

# PUBLIC HEALTH

## Degree in Occupational Therapy

**Code:** 804156

**Type of subject:** Compulsory

**Grade:** Third

**Semester:** Consult calendar

**Department:** Public Health and Maternal Child Health

**Credits:** 6 ECTS

### TEACHING STAFF

Villanueva Orbáiz, Rosa (Responsible of the course)

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### SHORT DESCRIPTOR

- Public health concept and methods. Determinants of health.
- Demography, epidemiology, qualitative research.
- Epidemiology and prevention of chronic prevalent processes.
- Epidemiology and accident prevention.
- Occupational health.
- Health planning and organization of health services.

### COMPETENCIES

#### General Competencies

- Knowledge of national and international health organizations, as well as the environments and conditioning factors of the different health systems.
- Obtain and use epidemiological data and assess trends and risks to inform health decision-making.
- Knowing, critically assessing and knowing how to use sources of information to obtain, organize, interpret and communicate scientific, health, socio-sanitary and social information, preserving the confidentiality of the data.
- Recognize the determinants of health in the population, the resources and multiprofessional teams and the actions for prevention, maintenance and promotion of health, both at individual and community level.
- Acquire and develop skills, abilities and practical experience in the socio-health and community context.
- Develop professional practice with respect for other professionals, acquiring teamwork skills.

#### Specific Competences

- Know and differentiate the concepts of public health, community health and preventive medicine.
- To know and understand the concept of health and its biological, lifestyle, environmental, ecological and social determinants.
- Know the concept of demography and its sources, and calculate and interpret static and dynamic demographic, social and economic indicators.
- Choose, modify and apply appropriate theories, models and methods of practice to meet the occupation according to the health needs of individuals and populations.
- Understand and apply the scientific method through basic and applied research programs, using both qualitative and quantitative methodology applied to Occupational Therapy/Ergotherapy and respecting ethical aspects.
- To understand the epidemiology of the most prevalent non-communicable diseases and their prevention strategies.
- To know and be able to analyze, elaborate, participate and evaluate education and health promotion programs within the field of Occupational Therapy/Ergotherapy in order to prevent occupational dysfunctions in general and subsequent medical, surgical and psychiatric conditions.
- Know and be able to design and apply the different modalities and general procedures of intervention in Occupational Therapy/Ergotherapy in their frames of reference, evaluating their effectiveness in a cooperative work environment.
- Knowing and being able to design occupational risk prevention measures.

- Know and be able to develop and apply health and social-health management and administration plans applied to the provision of services and quality improvement in Occupational Therapy/Ergotherapy.
- Understand and apply the principles of management in Occupational Therapy/Ergotherapy services, including cost-effectiveness, resource and equipment management, and establishing therapy protocols.
- Know and understand the legal and administrative framework in force in order to carry out the functions and responsibilities of the Occupational Therapy/Ergotherapy professional, using the socio-health and economic resources within the community.
- Consider developments in health, social care, society and legislation at international, national and local levels that affect Occupational Therapy/Ergotherapy services.

### Transversal Competences

- Planning/organization. Defining priorities; establishing the necessary action plans to achieve the objectives set, adjusting to the means and time available; defining intermediate goals and the contingencies that may arise; establishing the appropriate control and monitoring measures.
- Problem solving and decision making. Analyzing problems and complex situations, identifying their most relevant aspects and their causes, according to the available information, in order to choose the best quality solutions within the established timeframe.
- Teamwork: actively collaborate and take responsibility to contribute to the achievement of the objectives set.

### OBJECTIVES

To induce the acquisition of knowledge and provide students with methodological tools and skills in the field of:

- Public health concept and methods. Determinants of health.
- Demography. Epidemiology. Qualitative research.
- Epidemiology and prevention of chronic prevalent processes.
- Epidemiology and accident prevention.
- Occupational health.
- Health planning and organization of health services.

## AGENDA

### THEORETICAL

1. Concept of public health, preventive medicine and community health.
2. Concept of health.
3. Health determinants.
4. Demography. Concept. Interrelations with public health. Sources of data.
5. Static demographics.
6. Dynamic demography.
7. Diagnosis of the health of a community. Social, economic and health indicators.
8. Epidemiology. Concept. Objectives and applications.
9. Measures of frequency: Incidence and prevalence.
10. Questionnaire surveys in epidemiology.
11. Causality. Risks.
12. Descriptive epidemiological studies.
13. Analytical epidemiological case-control studies.
14. Analytical epidemiological cohort studies.
15. Experimental studies.
16. Random and systematic errors.
17. Interpretation of the results of a diagnostic test. A priori probabilities, sensitivity, specificity.
18. Interpretation of diagnostic test results: predictive values.
19. Epidemiological surveillance. Health information systems and sub-systems.
20. General epidemiology of chronic diseases. Prevention strategies.
21. Epidemiology of cardiovascular diseases.
22. Prevention of cardiovascular diseases.
23. Cancer epidemiology.
24. Cancer prevention.
25. Epidemiology and prevention of chronic respiratory diseases.
26. Epidemiology and prevention of diabetes.
27. Epidemiology and prevention of diseases of the musculoskeletal system and connective tissue.
28. Epidemiology of neurodegenerative diseases. Dementias and Alzheimer's disease. Parkinson's disease.
29. Epidemiology and prevention in traffic accidents.
30. Epidemiology and prevention of domestic, leisure and free time accidents.
31. Occupational health. Accidents at work.
32. Occupational health. Damage to health. Occupational diseases.
33. Designing health programs
34. Primary health care and specialized care.
35. Social and health care. Dependence Law

