

Year 2024/2025

340407 - Preventive Medicine and Public Health

Information about the subject

Degree: Bachelor of Science Degree in Medicine

Faculty: Faculty of Medicine and Health Sciences

Code: 340407 Name: Preventive Medicine and Public Health

Credits: 6,00 ECTS Year: 4 Semester: 2

Module: Social Medicine, Communication Skills and Initiation to Research

Subject Matter: Social Medicine Type: Compulsory

Field of knowledge: Health Science

Department: Biostatistics, Epidemiology, and Public Health

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

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Module organization

Social Medicine, Communication Skills and Initiation to Research

ECTS	Subject	ECTS	Year/semester
3,00	Laboratory of Clinical Interview and Communication Skills	3,00	3/1
15,00	Family and Community Medicine	3,00	5/2
	Legal Medicine and Toxicology	6,00	5/1
	Preventive Medicine and Public Health	6,00	4/2
9,00	History of Medical Science, and Medical Documentation and Terminology	6,00	2/1
	Laboratory of Research Methodology	3,00	4/1
6,00	Biostatistics	6,00	1/2
12,00	Bioethics and Medical Deontology	6,00	4/1
	Science, Reason and Faith	6,00	2/2
3,00	Healthcare Management	3,00	4/1
6,00	Medical English	6,00	1/1
6,00	Ethics and Social Morality	6,00	2/1
6,00	Medical Anthropology	6,00	1/1
	3,00 15,00 9,00 6,00 3,00 6,00 6,00	3,00 Laboratory of Clinical Interview and Communication Skills 15,00 Family and Community Medicine Legal Medicine and Toxicology Preventive Medicine and Public Health 9,00 History of Medical Science, and Medical Documentation and Terminology Laboratory of Research Methodology 6,00 Biostatistics 12,00 Bioethics and Medical Deontology Science, Reason and Faith 3,00 Healthcare Management 6,00 Medical English 6,00 Ethics and Social Morality	3,00 Laboratory of Clinical Interview and Communication Skills 15,00 Family and Community 3,00 Medicine Legal Medicine and 6,00 Toxicology Preventive Medicine and Public Health 9,00 History of Medical Science, and Medical Documentation and Terminology Laboratory of Research 3,00 Methodology 6,00 Biostatistics 6,00 12,00 Bioethics and Medical Deontology Science, Reason and Faith 3,00 Healthcare Management 3,00 6,00 Medical English 6,00 6,00 Ethics and Social Morality



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Recommended knowledge

Basics on Biostatistics and Epidemiology.

Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

R1 Know the legal basis of the exercise of the medical profession. R2 Informed consent. Confidentiality. R3 Recognize, diagnose and guide the management of physical and mental harm. Social and legal implications of death. R4 Know and recognize the normal evolution of the corpse. Postmortem diagnosis. R5 Basics of medical criminology. Be able to write medical-legal documents. R6 Recognize the need to maintain professional competence. R7 Knowing how to approach professional practice while respecting the patient's autonomy, beliefs and culture. R8 Know the principles and apply the methods of preventive medicine and public health. R9 Risk factors and disease prevention.



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Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

BASIC		Weighting			
		1	2	3	4
CB1	Students have demonstrated to possess and understand knowledge in a study area that starts from the base of the general secondary education, and is usually found at a level that, while supported by advanced textbooks, also includes some aspects that involve knowledge from the forefront of their field of study				X
CB2	Students know how to apply their knowledge to their job or vocation in a professional way and possess the competences that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of ??study				X
CB3	Students have the ability to collect and interpret relevant data (usually within their area of study) to make judgments that include a reflection on relevant social, scientific or ethical topics				X
CB4	Students can pass on information, ideas, problems and solutions to both a specialized and non-specialized audience			1	X
CB5	Students have developed the learning skills needed to undertake further studies with a high degree of autonomy				x

GENEF	RAL	Weighting		
		1 2 3 4		
CG1	Recognizing the essential elements of the medical profession, including ethical principles, legal responsibilities, and patient-centered professional exercise	x		
CG2	Understanding the importance of such principles for the benefit of the patient, society and profession, with special attention to professional secrecy	x		
CG3	Knowing how to apply the principle of social justice to professional practice and understanding the ethical implications of health in a changing global context	x		



