

**COURSE DATA****Data Subject**

<b>Code</b>	33968
<b>Name</b>	Public Health
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	9.0
<b>Academic year</b>	2019 - 2020

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. Period year</b>
1205 - Degree in Human Nutrition and Dietetics	Faculty of Pharmacy and Food Sciences	3 Annual

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1205 - Degree in Human Nutrition and Dietetics	27 - Public health	Obligatory

**Coordination**

<b>Name</b>	<b>Department</b>
GUILLEN DOMINGUEZ, MARIA LUISA	265 - Prev. Medicine, Public Health, Food Sc.,Toxic. and For. Med.
PORTOLES REPARAZ, OLGA CARMEN	265 - Prev. Medicine, Public Health, Food Sc.,Toxic. and For. Med.

**SUMMARY**

To acquire the basic concepts on the health and determinants of the health, levels of prevention and actions of protection and promotion of the health. To know the epidemiology and its application in them in nutritional studies. To understand the influence of the supply and nutrition on the health. To identify the key aspects of the promotion of the health and of the education for the health, fundamentally related to the field of the feeding and nutrition, as well as to know the principal programs of health in the different stages of the life. To know the epidemiology of the principal contagious and non transmissible diseases, its prevention and control, principally, in relation to the food. To know the relation between the environment and the health. To know the sanitary system, planification and magement



## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

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

### Other requirements

Knowledge of the subjects given during the first two years of degree, fundamentally Statistics, Microbiology and Nutrition, Chemical Analysis, Parasitology, as well as the basic matters of Physics, Chemistry and, Biochemistry

## OUTCOMES

### 1205 - Degree in Human Nutrition and Dietetics

- Know, judge and know how to use and apply the sources of information related to nutrition, food, lifestyles and health.
- Know about national and international health organisations and the different healthcare systems and identify the role of the dietitian-nutritionist.
- Know and intervene in the design, implementation and validation of nutritional epidemiological studies, and participate in the planning, analysis and evaluation of food and nutrition intervention programmes in different areas.
- Participate in activities for the promotion of health and the prevention of disorders and diseases related to nutrition and lifestyles, and provide food and nutrition education to the population.
- Collaborate in the planning and development of policies on food, nutrition and food safety based on the needs of the population and health protection.
- Participate in the management, organisation and provision of food services.
- Acquire basic training for the research activity, be able to formulate hypotheses, collect and interpret information for problem solving using the scientific method, and understand the importance and the limitations of scientific thought in the field of health and nutrition.
- Know the basic concepts of health and public health.
- Know the methods and means of health education.
- Know the relationship between environment and health.
- Acquire knowledge on epidemiology and prevention of communicable and non-communicable diseases.
- Know and assess the determinants of health.
- Adquirir los conocimientos sobre el método epidemiológico y su aplicación al campo de la nutrición.
- Be familiar with strategies for promoting health and preventing disease, primarily in the field of nutrition.



- Know the organisation of healthcare: health systems and international public health.

## LEARNING OUTCOMES

At the end of the course the pupil must be capable of:

- To apply the concepts of the Public Health in general and in related disciplines, especially, in the area of the degree of Human Nutrition
- To know the organizational and normative environment of the Public Health in Spain comparing the characteristics with other sanitary systems.
- To analyze critically the information in the epidemiological nutritional studies
- To realize calculations to obtain measures of frequency of disease - health, measure of association and of impact. To be able to interpret the obtained results.
- To detect and to correct the principal random and systematic errors in the epidemiological nutritional studies, as well as to value its influence for the results and its practical application.
- To interpret the results of metanalysis and of the different measures which are in use in the evaluation of diagnostic tests.
- To distinguish the different pollutants of the environment and to interpret the measurements realized by the different equipments to take decisions brings over of the convenience of preventive measures or of control. Evaluation of the impact of the pollutants in the health.
- To collaborate in the prevention and control of contagious diseases across the knowledge of his mechanism of transmission and strategies of prevention and control for general and particular level for those more relevant diseases.
- To collaborate in the prevention and control of the chronic diseases and accidents acting as sanitary educator on the ways of life and the environmental factors, as well as of sanitary assistance.
- To analyze opportunities and challenges raised by new or changeable situations in relation to the Public Health
- In general, one tries to promote the capacity of analysis and synthesis in the resolution of problems and capture of decisions in the field of Human Nutrition

## DESCRIPTION OF CONTENTS

### 1. General Concepts in Public Health

Concept of Health, Public Health, Determinants of the Health, Principal determinants of the way of life and of the physical and social environment. Food and Health. Mediterranean diet Sanitary Demography, Information systems, Epidemiological Vigilance. The World Health Organization. Levels of Prevention. Education for the health. Qualitative technologies. Prevention and Promotion of the Health

### 2. General Concepts in Public Health



Concepts and uses of the Epidemiology. Applications to the Human Nutrition. Causality. Measures of frequency. Types of epidemiological studies, measures of association and impact, biases, metanálisis. Nutritional epidemiology. Valuation of diagnostic tests. Poblacional screening tests. Examples of the principal studies published in Human and Dietetic Nutrition.

### 3. Environment and health

Environmental epidemiology. Effects on the health. Environmental health and food. Climatology and health. Climate change and repercussions on the environment and health. Pollution of soils. Waste management

### 4. Infectious diseases

Epidemiology, prevention and control. Immunization and vaccines. Sterilization, disinfection and pesticides. Classification of infectious diseases. The most relevant contagious diseases

### 5. Chronic Diseases

General epidemiology of the chronic diseases and strategies of prevention and control related to the food. Nutrition and cardiovascular disease. Nutrition and cancer. Nutrition and diabetes, obesity and metabolic syndrome. Genomic epidemiology studies in chronic diseases

### 6. Sanitary System and Services of Health

Sanitary Spanish system. Other sanitary systems. Primary care and Specialized Attention. Services of Health. Paper of the Graduate in Human and Dietetic Nutrition in the Sanitary system. Health economics. Management and Sanitary Planning. Community nutrition.

## WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	75,00	100
Seminars	10,00	100
Tutorials	2,00	100
Development of group work	20,00	0
Development of individual work	20,00	0
Study and independent work	80,00	0
Readings supplementary material	10,00	0
Preparation of practical classes and problem	5,00	0
<b>TOTAL</b>	<b>222,00</b>	



## TEACHING METHODOLOGY

The theoretical contents will be given across lessons composed in a dialogue with the students promoting the participation of the student across questions.

These theoretical meetings will have the complement of the tutorships (4 hours), virtual tutorships and seminars (6 hores).

In the seminar lessons, methodology based on learning by resolution of problems will be used. The work will be promoted in group that will allow the development of capacities of communication and oral coherent and logical expression.

## EVALUATION

**1. Exam:** Written test to asses knowledge and understanding of the theoretical minimum content established for the subject. This test will be the 75% of the final qualification of the subject.

**2. Partial exam:** During the course a partial exam will be taken at the end of the first semester. In the case of having passed with a 5/10, the subject of the partial will be eliminated and this mark will be saved during the first and second calls.

**3. Both marks for the first partial and for the final exam (second partial)** must be passed (5/10) in order to calculate an average. The final qualification of the students that are examined of all the contents, will be the achieved in the final exam.

**4. Seminars:** The work carried out in the seminar sessions, which includes the ability to resolve problems as well as the ability to make detailed and organized reports, will be up to 20% in the final qualification. These seminars will be coordinated with other subjects and also specific to the subject. Students are reminded of the obligation to attend coordinated seminars. Failure to attend them without justifying the reason will imply a zero in the evaluation section corresponding to the seminar.

**5. The qualifications of both seminars and tutorials** will be added when the complete subject has been passed

**6. Tutorials:** Evaluation of the work done during tutorials and other teaching activities of the course. Taking into account the attitude of the student and the answer to the questions presented, the contribution of this activity will count up to 5% of the final evaluation of the subject.

The student enrol in the subject must attend the tutorials and seminars to pass the course, although in the case of repeat students, they will keep the marks of tutorials and seminars that they had obtained in the previous course.





## REFERENCES

### Basic

- Argimón JM, Jiménez J, Ed. Métodos de investigación clínica y epidemiológica. Barcelona. Harcourt 2004.
- Serra-Majem L, Aranceta J. Nutrición y Salud Pública. Métodos, bases científicas y aplicaciones. 2ª ed. Barcelona: Elsevier-Masson, 2006.
- Hernández-Aguado I, Gil de Miguel A, Delgado-Rodríguez M, Bolumar-Montrull F. Manual de epidemiología y salud pública para licenciaturas y diplomaturas en ciencias de la salud. Madrid: Medica Panamericana, 2005.

### Additional

- Martínez-González MA, Sánchez-Villegas A, Faulín Fajardo J. Bioestadística amigable. Díaz de Santos: Madrid, 2006
- Fletcher RH, Fletcher SW, Wagner EH. Epidemiología Clínica. 2ª ed. Elsevier Masson:Madrid:2007
- Sierra López A, Saénz González MC, Fernández-Créhuet Navajas J, Salleras Sanmartí L, Cueto Espinar A, Gestal Otero J, Domínguez Rojas V, Delgado Rodríguez M, Bolumar Montrull F, Herruzo Cabrera R, Serra Majem L (dirs.). Medicina Preventiva y Salud pública. 11ª ed. Barcelona: Elsevier-Masson, 2008.

## ADDENDUM COVID-19

**This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council**

### 1. Contenidos

Se mantienen todos los contenidos inicialmente programados en la guía docente.

### 2. Volumen de trabajo y planificación temporal de la docencia

Se mantiene el peso de las actividades que suman las horas de dedicación en créditos ECTS marcados en la guía docente original.

Las clases teóricas no presenciales a partir del 23 de marzo se han desarrollado mediante presentaciones locutadas en las mismas fechas y horas y con la misma duración.

En las sesiones de tutoría, vía online, se realiza un repaso del temario, así como la resolución de las dudas planteadas por los propios alumnos.



Se mantiene la planificación temporal inicial, dejando margen para la entrega de las actividades planteadas.

### **3. Metodología docente**

A partir del 23 de marzo las clases teoría, correspondientes al temario programado pendiente, pasan a ser locutadas incluyendo material de consulta, disponible en el aula virtual

La tutoría pendiente se resolvió con una actividad online.

En los seminarios previstos en la guía docente del curso, se han realizado actividades en grupo sobre temas relacionados con el temario de la asignatura, así como la resolución de actividades planteadas basada en bibliografía relacionada con los conceptos del temario.

La resolución de dudas o realización de diversas propuestas, del profesorado y del alumnado, se realiza a través de un foro en el aula virtual.

### **4. Evaluación**

Examen online, mediante una prueba objetiva, examen tipo test de opción múltiple.

Cada pregunta contestada correctamente se calificará con 0,2 puntos, y cada pregunta contestada incorrectamente descontará 0,05 puntos. En esta actividad se tiene que obtener una nota mínima de 5/10 por aprobar la asignatura. Se mantiene el peso de las actividades que suman las horas de dedicación en créditos ECTS señaladas en la guía docente.

Se recuerda al alumnado la obligatoriedad de participación en las tutorías y los seminarios a través del Aula Virtual. La no participación a los mismos sin causa justificada implicará un cero en el apartado de evaluación correspondiente.

### **5. Bibliografía.**

La bibliografía recomendada se mantiene pues es accesible