

Teaching Guide of the subject

Year 2026 - 2027

PUBLIC HEALTH

Code: 106119

ECTS credits: 6

Qualification	Types	Course	Semester
2500891 Nursing	OB	2	1

Contact	Use of languages
<u>Responsible:</u> Castilla Manjón, María José mcastilla@santpau.cat <u>Teaching staff:</u> Lapena Estella, Carolina clapena@gencat.cat Garrigó Fullola, Montserrat mgarrigo@santpau.cat	Group 1 : Catalan and Spanish

Prerequisites

There are no official prerequisites.

Contextualisation and objectives

This subject is part of the Nursing Sciences module, Community Nursing subject and is planned in the third semester of the degree. It is made up of three different modules: one on general concepts on public health, another on epidemiology and finally one on the microorganisms responsible for communicable diseases.

The main purpose of the subject is to enable students to identify the health needs and problems of the population and the measures aimed at protecting and improving health.

Learning objectives of the subject

1. To analyse the factors that determine human health in today's society.
2. To show the usefulness of epidemiology for the knowledge, surveillance, protection and restoration of the health of the population.
3. Identify pathogenic microorganisms, their forms of transmission and prevention methods in the development of communicable diseases.
4. Describe the structure, functions and characteristics of health system models.

5. Integrate the Sustainable Development Goals into nursing practice, analysing their impact on the health of individuals and communities.
6. Analyze demographic, epidemiological and clinical data to identify prevalent health problems and associated factors.

Learning outcomes

Learning Outcomes of the TITLE (RAT)	LEARNING OUTCOMES OF THE SUBJECT (RAM)
KT03. Define the fundamental concepts of health and well-being of individuals, families, or the community.	KM37. Identify the influence of internal and external factors on the health status of individuals, families, or the community (KT03).
KT05. Explain the functioning of health systems, their roles, and their funding, taking into account sustainability and the appropriate use of resources.	KM18. Describe the characteristics of health systems according to the territorial context and their influence on nursing practice (KT05).
KT06. Define the purpose of public health and the related factors that increase the risk of diseases and health problems.	KM36. Identify the social determinants of health and the axes of social inequality affecting individuals, families, or the community (KT06).
KT11. Identify the sustainable development goals relevant to nursing care practice.	KM20. Identify the sustainable development goals relevant to nursing care practice (KT11).
ST10. Analyse demographic, epidemiological, and clinical statistical data, identifying factors related to the most prevalent health and care problems.	SM17. Analyse demographic, epidemiological, and clinical statistical data, identifying factors related to the most prevalent health and care problems (ST10).

Contents

MODULE 1. FUNDAMENTALS OF PUBLIC HEALTH

1. The concept of health. Health-disease process. Levels of prevention.
2. Social determinants of health and health inequalities.
3. Environmental health: Risk factors and vulnerable populations.
4. Public Health, Community Health and Health Promotion: Historical Evolution, Objectives and Functions and Role of the Community Nurse.
5. Demographics and health indicators.
6. The health system in Spain and Catalonia: organisation, levels of care and functions.
7. Health Plans and Policies in Spain and Catalonia: Objectives and Priority Actions.
8. International Organizations on health and the impact of health policies.
9. Public health intervention strategies: plans, programmes and measures for prevention and promotion.

MODULE 2. EPIDEMIOLOGY

1. Epidemiology: concept, historical evolution and applications in nursing practice.
2. Health information systems and epidemiological surveillance systems. Ethics and confidentiality.
3. Scientific method and epidemiological method. Descriptive epidemiology in prevalent health problems.

4. Analytical epidemiology: association measures and applications.
5. Basic designs for epidemiological research and nursing research (basic quantitative and qualitative):
6. Diagnostic tests: sensitivity, specificity and predictive values and implications for health programmes.
7. The Health Plan of Catalonia and strategic health planning.

MODULE 3. MICROBIOLOGY

Part 1 – General Microbiology

1. Infectious agents and host-parasite relationship
2. Pathogenesis of infections
3. Defense and immunity

Part 2 – Control and diagnosis

4. Control of microorganisms
5. Nosocomial infection and its control
6. Microbiological diagnosis

Part 3 – Main Infectious Agents

7. General characteristics of bacteria
8. Gram-positive cocci: *Staphylococcus*
9. Gram-positive cocci: *Streptococcus*
10. Gram-negative bacilli
11. Gram-negative cocci and gram-positive bacilli
12. Anaerobes and mycobacteria
13. Fungi: characteristics and types
14. Protozoa and helminths
15. Viruses: structure and pathogenesis
16. Hepatitis, respiratory and HIV viruses

Methodology

The methodological approach of the subject is based on the idea that the protagonist of the teaching-learning process is the students. For this reason, they must carry out active learning and as autonomous as possible with the help and advice of teachers.

Directed activity:

There is only one theory group. Theoretical development is combined with practical classroom activities, readings and links to websites for the expansion of knowledge.