## PRACTICAL

- Static and dynamic demography.
- Measures of frequency. Prevalence and incidence.
- Partnership and impact measures.
- Screening tests. A priori probabilities. Predictive values.
- Practical tests through the Virtual Campus.

## TEACHING ACTIVITIES

### Seminars

### Practical classes

Four practical classes in which the subsequently proposed program will be developed.

### Field work

## EVALUATION

The evaluation will be carried out continuously. Attendance at face-to-face activities is mandatory and the active participation of the student in all teaching activities will be valued positively in the final

- Activities proposed in the classroom (up to 10%)
- Evaluations of practical seminars and Self-evaluations through the Virtual Campus (up to 10%)
- Average rating of the two partials (80%). Being an essential condition that the qualification of the second part is equal to or greater than 4.

Obtain a final grade equal to or greater than five by applying the criteria specified below.

- It will be necessary to approve having completed the practices.

- There will be a partial exam (release). To eliminate the partial, a grade equal to or five.

**The First Part** will consist of multiple choice questions (\*) (60%) and resolution of practical cases (40%).

**The Second Part** will consist of multiple choice questions (\*) (60%) and resolution of practical cases (40%). It will take place the same day as the final exam

Important:

- Given that it is an essential condition for the average grade of the midterms, that the mark of the second midterm is equal to or greater than 4, students who do not meet this requirement will not pass the subject in the ordinary call.

- For students who have passed the first partial with a grade equal to or greater than 7 and the final grade for the subject is less than 5, the first partial grade will be maintained exclusively for the extraordinary session in June, only having to examine the second part of the subject.

(\*) Each test question will have 4 possible answers. For each wrong answer or unanswered question, 0.25 points will be subtracted.

The Council of the Department of Public Health and Maternal and Child Health adopted on March 14, 2018 the following agreement regarding **possible fraudulent activities**: "Both impersonation and fraudulent copying, action or activity during an exam will lead to failure of the corresponding subject in the current call. The use or presence of notes, textbooks, calculators, cell phones or other means that have not been expressly authorized by the teacher in the statement of the exam will be considered as a fraudulent activity. In any of these circumstances, the infraction may be subject to the corresponding informative file and, if appropriate, sanctioning to the Services Inspection of the UCM.

The Quality Commission, at its meeting of February 23, 2017, approved the **attitude to follow in the event of a voluntary or accidental infringement of the rules for conducting the exam** and the suspicion of **improper use of foreign texts in certain works**: "The voluntary or accidental infringement of the rules for conducting the exam prevents the assessment of the same, so the offending student will take the oral examination of the subject to establish their knowledge of the subject. If intentionality is confirmed in the cheating, it will be considered a very serious misconduct, and will be reported to the Services Inspection to take the disciplinary measures it deems appropriate. Any work that may be considered as plagiarism or fraudulent, will be invalidated and the Services Inspectorate will be notified to take the appropriate disciplinary measures."

## BIBLIOGRAPHY / RELATED INTERNETLINKS

- Gordis L. Epidemiología. 6ª Edición. Elsevier. Madrid 2020. Acceso electrónico:  
<https://www.clinicalkey.com/student/content/book/3-s2.0-B978849115364000266>
- Greenberg, R.S. et al. Medical Epidemiology, 4ª ed., Lange, New York, 2013.
- Hulley, B.; Cummings, R., Diseño de investigaciones clínicas, 4ªed. 2014. Wolters Kluwer: Lippincott Williams & Wilkins, Barcelona, 2014. Acceso electrónico:  
<https://ucm.on.worldcat.org/oclc/969640657>
- Martínez González MA. Conceptos de Salud Pública y Estrategias Preventivas. 2ª Ed. Elsevier. Barcelona 2018. Acceso electrónico:  
<https://ucm.on.worldcat.org/oclc/1041411727>
- Piédrola Gil, G. et al., Medicina Preventiva y Salud Pública, Elsevier España, Barcelona, 2015. Acceso electrónico:  
<https://ucm.on.worldcat.org/oclc/946787430>
- Rey Calero J. del; Gil de Miguel, A.; Herruzo Cabrera, R.; Rodríguez Artalejo, F., Fundamentos de Epidemiología para profesionales de la Salud, Editorial Universidad Ramón Areces, Madrid, 2007.

### Related Internet Links

- [www.ine.es](http://www.ine.es)
- <http://madrid.org>
- <http://msc.es>
- <http://who.int>