CG4	Developing professional practice with respect to patient autonomy, beliefs and culture)			
CG5	Recognizing the limitations themselves and the need to maintain and update their professional competence, giving special importance to the autonomous learning of new knowledge and techniques and to the motivation for quality			X	
CG6	Developing professional practice with respect for other health professionals, acquiring teamwork skills			X	
CG7	Understanding and recognizing the normal structure and function of the human body, at the molecular, cellular, tissue, organic and systems levels, at the different stages of life and in both sexes	(
CG8	Recognize the basis of normal human behavior and its disfunctions				
CG9	Understanding and recognizing the effects, mechanisms and manifestations of the disease on the structure and function of the human body)	(
CG10	Understanding and recognizing the causative agents and risk factors that determine health and disease development				X
CG11	Understanding and recognizing the effects of growth, development and aging on the individual and their social environment			x	
CG12	Understanding the basis of action, indications and efficacy of therapeutic interventions, based on available scientific evidence)	C		
CG13	Getting and writing a medical history containing all relevant information				X
CG14	Perform a physical exam and mental assessment				
CG15	Having the ability to make an initial diagnostic judgment and establish a reasoned diagnostic strategy				
CG16	Recognizing and treating life-threatening situations and those that require immediate attention				
CG17	Establishing all diagnosis, prognosis and treatment, applying principles based on the best possible information and clinical safety				
CG18	Indicating the most appropriate therapeutics of the most prevalent and chronic acute processes, as well as terminally ill patients				
CG19	Raising and proposing appropriate preventive measures for each clinical situation)			



CG20	Acquiring enough clinical experience in hospital institutions, health centers or other health institutions, under supervision, as well as basic knowledge of patient-centered clinical management and appropriate use of tests, medicines and other health system resources				x
CG21	Listening to carefully, obtain and synthesize relevant information about the problems afflicting the patient and understand the content of this information	X			
CG22	Writing medical histories and other medical records in an understandable way to outsiders	X		1	
CG23	Communicating effectively and clearly, both orally and in writing, with patients, family members, media workers and other professionals		X	1	
CG24	Establishing good interpersonal communication that enables patients, family members, media workers and other professionals to address patients, families, media and other professionals with efficiency and empathy	X			
CG25	Recognizing health and population determinants, both genetic and sexual, lifestyle, demographic, environmental, social, economic, psychological and cultural issues				X
CG26	Taking on your role in prevention and protection against illness, injury or accidents, and health maintenance and promotion, both individually and in the community				X
CG27	Recognizing their role in multi-professional teams, taking the lead where appropriate, both for the provision of health care, and in health promotion interventions				X
CG28	Obtaining and using epidemiological data and assess trends and risks for health decision-making				x
CG29	Knowing national and international health organizations and the environments and conditions of different health systems				x
CG30	Basic knowledge of the National Health System and health legislation				X
CG32	Knowing how to use information and communication technologies in clinical, therapeutic, preventive and research activities				X
CG33	Maintaining and using records with patient information for further analysis, preserving data confidentiality			X	



SPECIF	ric	Weig	ghting	3
	1	2	3	4
CE7	Knowing the legal basis of the exercise of the medical profession. Informed consent. Confidentialityv	X	1	
CE8	Recognizing, diagnosing and guiding the management of physical and mental harm. Social and legal implications of death	x		
CE9	Knowing and recognizing the normal evolution of the corpse. Postmortem diagnosis. Basics of medical criminology			
CE10	Being able to write medical-legal documents			
CE13	Recognizing the need to maintain professional competence		x	
CE14	Knowing how to approach professional practice while respecting the patient's autonomy, beliefs and culture			x
CE15	Knowing the principles and applying the methods of preventive medicine and public health. Risk factors and disease prevention			X
CE16	Recognizing the determinants of population health. Health indicators. Planning, programming and evaluation of health programs. Prevention and protection against diseases, injuries and accidents. Assessment of quality of care and patient safety strategies. Vaccines. Epidemiology. Demographics			X
CE17	Knowing health planning and administration at the global, European, Spanish and regional levels			X
CE18	Knowing the economic and social implications of medical action, considering criteria of effectiveness and efficiency. Health and environment. Food safety. Occupational health			X
CE19	Knowing, critically valuing and knowing how to use technologies and sources of clinical and biomedical information, to obtain, organize, interpret and communicate clinical, scientific and health information			X
CE22	Knowing the history of health and disease		x	
CE23	Knowing the existence and principles of alternative medicines			
CE31	Writing stories, reports, instructions and other records, understandably to patients, family members and other professionals			



TRANSVERSAL				ı
	1	2	3	4
CT1	Analytical and synthesis capacity			X
CT2	Planification and organization capacity			x
СТ3	Oral and written communication in mother language			x
CT5	Informatics knowledge	x	1	
СТ6	Manage information capacity			X
CT7	Solving problems			x
СТ9	Team work		X	
CT12	Interpersonal relationship skills	X		
CT13	Recognition of diversity and multiculturalism		x	
CT14	Critical reasoning			X
CT15	Ethical commitment			x
CT16	Individual learning			X
CT17	New situations' adaptation		x	
CT22	Motivation for quality		x	
CT23	Sensitivity to environmental and social health issues			x
CT27	Ability to express one's feelings		x	
CT30	Social commitment		x	
CT31	Show sensitivity to personal, environmental and institutional injustices		X	



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CT33 Knowing how to get relevant information from personal interviews

X





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Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3, R7, R9	30,00%	Open questions
R1, R2, R3, R4, R5, R6, R7, R8, R9	55,00%	Tests
R2	0,00%	Presentations
R7, R9	10,00%	Practices
R2	0,00%	Work
R1, R2, R3, R4, R5, R6, R7, R8, R9	5,00%	Participation in class

Observations

Minimum requirements:

No subject of module 3 (Human Clinical Training) can be taken without having passed all subjects of module 1 (Morphology, Structure and Function of the Human Body).

