

Radiology diagnosting imaging and radiotherapy techniques

INTEGRATED COURSE: ECONOMICS AND SOCIAL AND INTERNATIONAL POLITICS

SSD: MED/42, SECS-P/02/17, SECS-P/07

CFU: 9

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MODULE: General applied hygiene

SSD: MED/42

CFU: 3

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MODULE: Political Economy

SSD: SECS-P/02

CFU: 4

PROFESSOR: Federico de Andreis e-mail: federico.deandreis@unicamillus.org

MODULE: Business administration

SSD: SECS-P/07

CFU₂

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PREREQUISITES

Although there is no prerequisite, basic concepts of microbiology, statistics and epidemiology are necessary with particular reference to the transmission of microorganisms in the community and in the care structures.

LEARNING OBJECTIVES

Knowledge of the purposes of the health service and of the organizational models at international, national and local level are educational objectives.

Knowledge of the basic dynamics that regulate the functioning of the markets, with particular reference to the health services sector, are essential objectives. Students will have to acquire knowledge of the determinants underlying the design and implementation of economic policies and the relationships between health



and economic growth. Particular attention will be paid to the study of market failures and state intervention to reduce social costs resulting from these imperfections. Finally, the topic of cost benefit analysis will be discussed for the evaluation of public policies with particular reference to health planning. Introduce the student to the knowledge of business economics with reference to the public and private sector by inserting some thematic focus on health organizations

LEARNING OUTCOMES

knowledge and understanding

At the end of the course, the student will be able to use the knowledge acquired within his profession, in order to place his work in the global framework of the health system. It will also have the means to recognize the specific role of its professional profile in the organization and planning of healthcare intervention. Know the main elements of applied hygiene, public health and health promotion; describe the main methods of transmission of infections in the community and in the care facilities, know the elements of the epidemiological chain, know and describe the epidemiological methodologies applied to hygiene, describe the infections associated with assistance, know the prevention measures of infections associated with the assistance, describe the principles of sanitization, cleaning, disinfection, decontamination, antisepsis, sterilization, know the concepts of prophylaxis. Understand the role and objectives of economic policy. Describe the effects of information asymmetries, externalities and limited rationality. Know the main determinants of economic growth with particular reference to the role played by health protection policies. Know the characteristics of the main health systems. Know the basic elements of public policy assessments. Apply these elements to the context of the economic evaluation of health services. Know the business economy as a science that studies the business phenomenon and its multiple manifestations in civil society. Know the business circuits, operations, valuesand changes in value deriving from exchanges, at market and non-market conditions, between the company and the outside world. Know and know how to basically interpret the documents making up the financial statements of companies. Know the basic tools useful for management control (classifications and cost configurations.



Applying knowledge and understanding

At the end of the course, the student will be able to:

• Use the economic analysis to understand the international reality and the problems of the economic sector, evaluating the interventions aimed at improving the well-being of an economic and social nature.

communication skills

At the end of the course, the student will have to know how to use the acquired terminology with competence and appropriateness. Use specific scientific terminology appropriately and interpret results of an economic analysis

making judgements

At the end of the course, the student must be able to make general assessments on the topics covered. Carry out assessments relating to the economic sustainability of public programs with particular reference to health policies. Provide basic interpretations of a company's trend and economic health status.

COURSE SYLLABUS

GENERAL APPLIED HYGIENE

Introduction: concepts of health, hygiene and public health.

General applied hygiene and epidemiological tools: health of different populations and its determinants, in the community and healthcare settings. Descriptive epidemiology in general applied hygiene: prevalence and incidence studies, the concept of risk/hazard, and cause-effect relationship.

Hygiene applied to the epidemiology of infectious diseases: general concepts, epidemiological models of infectious diseases. Concepts of epidemic and endemic. Sources of infection, entry and elimination routes of microroganisms, epidemiological chain and transmission of infections. Principles of prevention and prophylaxis: primary, secondary and tertiary prevention. Prevention of infectious diseases: concepts of environmental hygiene, disinfection, antisepsis, sterilization, biological risk in the healthcare settings and ways of prevention.

Health organization and planning:

- principles and purposes of the health organization;



- models of organization of the health service;
- the hospital and non-hospital organization;
- health planning at regional, national and supranational level.

General and applied hygiene:

- the physical environment: air, water, soil, climate, ionizing radiation;
- the biological environment: microorganisms, food;
- the social environment: urbanization, housing;

Epidemiology:

- definition and purpose of epidemiology;
- experimental and general epidemiology of non-infectious diseases;
- overall health and health determinants.