Supervised activity:

Students carry out a compulsory work in small groups (5-6 students) that consists of the preparation and presentation of a topic previously assigned by the teacher at the beginning of the subject.

The work must follow the EUI rules for the submission of papers. It will be delivered in electronic format on the day that the first day of class has been specified as the delivery date; and students will have to make an oral presentation of it.

Training activities¹

Activity	Hours	ECTS	Learning Outcomes
Type: Directed Theory (TE) Classroom practices (PAUL)	45	1,80	<i>KM36,KM37,KM18,KM20,SM17</i> <i>KM36,KM37, SM17</i>
Type: Supervised Scheduled tutorials:	1	0,04	<i>KM36,KM37,KM18,KM20,SM17</i>
Type: Autonomous Personal study, bibliographic consultations and documents. Preparation of work.	90	3,60	<i>KM36,KM37,KM18,KM20,SM17</i>

Evaluation

To pass the subject, students have only one call per academic year.

Academic progression and passing the subject is assessed by:

Continuous assessment

A continuous and formative assessment will be carried out throughout the semester through three objective tests with a weighting of 30% each of them and a compulsory group work that weights 10%. The objective tests are carried out at the end of each of the modules that make up the subject and in order to be able to average, a grade equal to or greater than 5 out of 10 must be obtained in each of them.

In multiple-choice tests, the negative answers are according to the following formula:

$X = \text{Correct answers} - (\text{errors}/n-1)$ where n is the number of answer options.

The final grade of the subject is given by the weighted average of the grades obtained in the aforementioned tests and the group work.

Feedback on the results of the evaluation tests will be made through the classroom and tutorials if necessary.

The evaluation rubric of the work is available in the virtual classroom.

¹ The teaching staff will allocate approximately 15 minutes once the subject is finished to allow that their students can answer the assessment surveys on teaching and subject.

Qualification

- 0 to 4.9: Suspense
- 5.0 to 6.9: Passed
- 7,0 a 8,9: Notable
- 9,0 a 10: Excel·lent.

Single assessment

1. In this subject, they must attend the classroom on the day/days that are scheduled for group work.
2. The date of the single test will coincide with the date of the last continuous assessment test that appears in the daily programme and in the calendar of training and assessment activities.
3. The single assessment will consist of:
 - Test 1 which will consist of an **objective test** of module I and weights 30%.
 - Test 2 which will consist of an **objective test** of module II and weights 30 %.
 - Test 3 which will consist of an **objective test** of module III and weights 30 %.
 - Test 4 which will consist of **group work** and weights 10 %.

Recovery activity

1. A single date is determined for the recovery activity for all students, whether or not they are subject to single assessment.
2. A recovery activity is proposed to students who have been previously evaluated by a set of activities whose minimum weight is equivalent to 2/3 of the total grade of the subject and who have obtained a final grade of less than 5 and greater than 3.5.
3. This test will consist of an evaluation activity of the test(s) not passed.
4. The recovery tests will be determined by the teaching staff.
5. The teacher may exclude from the recovery process those activities that, by their nature, he/she considers that they are not recoverable.
6. In the event that the student passes the retake test corresponding to the failed part, the maximum grade of this will be a 5.
7. The retake grade will replace the grade originally obtained and the final weighted grade will be recalculated.
8. Once the subject has been passed, it cannot be subject to a new evaluation.

No evaluable

It is considered that the subject will not be assessable when one of these circumstances is met:

1. Not having delivered any of the continuous assessment activities provided for in the teaching guide.
2. Not having attended any of the practical or compulsory sessions, when these are necessary to assess learning outcomes and as indicated in the teaching guide.
3. Not having taken the final test (exam, written or oral test, work defense, etc.), if This represents an essential percentage of the grade.

4. Not having completed the minimum required participation in training activities (for example, seminars, presentations, forums, etc.), when these are part of the evaluation.
5. Not having submitted the final project or compulsory project, if this constitutes a central evidence of learning of the subject.

Exam Review

Once the final grade has been published, the student can request the revision of the exam within the period determined by the "exam review". Review requests will not be accepted on dates outside the established limit.

Procedure in case of copying / plagiarism

1. Copying **or plagiarism** in any type of evaluation activity constitutes a crime, and will be penalized with a 0 as a grade for the subject, losing the possibility of recovering it, whether it is an individual or group work (in this case, all members of the group will have a 0).
2. If, during the completion of an individual assignment in class, the teacher considers that a student is trying to copy or is discovered some type of document or device not authorized by the teacher, the same will be graded with a 0, without the option of recovery, and therefore, the subject will be suspended.
3. A work, activity or exam will be considered to be "copied" when it reproduces all or a significant part of the work of oneself, another classmate.
4. A work or activity will be considered "plagiarized" when a part of a text by an author is presented as one's own without citing the sources, regardless of whether the original sources are in paper or digital format.