It is necessary to obtain a minimum score of 5 in the test exam in order to pass and be able to add the rest of the evaluations.

Criteria for the awarding of honors:

Honors may be awarded to the best students, who must have obtained a minimum grade of 9. If circumstances so require, a special test may be established to determine those students deserving of the honorary degree, taking into account the limitation of 5% of the students enrolled. In the second and subsequent examinations, only the number of honors that may remain after the first examination may be awarded.

CRITERIA FOR THE AWARDING OF HONORS:According to Article 22 of the Regulatory Regulations for the Evaluation and Grading of UCV Subjects, the mention of "Matricula de Honor" may be awarded by the professor responsible for the subject to students who have obtained the grade of "Outstanding". The number of "Matrícula de Honor" mentions that may be awarded may not exceed five percent of the students included in the same official transcript, unless this is less than 20, in which case only one "Matrícula de Honor" may be awarded.



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MENTION OF DISTINCTION:

In accordance with the regulations governing the assessment and grading of subjects in force at UCV, the distinction of "Matrícula de Honor" (Honours with Distinction) may be awarded to students who have achieved a grade of 9.0 or higher. The number of "Matrículas de Honor" (Honours with Distinction) may not exceed five percent of the students enrolled in the group for the corresponding academic year, unless the number of enrolled students is fewer than 20, in which case a single "Matrícula de Honor" (Honours with Distinction) may be awarded. Exceptionally, these distinctions may be assigned globally across different groups of the same subject. Nevertheless, the total number of distinctions awarded will be the same as if they were assigned by group, but they may be distributed among all students based on a common criterion, regardless of the group to which they belong. The criteria for awarding "Matrícula de Honor" (Honours with Distinction) will be determined according to the guidelines stipulated by the professor responsible for the course, as detailed in the "Observations" section of the evaluation system in the course guide.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

M1	Masterclass
M2	Problems resolution and practical cases
M3	Virtual simulations
M4	Content presentations by teacher
M5	Knowledges and skills explanation
M8	Group activities supervised by professor
M9	Knowledge acquirance through student interaction and activity
M11	Personalised attention by professor
M12	Tests to understand the level of knowledge acquirance and skills



M13	Written work
M14	Online activity on e-learning
M15	Personal study
M16	Information research
M17	Discussion and solving issues in group
M18	Work in team
M19	Group work for searching, discussion and information research
M20	Role-playing
M21	Supervision of clinical histories



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IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Theory class M1, M4, M5	R1, R2, R3, R4, R5, R6, R7, R8, R9	42,00	1,68
Seminar and group practices M8, M9, M12, M16, M17, M18, M19	R2, R7, R8, R9	10,00	0,40
Practices in small groups M2, M8, M9, M12, M13, M17, M18	R2, R3, R7, R8, R9	5,00	0,20
Tutoring M8, M11	R1, R2, R3, R4, R5, R6, R7, R8, R9	1,50	0,06
Evaluation M12	R2, R7, R8, R9	1,50	0,06
TOTAL		60,00	2,40

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS	
No attendance M2, M13, M14, M15, M16, M17, M18, M19	R1, R2, R3, R4, R5, R6, R7, R8, R9	90,00	3,60	
TOTAL		90,00	3,60	



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Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents	
Section I. Introduction to Preventive Medicine	Concept of Preventive Medicine and Public Health. Health and its determinants. Natural History of Disease. Levels and Strategies of Prevention. Inequalities in health.	
Section II. Health demography, Information systems and General Epidemiology	Health demography. Sources of information. Epidemiology. Causality models.	
Section III. Epidemiology and Prevention of Communicable Diseases	Introduction to epidemiology and prevention of communicable diseases. General foundations for prevention of communicable diseases. Sterilization and disinfection. Active and passive immunization. Vaccination programs. Healthcare associated Infections. Viral hepatitis. AIDS.	
	Fecohydric transmission diseases. Respiratory diseases: Influenza, Legionellosis, Tuberculosis. Meningococcal disease. Zoonoses. Emerging infectious diseases. Travel health advice.	
Section IV. Epidemiology and Prevention of Non-Communicable Diseases	General epidemiology of chronic diseases. NCD prevention strategies. Know the main factors of risk and determine the main risk factors and determinants of NCDs. Disability and mortality.	



