

BASIC DETAILS:

Subject:	SALUD PÚBLICA		
Id.:	33354		
Programme:	DOBLE GRADO EN FARMACIA Y BIOINFORMÁTICA. PLAN 2018		
Module:	LEGISLACIÓN Y FARMACIA SOCIAL		
Subject type:	OBLIGATORIA		
Year:	4	Teaching period:	Primer Cuatrimestre
Credits:	6	Total hours:	150
Classroom activities:	70	Individual study:	80
Main teaching language:	Castellano	Secondary teaching language:	Inglés
Lecturer:	FLORES SERRANO, DAVID (T)	Email:	dflores@usj.es

PRESENTATION:

La reciente pandemia de Coronavirus ha puesto de manifiesto la relevancia de la Medicina Preventiva y la Salud Pública las cuales han sido definidas por la Asociación Internacional de Epidemiología en 1988 como: **"Campo especializado de las Ciencias de la Salud, compuesto por diferentes disciplinas, que emplean técnicas dirigidas a promover y mantener la salud y el bienestar, así como impedir la enfermedad, la incapacidad y la muerte prematura"**; y como: **"Una de las iniciativas organizadas por la sociedad para proteger, promover y recuperar la salud de la población. Es una combinación de ciencias, habilidades y creencias, dirigidas al mantenimiento y mejora de la salud de todas las personas, a través de acciones colectivas y sociales"**.

Como disciplina puede resumirse como aquella que trata de la ciencia y el arte de promover la salud y prevenir la enfermedad a través de los esfuerzos organizados de la sociedad. La Medicina Preventiva y Salud Pública como especialidad de las Ciencias de la Salud: **"Es la ciencia y la práctica del fomento, elaboración y aplicación de políticas de promoción y protección de la salud y de prevención de la enfermedad tanto para reducir la probabilidad de su aparición como para impedir o controlar su progresión, así como de la vigilancia de la salud de la población, de la identificación de sus necesidades sanitarias y de la planificación y evaluación de los servicios de salud"**.

En este contexto, se tratará durante este segundo semestre de que el futuro profesional de la farmacia tome conciencia de su papel destacado en la prevención de la enfermedad y la promoción de la salud así como que sea conocedor de los diferentes indicadores y sistemas de salud en los cuales se imbrica su futura profesión.

The recent COVID pandemic has highlighted the relevance of the Public health professionals who work with other professional groups to monitor the health status of the community, identify health needs, develop programmes to reduce risk and screen for early disease, control communicable disease, foster policies which promote health, plan and evaluate the provision of health care, and manage and implement change.

The official definition of public health is: "the science and art of preventing disease, prolonging life, and promoting health through the organised efforts of society". This definition, coined in 1988 by the International Epidemiology Society in England by Sir Donald Acheson, reflects the essential focus of modern public health. Public health has been recognised as a specialist field of practice within health sciences since the middle of the Nineteenth Century when the first Medical Officers of Health were appointed in this country.

In this context, the purpose of this subject will be to allow the future pharmacy professional to acknowledge his role within a national health system preventing disease, promoting health and

being aware of the main indicators and determinants of health.

PROFESSIONAL COMPETENCES ACQUIRED IN THE SUBJECT:

General programme competences	G01	Ability to express opinions and propose arguments effectively both orally and in writing. Effectively use language skills to express views and formulate arguments both orally and in writing.
	G02	Troubleshooting and decision-making.
	G03	Ability for autonomous learning and self-criticism.
	G04	Ability to effectively use new information and communications technology to improve written and oral presentations and to facilitate data analysis.
	G05	Ability for teamwork, actively contributing to the objectives and the organisation of a team.
	G07	Demonstrate creativity, independence of thought, autonomy.
	G08	Demonstrate critical and analytical ability to conventional approaches of the discipline.
	G09	Demonstrate capacity for innovation, creativity and initiative.
	G11	Knowledge of the English language for use in professional environments.
	Specific programme competences	E15
E16		Use statistical analysis applied to pharmaceutical sciences.
E39		Conocer y comprender las técnicas utilizadas en el diseño y evaluación de los ensayos preclínicos y clínicos.
E41		Promote the rational use of medication and healthcare products.
E44		Understand the management and the characteristics of pharmaceutical assistance in Primary and Specialised Care structures in the Healthcare System.
E50		Understand the management and characteristics of pharmaceutical assistance in an office environment and in the pharmaceutical industry.
E51		Learn about the foundations of public health and intervene in the activities of health promotion, disease prevention at an individual and collective level and contribute to health education, recognising the determinants of health among the population health, both in terms of genetics as well as sex and lifestyle, demographic, environmental, social, economic, psychological and cultural dependants.
E52		Know about, understand and apply legal, social and economic conditions related to the health sector and in particular with medication.
E53		Conocer los principios éticos y deontológicos y actuar según las disposiciones legislativas, reglamentarias y administrativas que rigen el ejercicio profesional colaborando con otros profesionales de la salud y adquiriendo habilidades de trabajo en equipo.
E54		Use efficiently information retrieval techniques for primary and secondary sources of information (including databases using computer).
E55		Understand and apply management techniques in all aspects of pharmacy.
E56		Understand the principles and scientific methodology applied to pharmaceutical sciences, including the historic and social role of the pharmacy.
E57		Conocimientos básicos del Sistema Nacional de Salud, de la legislación sanitaria en general y específicamente la relacionada con los medicamentos, productos sanitarios y asistencia farmacéutica.
E58		Learn the techniques of oral and written communication skills in order to be able to inform users of pharmaceutical establishments in terms that are understandable and appropriate for different cultural levels and social environments.
Regulated profession competences	P03	Know how to apply the scientific method and acquire skills in handling legislation, sources, bibliography, developing protocols and other aspects considered necessary for the critical design and evaluation of preclinical and clinical trials.
	P06	Promote rational use of medicines and healthcare products, and acquire basic knowledge in clinical management, health economics and efficient use of healthcare resources.
	P07	Identify, evaluate and assess the problems related to drugs and medication as well as participate in pharmacovigilance activities.
	P09	Intervenir en las actividades de promoción de la salud, prevención de enfermedad, en el ámbito individual, familiar y comunitario; con una visión integral y multiprofesional del proceso salud-enfermedad.
	P14	Conocer los principios éticos y deontológicos según las disposiciones legislativas, reglamentarias y administrativas que rigen el ejercicio profesional, comprendiendo las implicaciones éticas de la salud en un contexto social en transformación.
	P15	Recognise the limitations and the need to maintain and update professional skills, with particular emphasis on self-learning of new knowledge based on the available scientific evidence.

