIES**

Activity	Hours
Tutorials	2,00
Theory	84,00
Classroom practices	4,00
<b>Total hours</b>	<b>90,00</b>

**NON PRESENCIAL ACTIVITIES**

Activity	Hours
Attendance at other activities	3,00
Individual or group project	46,00
Independent study and work	30,00
Preparation of lessons	8,00
Preparation for assessment activities	44,00
Resolution of case studies	4,00
<b>Total hours</b>	<b>135,00</b>

**TEACHING METHODOLOGY****EVALUATION****REFERENCES**

- 1. Calvo A. ed. (2015). Biología celular biomédica. Madrid: Elsevier. 2. Galle, P; Paullin, R. (2003). Biofísica: Radiobiología, Radiopatología. Masson S.A. Barcelona.
- 3. Stryer, L; Berg, J M y Tymoczko, J L. (2013). Bioquímica. Barcelona: Reverté. 7a ed. 4. González Hernández, A. (2010). Principios de bioquímica clínica y patología molecular. Elsevier España. 5. Forcada Segarra JA. (2010; Revisado 2014). Actuación y prevención en riesgos biológicos para enfermería. Editorial DAE. 6. Forcada Segarra JA et al. (2018) Actualización en vacunas y vacunología para enfermer@s. Editorial DAE.
- 1. Alberts et al. (2016). Biología molecular de la célula. Madrid: Panamericana. 6a Edició. 2. Feduchi E., Romero C., Yáñez E., Blasco I. y García-Hoz C. (2015). Bioquímica. Conceptos



esenciales. Madrid: Panamericana. 2a ed. 3. Lodish H, Berk A, Kaiser CA, Krieger M, Bretscher A, Ploegh H, Amon A, Scott MP (2016). Biología celular y molecular. Madrid: Panamericana. 7a ed. 4. McKee M y McKee J. (2014). Bioquímica. Las bases moleculares de la vida. México D.F.: McGraw-Hill Education. 5. Frumento A. (1995). Biofísica. Barcelona. Mosby/Doyma. 6. Madigan, MT; Martinko, JM.; Parker, J (2003). Brock. Biología de los microorganismos. (s/l): Pearson-Prentice Hall. 10a ed. 7. De la Rosa, M; Prieto, J; Navarro, JM. (2011). Microbiología en Ciencias de la Salud. Conceptos y Aplicaciones. Madrid: Elsevier. 3a ed. 8. Murray, PR; Rosenthal, KS; Pfaller, MA. (2017). Microbiología Médica. Madrid: Elsevier España. 8aed.