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Section V. Health protection. Environment and human health.

Environmental determinants.

Sanitary importance of water, waste and Environmental

pollution.

Sanitary surveillance of food. Health hazards and risks associated with food. Food safety. Food control. Food

poisoning and food poisoning.

Section VI. Health Education. Concepts and methods.

Health education in the health care.

Influence of lifestyle on health: nutrition, physical activity,

drugs, risk behaviors, accidents and violence.

Section VII. Health Promotion Determinants in relation to health.

Influence of Genetics in health. Growth, development and aging. Health and assistance programs.

Section VIII. Occupational Health Working conditions, determinants of health in the workplace

and and prevention of occupational hazards.

Occupational diseases



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Temporary organization of learning:

Block of content	Number of sessions	Hours
Section I. Introduction to Preventive Medicine	1,00	2,00
Section II. Health demography, Information systems and General Epidemiology	10,00	20,00
Section III. Epidemiology and Prevention of Communicable Diseases	10,00	20,00
Section IV. Epidemiology and Prevention of Non-Communicable Diseases	4,00	8,00
Section V. Health protection.	1,00	2,00
Section VI. Health Education.	1,00	2,00
Section VII. Health Promotion	2,00	4,00
Section VIII. Occupational Health	1,00	2,00

References

BASIC BIBLIOGRAPHY

·Piédrola Gil. Medicina preventiva y salud pública. 12 edition. Barcelona: Elsevier-Masson. 2016

ADDITIONAL BIBLIOGRAPHY

- ·Hernández-Aguado I, Lumbreras B. Manual de Epidemiología y Salud Pública para grados en ciencias de la salud. 3rd Edition. Madrid: Médica Panamericana. 2018.
 - ·Rothman, JK. Epidemiología Moderna. 6th ed. Madrid: Díaz Santos S.A; 1987
- ·Martínez Navarro, F et al. Salud Pública. Barcelona: McGraw-Hil-Interamericana; 1998 Rose, G.
 - ·La estrategia de la medicina preventiva. Barcelona: Masson;1994.
 - ·The Guide to Clinical Preventive Services. US Preventive Services Task Force (2022).

Available online: https://www.uspreventiveservicestaskforce.org/



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Addendum to the Course Guide of the Subject

Due to the exceptional situation caused by the health crisis of the COVID-19 and taking into account the security measures related to the development of the educational activity in the Higher Education Institution teaching area, the following changes have been made in the guide of the subject to ensure that Students achieve their learning outcomes of the Subject.

<u>Situation 1: Teaching without limited capacity</u> (when the number of enrolled students is lower than the allowed capacity in classroom, according to the security measures taken).

In this case, no changes are made in the guide of the subject.

<u>Situation 2: Teaching with limited capacity</u> (when the number of enrolled students is higher than the allowed capacity in classroom, according to the security measures taken).

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject will be made through a simultaneous teaching method combining onsite teaching in the classroom and synchronous online teaching. Students will be able to attend classes onsite or to attend them online through the telematic tools provided by the university (videoconferences). In any case, students who attend classes onsite and who attend them by videoconference will rotate periodically.

In the particular case of this subject, these videoconferences will be made through:

X	Microsoft Teams		
	Kaltura		



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Situation 3: Confinement due to a new State of Alarm.

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject, as well as the group and personalized tutoring, will be done with the telematic tools provided by the University, through:

Х	Microsoft Teams	
	Kaltura	
Explana	ation about the practical sessions:	
Las prá	cticas se gestionarán a través de casos que se resolverán a través de la plataforma	
UCV y I	a herramienta Microsoft Teams para tutorizar las mismas.	



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2. System for Assessing the Acquisition of the competences and Assessment System

ONSITE WORK

Regardii	ng the Assessment Tools:
	The Assessment Tools will not be modified. If onsite assessment is not possible, if will be done online through the UCVnet Campus.
X	The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated percentage	Description of the suggested changes	Platform to be used
Exámen tipo test	45	Pasará a evaluación test con un % otorgado del 85%	MOODLE
Preguntas abiertas	30	No habrán preguntas abiertas 0%	
Exposición Oral	5	0%	
Trabajo	5	0%	
Participación clase	5	Se mantendrá la posibilidad de realizar y evaluar trabajos por sesiones (clase) con un % otorgado del 5%	Plataforma UCV y Microsoft Teams
Prácticas	10	10%	Plataforma UCV y Microsoft Teams



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The other Assessment Tools will not be modified with regards to what is indicated in the Course Guide.

Comments to the Assessment System:

El resto de instrumentos de evaluación no se modificarán respecto a lo que figura en la guía docente.