PRE-REQUISITES:

Not applicable

SUBJECT PROGRAMME:

Observations:

El programa puede ser susceptible de sufrir cambios en función del rendimiento del grupo o de la actualidad sanitaria del momento y que obligue a profundizar más en unos temas que en otros.

Subject contents:

1 - INTRODUCTION
1.1 - BASIC PRINCIPLES OF HEALTH AND PUBLIC HEALTH
1.1.1 - Definition of health, wellbeing and illness. OMS and Milton Terris
1.1.2 - Definition of health protection, health promotion and prevention of disease
1.1.3 - Health determinants and indicators. The Landlone report
2 - RESEARCH IN PUBLIC HEALTH. TOOLS AND USES
2.2 - BASIC PRINCIPLES OF DEMOGRAPHY
2.2.1 - Static demography. Population pyramids
2.2.2 - Dynamic demography. Populations evolution and development. Migrations, population grow, shrink and ageing.
2.2.3 - Basic indicators used in public health. Mortality, Morbidity, Incidence, Prevalence.
2.3 - EPIDEMIOLOGY. CONCEPTS AND USES
2.3.1 - Definition of epidemiology. The epidemiologist and the clinician
2.3.2 - Analysis tools. Epi curves. Types, components and uses
2.3.3 - Population and analysis variables
2.3.4 - Practical cases
3 - THE NATIONAL HEALTH SERVICE
3.1 - STRUCTURE AND MANAGEMENT OF HEALTH SERVICES
3.1.1 - Health policies and interventions. The three models: Mix, comunist and capitalist.
3.1.2 - The spanish health model. Origin, legal framework and structure
3.2 - THE PHARMACIST'S ROLE IN HEALTH SERVICES
3.2.1 - Community Pharmacy, Hospital Pharmacy, Primary care Health centers
3.2.2 - Present and future of the Pharmacy services in Spain. Are we going to the liberalization of the sector?
3.2.3 - Digital Drug Safety Surveillance: monitoring Pharmaceutical Products
4 - MAIN HEALTH DETERMINANTS
4.1 - DIETARY HABITS WITH EPIDEMIOLOGIC AND POPULATION HEALTH IMPACT
4.1.1 - Main dietary conditions in the XXI century: Obesity, sedentary lifestyle, CVD
4.1.2 - Nutritional deficiencies. Anorexia, bulimia, deficiency-related diseases
4.1.3 - Oncologic conditions related with poor dietary habits and inadequate intake lifestyle.
4.2 - LEISURE ACTIVITIES WITH EPIDEMIOLOGIC IMPACT
4.2.1 - Smoking. Epidemiology, Population distribution. Related pathologies (Lung cancer, COPD, etc.)
4.2.2 - Alcoholism. Epidemiology and related conditions (cirrhosis, liver cancer, etc.)
4.3 - LABOUR ACTIVITIES AND HABITS WITH EPIDEMIOLOGIC IMPACT.
4.3.1 - Stress, anxiety, depression. Epidemiology, main differences and health impact.
4.3.2 - Main labour conditions causing disabilities and dependence
4.4 - PHYSICAL, INTELLECTUAL AND SENSORIAL DISABILITIES.
4.4.1 - Disabilities, rehab, dependence. Impact on health services.
4.4.2 - Rare diseases
4.5 - POPULATION AGEING. THE FUTURE OF HEALTH SYSTEM
4.5.1 - Demographic aspects of population ageing
4.5.2 - Health assessment and interventions in the elderly.
4.5.3 - Health assistance to the elderly. The spanish situation.

