

<b>HEALTH ECONOMICS AND HEALTH CARE ORGANIZATION</b>	
<b>GENERAL INFORMATION</b>	
Course coordinator	Assistant Professor Ivan Miškulin, PhD
Assistant/Associate	Professor Maja Miškulin, MD, PhD Ivan Vukoja, MD, PhD Nika Pavlović, PhD Goran Zukanović, MD
Study Programme	Integrated undergraduate and graduate university study of Medicine
Status of the course	Mandatory
Year of study, semester	5 <sup>th</sup> year, 10 <sup>th</sup> semester
ECTS	<b>1</b>
Workload (hours)	Lectures (35); Seminars (10)
Expected number of students	70
<b>COURSE DESCRIPTION</b>	
<b>Course objectives</b>	
To enable students to understand and interpret the relationship between organisational and economic laws and the health care system, as well as to empower students to understand the organisational, as well as model of financing of the health care system and to critically evaluate the management process in health care. To introduce students to the process of assessing of the population health status and to enable them to valorise the planning process in health care and to assess the relationship between the health care system and other societal stakeholders that affect the health of the population.	
<b>Enrolment requirements and entry competencies</b>	
In accordance with the conditions for enrolment in the 5 <sup>th</sup> year of this study program.	
<b>Learning outcomes at the Programme level</b>	
<b>1.1., 2.1., 2.2., 2.3., 3.2., 3.3., 3.4., 3.5., 4.1., 4.2.</b>	
<b>Learning outcomes (5-10)</b>	
After the lectures, seminars, self-study and the passed exam students will be able:	
<ol style="list-style-type: none"> <li>1. To assess the relationship between organisational and economic laws and the health care system and to distinguish the purpose and objectives of the health care system.</li> <li>2. To argue the peculiarities of health management and the principles of health care and its level, to evaluate the meaning and importance of teamwork and communication in the context of the health care implementation process, to critically judge the health care management process and its specifics, to interpret the health evaluation process and the system for the health care quality insurance and improvement.</li> <li>3. To interpret population health indicators, population health assessment procedures, health care measures and medical technology, and to critically evaluate the relationship between medical technology and health care organization.</li> <li>4. To critically judge the basic elements of the health care organisational and financing models and the basic health care financing systems in modern countries.</li> <li>5. To valorise the health planning process and the concept of health care rationalization, to critically judge the basic elements of the health system and its functioning, and to evaluate partners in the health system and their roles and significance.</li> <li>6. To determine the health needs of particularly vulnerable population subgroups and to distinguish between organizational and legislative frameworks of the health system response to those needs.</li> </ol>	

7. To assess the relationship between the health care system and local and regional self-government, to critically judge the relationship between civil society organizations and the health care system, to evaluate the relationship between the Croatian Red Cross and the health care system, to argue the role of various professional organizations in the health care system and a role and functioning of the Ministry of Health of the Republic of Croatia and to distinguish the specifics of running private medical offices and to anticipate the specifics of health care in emergencies.

8. To evaluate the peculiarities of health insurance in the Republic of Croatia, to judge the organization, scope of work and roles of the community nursing service, as well as the organization, role and scope of work of state health institutes and public health institutes.

## Course content

### Lectures

Introduction to health economics, health management and organization of the health care. Economic laws and health care. Economics. Management. Health need. Peculiarities of health management. Contents of health economics. Laws of the market. Evaluating health cost-effectiveness. Health management. Health management and leadership cycle.

The assessment of the health status of the population. Reasons for evaluation. Population health indicators. Procedure for assessing the health status of the population. A method of rapid assessment of community health needs and improvement of community health.

Health care measures and medical technology. Principles, goals and levels of health care. Health care measures - conceptual definition and subtypes, strategic and basic goals of health care measures. Medical technology - conceptual definition, types and forms, choice of appropriate technology. Relationship between medical technology and health care organization.

Health planning. Health planning process. Hierarchy of human needs. Health needs. Health requirements. Health planning with regard to time. Health planning with respect to the place of planning. Orientation of planning. Technical basis for planning. Evaluation. Rationalization in health care. Rationalization. Rationing. Health care cost analysis - basic criteria. QALY, DALY. Standards. Algorithms. Protocol. Recommendations. Guidelines.

Health care organization. Health care. Basic elements of the health care system - service providers, service users, paying intermediary. Functioning of the health system. Partners in the healthcare system. Purpose and goals of the health care system. Health system levels. Health institutions and organizations.

Health care financing. The fundamental problem of modern health systems. Efficiency and fairness as basic criteria for evaluating the manner of the health care financing. Basic elements of the health care financing model. Basic functional relationships between actors in the health system - revenue collection, pooling of funds, buying or paying for care, providing care. Basic health care financing systems in modern countries - state funding through taxes, social health insurance, private health care financing, personal medical savings accounts, direct payment of health care.

Implementation of health care. Activities and associates in health care. Teamwork in health care. Communications in health care - message and subjects, transmission pathways, interpersonal framework, public communications, verbal and nonverbal communication, interference (noise) in message transmission, listening. Organization - purpose, structure, reward, management, conflicts, intervention.

Management in health care. Team mode of working - types, advantages, disadvantages, mode of deciding in a team, leading a team. Formal and informal organization. Communication and cooperation. Motivation, money, responsibility and career. Personnel management procedures. Entrepreneurship in healthcare.

Evaluation in healthcare. Reasons for evaluation. Complexity and role of evaluation. Order of values and interests of participants. Three levels of evaluation. The moral essence of value differences. The role of the medical doctor. Professional evaluation issues. Forms of evaluation. Contemporary tendencies. Peculiarities of evaluation in primary health care. The importance of the role of professional organizations.

