Simulation I

Code: 106116
ECTS Credits: 3

2025/2026

Degree	Type	Year
Nursing	OB	2

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Teaching groups languages

You can view this information at the end of this document.

Prerequisites

There is no prerequisite for taking the course.

Objectives and Contextualisation

Simulation is an innovative teaching methodology that enables advanced clinical skills to be practiced in a simula

The objectives of the course are for students to be able to:

- To demonstrate technical and non-technical skills to apply the most frec
- To establish effective communication with patients, healthcare team an
- To act, plan and prioritize action in accordance with the situation of the
- To demonstrate the use of critical reasoning in decision-making and res
- To demonstrate teamwork skills to achieve a common goal.

Competences

- Carry out basic curative actions based on holistic health care, involving multiprofessional cooperation, the integration of processes and continuity of health care.
- "Demonstrate an understanding of people without prejudice: consider physical, psychological and social aspects, as independent individuals; ensure that their opinions, values and beliefs are respected and guarantee their right to privacy, through trust and professional secrecy."
- Demonstrate knowledge of the ethical and deontological code of Spanish nursing and what is understood by ethical health implications in a changing world context.
- Make changes to methods and processes in the area of knowledge in order to provide innovative responses to society's needs and demands.
- Offer technical and professional health care and that this adequate for the health needs of the person being attended, in accordance with the current state of scientific knowledge at any time and levels of quality and safety established under the applicable legal and deontological rules.
- Promote and respect the right to participation, information, autonomy and informed consent in decision-making by the patient, in accordance with the way they are experiencing the health-illness process.
- Protect the health and welfare of people or groups attended guaranteeing their safety.
- Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
- Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.
- Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
- Take sex- or gender-based inequalities into consideration when operating within one's own area of knowledge.
- Use scientific methodology in interventions.

Learning Outcomes

1. Acquire and use the necessary instruments for developing a critical and reflective attitude.
2. Apply the ethical and deontological code of nursing in all areas of nursing activity.
3. Assess and treat receivers of care in a tolerant holistic manner without making value judgements.
4. Communicate using non-sexist and non-discriminatory language.
5. Demonstrate skill in carrying out manoeuvres of basic and advanced life support.
6. Demonstrate skill in performing nursing procedures and techniques.
7. Exercise a respectful relationship with the user of the service/family/health team without making value judgements.
8. Respect the principles of the right to privacy, confidentiality and professional secrecy in all care given.
9. Respect the right to participation in the decision making process by people for their own care, in accordance with the way in which they are experiencing the health process.
10. Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
11. Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.

12. Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
13. Use methods of protection and safety to ensure wellbeing and minimise risk associated with health care.
14. Use scientific evidence in care practice.

Content

In the context of health sciences, there are constantly changes and new challenges associated with constant re-evaluation and the existence of more complex situations. These changes have generated in educational institutions generating new tools that allow students to acquire different levels of training and knowledge, and apply safe action plans for patients. Simulation has allowed the development of new learning paths thanks to the recreation of clinical scenarios similar to the real one. Therefore, simulation encompasses a variety of educational techniques in which students have the opportunity to practice an active learning process in an environment that mimics the clinical setting and to experience experiences similar to real ones but without endangering the safety of the patient.

Different types of simulators can be found in the simulation. Those that will be used in the subject will be: part task trainers, static mannequins that do not interact with the students but imitate different parts of a patient's body; Human Patient Simulators, which are computer-controlled mannequins that interact with students to mimic patient care in their corresponding clinical environment; and finally, use will be made of the standardized patient represented by trained actors who will seek to behave in a pre-established way. Depending on the use of the type of simulator (one or a combination of different ones) and the recreation of the more or less realistic environment in the classroom, low, medium and high fidelity simulation will be carried out, always seeking the acquisition of certain learning objectives present in the different cases.

- Low fidelity simulation (PHCA)

Simulation experiences that include role-playing games or case studies, which are usually focused on the practice of a specific skill and which tend to influence the use of static mannequins or task trainers.

- Medium fidelity simulation (PHCA)

Experiences in simulation in which learning systems generally self-directed by screen are used, or else, the use of medium fidelity mannequins, the use of medium fidelity mannequins, which may have physiological sounds or other characteristics that allow interaction with itself; However, this simulation is usually oriented towards decision making, perfecting a skill or working on problem solving.