Introduction to the course: concept of health, hygiene and public health

Hygiene and epidemiological tools: the health of the population and its determinants, in the community and care sector. Descriptive epidemiological measures of common use in applied hygiene: prevalence and incidence studies, the concept of risk and cause-effect relationship.

Hygiene applied to the epidemiology of infectious diseases: general concepts, epidemiological models of infectious diseases. Epidemic and endemic concept. Sources of infection, pathways of entry and elimination of microorganisms, epidemiological chain and transmission of infections.

Prevention and prophylaxis principles: primary, secondary and tertiary prevention.

Prevention of infectious diseases, concepts of environmental hygiene, disinfection, antisepsis, sterilization, biological risk in the care sector and its prevention

POLITICAL ECONOMY

- The markets for goods, preferences, utility, supply and demand
- Pareto efficiency and market failures: information asymmetries, externalities, moral harzard, adverse selection
- Agency report
- Relations between economy, development and health
- Welfare systems and health systems
- Demand and supply of health services
- The economic analysis of health programs
- Cost effectiveness, utility cost and benefit cost assessments
- Historical approach to international economic policy
- The market
- Supply and demand
- Development and underdevelopment
- Consumer preferences
- Economic analysis of risk management in healthcare systems.



BUSINESS ADMINISTRATION

Brief index of topics:

An Overview of Health Care Management Leadership Management and Motivation Organizational Behavior and Management Thinking Strategic Planning Healthcare Marketing Quality Improvement Basics Information Technology Financing Health Care and Health Insurance Managing Costs and Revenues Managing Health Care Professionals The Strategic Management of Human Resources Teamwork Addressing Health Disparities: Cultural Proficiency Ethics and Law Fraud and Abuse Special Topics and Emerging Issues in Health Care Management Health Care Management Case Studies and Guidelines

COURSE STRUCTURE

The module of SOCIAL AND INTERNATIONAL ECONOMY AND POLITICS is organized in lectures (90 hours) and theoretical-practical exercises. The lessons are held by projecting illustrative images (Power-Point) and through the use of paper material provided by the teacher

COURSE GRADE DETERMINATION

The exam is unique for the entire integrated course, it is not possible to take exam tests for the individual modules.

The acquisition of the expected learning outcomes will be assessed through a multiple-choice or open answers written test (30 questions). Those who have achieved a minimum score of 18/30 can access the oral exam to improve the grade. You can be postponed to the oral exam even if you have passed the written test.

The final exam grade will be calculated according to the following criteria:

Not suitable: Poor or lacking knowledge and understanding of the topics; limited capacity for analysis and synthesis, frequent generalizations of the requested contents; inability to use technical language.

- **18-20**: Just sufficient knowledge and understanding of the topics, with obvious imperfections; just sufficient capacity for analysis, synthesis and autonomy of judgment; poor ability to use technical language.
- **21-23**: Sufficient knowledge and understanding of the topics; sufficient ability to analyze and synthesize with the ability to reason with logic and coherence the required contents; sufficient ability to use technical language.
- **24-26**: Fair knowledge and understanding of the topics; discrete ability to analyze and synthesize with the ability to rigorously argue the required contents; good ability to use technical language



27-29: Good knowledge and understanding of the required contents; good ability to analyze and synthesize with the ability to rigorously argue the required contents; good ability to use technical language.

30-30L: Excellent level of knowledge and understanding of the required contents with an excellent ability to analyze and synthesize with the ability to argue the required contents in a rigorous, innovative and original way; excellent ability to use technical language

OPTIONAL ACTIVITIES

In addition to the theoretical teaching activity, some topics and case studies will be addressed with monographic insights.

READING MATERIALS

GENERAL AND APPLIED HYGIENE

readings made available to the teacher and all the material used during the lessons.

POLITICAL ECONOMY

readings made available to the teacher and all the material used during the lessons.

- Wondeling, Gruen, Black. Introduction to health economics. Understanding Public Health. 1st edition.
- Randy Charles Epping, A Begginers' Guide to the World of Economy, Third Edition, New York: Vintage, 2001)

BUSINESS ADMINISTRATION

Sharon Bell Buchbinder, Nancy H Shanks, (2017), Introduction to health care management, Jones & Bartlett

Learning, Burlington, Massachusetts.

Readings provided by the teacher as well as all the material used during the lessons