Subject planning could be modified due unforeseen circumstances (group performance, availability of resources, changes to academic calendar etc.) and should not, therefore, be considered to be

definitive.

TEACHING AND LEARNING METHODOLOGIES AND ACTIVITIES:

Teaching and learning methodologies and activities applied:

The student will get the desired knowledge through the analysis, debate and in-class discussion of the subject detailed above as well as a research process during the out-class time. The tools proposed to the student are:

- **In-class lectures.** The syllabus detailed above will be presented and discussed with the students. The student will need to read the information given in advance and prior to the lecture in order to enhance the learning process.
- A **basic text book** for the student to use and also the student will be provided with **extra readings, consultation books and web sites** in order to settle and increase the knowledge provided in class.
- In order to increase communication and team work skills, a **group assignment** will be proposed as well as **in-class debates** and **interactive activities** will be proposed.
- **Videos** will be used during the semester to consolidate the information presented.
- **Practical cases** in english will be used through the CDC app.

This planning could be changed depending on different aspects such as group performance, availability of resources, other subjects needs, etc.

En esta asignatura es muy importante la lectura de la información, el análisis de la misma y los debates y discusiones en clase del programa detallado anteriormente a la vez que un proceso de investigación en el tiempo de trabajo autónomo. Las herramientas propuestas a los estudiantes son:

- **Clases teóricas** en las que se presentarán los temas más importantes y se realizarán **debates** que faciliten la comprensión de ciertos aspectos. El alumno será requerido a lecturas previas a la clase con el fin de participar en su desarrollo lo máximo posible.
- Un **libro de texto base** en el que se fundamenta la asignatura y que el alumno podrá usar para consolidar o ampliar conocimientos. También se pondrán a disposición del alumno **libros de consulta y páginas web** para contrastar la información recibida en clase y para que aquellos alumnos interesados puedan ampliar conocimientos en temas específicos.
- Con la finalidad de potenciar los aspectos relacionados con la comunicación y el trabajo en equipo se propondrá a los alumnos debates y actividades interactivas que se irán definiendo a lo largo del semestre incluyendo, debates presenciales, online, cuestionarios online y un trabajo grupal.
- Se utilizarán **videos** que sirvan para ilustrar los temas que se presenten y ayuden a abrir el debate mediante la discusión de los aspectos destacados.
- Se presentarán a los alumnos **casos prácticos interactivos en inglés.**

Esta planificación queda sujeta a posibles cambios y podrán verse modificados por motivos imprevistos (rendimiento del grupo, disponibilidad de recursos, modificaciones del calendario, necesidades de otras asignaturas) y por tanto no deben considerarse como cerrados y definitivos.

Student work load:

Teaching mode	Teaching methods	Estimated hours
Classroom activities	Master classes	32
	Other theory activities	15
	Debates	8
	Coursework presentations	6
	Films, videos, documentaries etc.	5
	Assessment activities	4
Individual study	Tutorials	5
	Individual coursework preparation	15
	Group coursework preparation	33
	Research work	17
	Recommended reading	10
Total hours:		150

ASSESSMENT SCHEME:

Calculation of final mark:

Written tests:	30 %
Individual coursework:	50 %
Group coursework:	20 %
TOTAL	100 %

*Las observaciones específicas sobre el sistema de evaluación serán comunicadas por escrito a los alumnos al inicio de la materia.

BIBLIOGRAPHY AND DOCUMENTATION:

Basic bibliography:

SIERRA LOPEZ, A. y cols (2008): Piédrola Gil Medicina Preventiva y Salud Pública. 11º Edición. Ed. Elsevier Masson barcelona.
FRIAS OSUNA, Antonio. Salud Publica y educación para la salud. Elsevier. 2000

Recommended bibliography:

FRUTOS GRACIA, JOSE. Salud Pública y Epidemiología. ISBN 9788479787523. Ed. Díaz de Santos
MARTINEZ GONZALEZ, MIGUEL ANGEL. Compendio de salud Publica.
GIL LACRUZ, MARTA. El laberinto de la salud publica. Ed. Erasmus
MARTINEZ HERNANDEZ, JUAN. Nociones de Salud Pública. Ed. Diaz de Santos
MARTOS GARCIA, Raul. Fundamentos de la educación para la Salud y la atención primaria. ISBN 9788496224728
HERNANDEZ-AGUADO, IDELFONSO. Manual de Epidemiología y Salud Pública: Para grados en ciencias de la salud. Editorial Médica

Recommended websites:

ORGANIZACION MUNDIAL DE LA SALUD	www.who.int
ORGANIZACION PANAMERICANA DE SALUD	www.paho.org
INSTITUTO DE SALUD CARLOS III	www.isciii.es
CONSERJERÍA DE SALUD GOBIERNO DE ARAGON	www.aragon.es
MINISTERIO DE SANIDAD Y CONSUMO	www.msps.es
US ENVIRONMENTAL PROTECTION AGENCY	www.epa.gov
U S F O O D A N D D R U G ADMINISTRATION	www.fda.gov

US CENTERS FOR DISEASE CONTROLS	www.cdc.gov
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