Quality: assessment, control, insurance and professional supervision in the health sector. Quality of health work. Approaches to health care quality assessment - structure, processes, outcome. Quality improvement - assessment, control and quality assurance. Professional supervision. Standards and norms.

Social and health policy. Political system. Principles of social ethics. Social policy. Social policy measures. Today's social policies in Europe. Health policy.

Local and regional self-government and the health system. Introduction to the role, scope of work and organizational structure of organizational units of local and regional self-government in charge of health in the city of Osijek and Osijek-Baranja County.

Professional organizations in the health care system. Croatian Medical Chamber. Croatian Chamber of Nurses. Croatian Chamber of Pharmacists. Croatian Medical Association and its professional societies and their role in the health system of the Republic of Croatia.

Health insurance in the Republic of Croatia. Basic health insurance. Supplementary health insurance. Private health insurance.

Ministry of Health of the Republic of Croatia. Organization of the ministry, scope of work, legislative framework.

State Health Institutes. Croatian Institute of Emergency Medicine. Croatian Institute for Public Health. Croatian Institute of Toxicology and Anti-Doping. Croatian Institute of Transfusion Medicine. Croatian Institute of Telemedicine. Croatian Institute for Health Insurance. Croatian Institute for Health Protection and Safety at Work.

Quality of health care in the Republic of Croatia. Agency for Quality and Accreditation in Health and Social Welfare. Law on the Quality of Health Care and Social Welfare. Quality standards. Quality indicators according to the type of the health care providers. Data collection system. Quality assurance system in the Clinical Hospital Center Osijek. Quality assurance system in the Teaching Institute for Public Health of the Osijek-Baranja County. Quality assurance system in the Osijek Health Center.

Running the business of the private medical practices. The function of the medical doctor. Purchase. Maintenance of the premises and equipment. Organization of the private medical practice. The accounting function. The human resource function. Specifics of individual private medical practices - private practice in family medicine, private practice in gynaecology and obstetrics, private practice in dental medicine.

Emergency health care. Review and systematization of emergencies. Emergency protection measures. Organization of health care in emergencies in the Republic of Croatia. Humanitarian aid in disasters.

### **Seminars**

Croatian Red Cross and the health care system. Introduction to the organization, scope of work and activities of the Red Cross Society of Osijek-Baranja County and the Society of the Red Cross of the City of Osijek aimed at preserving and improving the health of the population.

Health needs of particularly vulnerable population subgroups. Small children. Pregnant and breastfeeding women. Persons with disabilities. People with special needs. Elderly persons - organizational and legislative framework for responding to the health needs of the mentioned population subgroups in the Republic of Croatia.

Civil society organizations and the health system. Introduction to the organization and scope of work of civil society organizations operating in the field of health in the city of Osijek and Osijek-Baranja County and their role and importance in health promotion and disease prevention.

Community nursing service and health. Introduction to the organization and scope of work of the community nursing service in the city of Osijek and Osijek-Baranja County and its role in the promotion and improvement of health and disease prevention.

Institutes of Public Health and Population Health. Introduction to the structure, scope of work and activities of the Teaching Institute for Public Health of the Osijek-Baranja County in the promotion and improvement of health and disease prevention.

#### Mode of teaching

Lectures; Seminars.

#### Student obligations

Attending all types of classes is mandatory and the student is required to participate in all types of knowledge assessment. The student can be justifiably absent from 30% of each type of classes.

#### Monitoring student work (*Connectivity of learning outcomes, teaching methods and grading*)

Teaching activity	ECTS	Learning outcome	Student activity	Assessment methods	Grade points	
					Min.	Max.
Attending classes	0.1	1-8	Attendance at classes	Record	2	4
Seminars	0.3	6-8	Attendance and active participation in seminars by preparing a seminar presentation	Assessment of the quality of the seminar presentation	18	36
Final exam	0.6	1-8	Learning for the written exam	Written exam	30	60
<b>Total</b>	<b>1.0</b>				<b>50</b>	<b>100</b>

*Evaluation of the final exam:*

Percentage of accurate answers provided (%)	Grade points
60.00-64.99	30
65.00-69.99	35
70.00-74.99	40
75.00-79.99	44
80.00-84.99	48
85.00-89.99	52
90.00-94.99	56
95.00-100.00	60

*Calculation of final grade:*

The grade points accumulated during the classes will be added to the points achieved at the final exam. The grading will be done by absolute distribution, i.e. on the basis of the final results, and it will be compared to the numerical system in the following manner:  
 A – Excellent (5): 90-100 grade points; B – Very Good (4): 80-89.99 grade points; C – Good (3): 70-79.99 grade points; D – sufficient (2): 60-69.99 grade points; E – sufficient (2): 54.99 -59.99 grade points.

**Required reading (available in the library and through other media)**

Title	Number of copies in the library	Availability through other media
1. Šogorić S. Health care organization and health economics (in Croatian). Medicinska naklada, Zagreb, 2016.	14	

**Additional reading**

2. Kovačić L. Organization and management in health care (in Croatian). Medicinska naklada, Zagreb, 2003.
3. Legal acts that regulate the issues of the subject area in the Republic of Croatia.
4. Published recent scientific research in the subject area.

**Course evaluation procedures**

An anonymous, quantitative, standardised student survey on the course and the teacher's work implemented by the Office for Quality of the Faculty of Medicine Osijek.

**Note /Other**

E-learning is not within the standard amount of the classes, but it is used in teaching and contains links to various pages, videos and audio materials available on the web pages.