The use of Artificial Intelligence (AI) technologies

The use of Artificial Intelligence (AI) technologies is regulated according to the type of work to be carried out:

1. In the event that the work aims at personal reflection and meaningful learning by the student, **the use of AI technologies is prohibited** in any of its phases of completion.
Any work that includes AI-generated fragments (e.g. abstracts, translations, text writing or image creation) will be considered a lack of academic honesty and may lead to a partial or total penalty in the grade of the activity, as well as greater penalties in cases of seriousness.
2. In other works, **the restricted use of AI technologies is allowed** exclusively in those support tasks, such as bibliographic or information searches, proofreading, translations, and other specific situations that are indicated. In these cases, the student will have to clearly identify which parts have been generated with this technology, specify the tools used and include a critical reflection on how they have influenced the process and the final result of the activity. The non-transparency of the use of AI in this assessable activity will be considered a lack of academic honesty and may lead to a partial or total penalty in the grade of the activity, as well as greater sanctions in cases of severity.

In any case, in the description of each assignment, the teacher in charge will clearly indicate **whether the prohibited or restricted use of AI applies**.

Aspects of evaluation related to values and attitudes

1. The teacher may reduce the grade of the subject by between 1 and 2 points when the student repeatedly does not respect the indications of behavior in the classroom and/or disturbs the normal functioning of the same.
2. "No lack of respect for classmates or teachers will be tolerated. Homophobic, sexist or racist attitudes will also not be tolerated. Any student in whom any of the attitudes described above are detected will be classified as having failed the subject."

Formal aspects of written work

In all activities (individual and group) linguistic correction, writing and formal presentation aspects will be taken into account.

Other considerations

1. All the evaluation tests will be published in the daily program and in the calendar of training and evaluation activities.
2. The date of the single test will coincide with the date of the last continuous assessment test.
3. Students who repeat the subject may request at the beginning of the course to carry out only one final synthesis assessment (article 117, page 46 of the Academic Regulations of the Universitat Autònoma de Barcelona (Approved by agreement of the Governing Council of 7 July 2022, and modified by agreement of the Governing Council of 1 February 2023)).

Students in second or more enrolment who have taken all the assessment tests in the previous year may opt to be assessed with a single synthesis assessment activity. This activity will consist of an exam at the end of the subject coinciding with the written exam of the subject. Students in second or more enrolment who wish to opt for the final exam must notify the teaching staff responsible for the subject in writing two weeks before the published date.

Evaluation activities

Activity	Weight	Hours	ECTS	Learning Outcomes
Written assessments: objective tests.	90%	6	0,24	<i>KM36,KM37,KM18,KM20,SM17</i>
Module I	30%			
Module II	30%			
Module III	30%			
Group Work	10%	2	0.08	<i>KM36,KM37 ,KM20,SM17</i>

Bibliography

Books:

- Martín Zurro, A. et al. *Primary Care. Concepts organization and clinical practice*. 7th ed. Barcelona: Doyma; **2014**.
- Martín Zurro, A Jodar Solà, G. *Family care and community health*. 2nd ed. Barcelona: Elsevier; **2018**.
- Piedrola Gil. *Preventive medicine and public health*. 12th ed. Barcelona: Elsevier Masson; **2016**.
- Hernández-Aguado, I. et al. *Manual of epidemiology and public health: for degrees in health sciences*. 2nd ed., Madrid: Médica Panamericana; **2018. (Digital)**
- Martínez Gonzalez, MA. *Public Health Concepts and Preventive Strategies*. 2nd ed., Barcelona: Elsevier; **2018. (Paper i digital)**
- Murray, PR. Et al. *Medical Microbiology*. 9th ed. Elsevier; 2021
- Prats, G. *Clinical microbiology and medical parasitology*. 2nd ed Madrid: Ed. Médica Panamericana SA; 2023.
- **Argimon Pallàs JM, Jiménez Villa J. Clinical and epidemiological research methods. 5th ed. Barcelona: Elsevier; 2019.**

Internet resources:

- Generalitat de Catalunya. GENCAT. Available at: <http://web.gencat.cat/ca/inici/>
- Spanish Society of Public Health and Health Administration (SESPAS). Available to: <http://www.sespas.es/>
- National Institute of Statistics (INE). Available to: <http://www.ine.es/>
- Public Health Agency (ASPB). Available at: <http://www.aspb.cat/>
- Observatory of the Health System of Catalonia (OSSC). Available at: <http://observatorisalut.gencat.cat/ca/>
- World Health Organization, WHO. Available at: <http://www.who.int/>
- Centers for Disease Control and Prevention: CDC.). Available to: <https://www.cdc.gov/spanish/index.html>
- <https://salutpublica.gencat.cat/ca/ambits/promocio/vacunacions/manual-vacunacions/versio-desglossada-capitols/>

To the program

- Moodle
- Kahoot