- High fidelity simulation (PSCA)

Experiences that include the use of standardized patients or extremely realistic integrated mannequins and that guarantee students the possibility of interacting. This simulation, given the realistic reproduction and the use of advanced technology to represent real situations, usually focuses on the prey of decisions, solving problems in a contextualized way, learning to prioritize, etc.

Taking this into account, the contents of the subject are distributed in different work blocks with different practices, which include low, medium and high fidelity, in different cases to work:

- Carrying out different hand washes, creating a sterile field and treating different types of wounds.

- Administration of drugs by different routes.

- Assessment and taking vital signs. Application of measurement scales.

- Continuous infusion systems.

- Performing hygiene in bedridden patient.

- Carrying out venous extractions, handling of the peripheral catheter, blood cultures and blood gases.

- Administration of oxygen therapy and respiratory physiotherapy.

- Detection and management of the different types of isolations.

- Carrying out mobilizations for patients.

- Conducting catheters (nasogastric, PEG, enteral, bladder).

- Carry out bandages and sutures.

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Advanced Clinical Simulation Practices	12	0.48	1, 2, 4, 5, 6, 9, 8, 14, 13, 3
Advanced clinical skills practices in humans	30	1.2	1, 2, 4, 5, 6, 11, 9, 8, 14, 13, 3
Type: Autonomous			
Personal work/ Reading articles	29	1.16	12, 10

The main goal of the Advanced Clinical Skills Practices (PHCA) and Advanced Clinical Simulation Practices (PSCA) is for students to acquire clinical skills of varying complexity through guided simulation of techniques and procedures.

Both types of sessions are conducted under the active supervision of faculty, who guide and ensure quality learning and achievement of educational objectives.

To make the most of the sessions, students must independently study the theoretical content associated with each procedure before class. This prior work is a mandatory prerequisite for participating in the practical sessions.

In PSCA, simulations may be recorded as a learning tool for later analysis. Students must give prior consent to be recorded. All recordings will be deleted after the sessions.

The practical component includes:

- 10 low/medium-fidelity sessions (3 hours each).
- 3 high-fidelity simulation sessions (4 hours each).

Activities include:

- Clinical case resolution.
- Group critical reflection.
- Participation in feedback and debriefing.

The methodology is active and participatory; student engagement is essential to achieve learning goals.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Attendance and active participation in class	20	1	0.04	2, 4, 9, 3
Written evaluation using objective tests: multiple response items.	50	2	0.08	1, 7, 5, 6, 12, 11, 10, 8, 14, 13
Written evaluation using objective tests: multiple response items.	30	1	0.04	1, 7, 5, 6, 12, 11, 10, 8, 14, 13

1. Pre-session Moodle Quizzes (50%)
   Five online quizzes before each pair of PHCA sessions. Each is worth 10%.

- Must be completed within deadline. Late = 0 (not recoverable).

1. Final Multiple-Choice Exam (30%)
   In-person test covering PHCA and PSCA content.

- A minimum of 4.5/10 is required to average.

1. Active Participation and Attitude (20%)
   Continuous evaluation based on instructor observation:

- Preparation, engagement, and professionalism.
- Communication and teamwork.
- Active role in feedback and debriefing.

Recording in PSCA:
Simulations may be recorded for educational purposes. Requires student consent. Files will be deleted after the sessions.

Mandatory Attendance:

- Attendance is compulsory and non-recoverable.
- Each unjustified absence = −1 point.
- More than 1 unjustified or 2 justified absences = not assessable.
- No group changes or rescheduling allowed.
- Mandatory uniform: clinical scrubs and closed shoes.

Passing Criteria:

- Complete all 5 quizzes.

- Pass the final exam (≥4.5/10).
- Final weighted average ≥5/10.
- Fulfill attendance requirements.

Resit Policy:

- Only the final exam is resit-eligible.
- Quizzes and participation are not recoverable.

Other Considerations:

- Single assessment not available.
- Missing any mandatory activity = "not assessable".

Use of Artificial Intelligence (AI):
The use of AI technologies is not permitted in any phase of academic work. Any activity containing content generated partially or fully by AI will be considered academic misconduct and may result in partial or total penalties, as well as further sanctions depending on the severity.

Bibliography

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Software

No specific software is required to complete the course.

Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this link. To consult the language you will need to enter the CODE of the subject.