INTRODUCTION TO MEDICAL INFORMATICS	
GENERAL INFORMATION	
Course coordinator	Associate Professor Krešimir Šolić, PhD
Assistant/Associate	Assistant Professor Mirko Pešić, PhD Kristina Kralik, MSc
Study Programme	Integrated undergraduate and graduate university study of Medicine
Status of the course	Mandatory
Year of study, semester	2nd year, 3rd semester
ECTS	**1**
Workload (hours)	Lectures (10); Seminars (5), Exercises (15)
Expected number of students	70
COURSE DESCRIPTION	
Course objectives	
To get students familiar with the health information and communication computer system's technical basis and the way of functioning. To train them for independent and safe advanced use of the computer software tools and the Internet technologies.	
Enrolment requirements and entry competencies	
None required.	
Learning outcomes at the Programme level	
2.1., 2.2., 2.3., 3.4., 3.5., 4.2.	
Learning outcomes (5-10)	
After listening to lectures, exercises, independent learning and passing the exam, students will be able to: 1. Explain the basics of structure and functioning, and the state of development of the health care information systems in Republic of Croatia. 2. Properly interpret health care data and health care information. 3. Self-assess the riskiness of their behaviour in terms of data protection and privacy protection. 4. Format the document according to some predefined instructions. 5. Create interactive tables and graphical data reports. 6. Create a good quality digital presentation on a predefined topic. 7. Construct a decision tree independently.	
Course content	
Lectures: P1. Basic medical informatics concepts, historical development. P2. Organization and structure of data in medicine and health care, data protection. P3. Health care information systems. P4. Medical record. P5. Decision making rules and procedures in medicine. Seminars: S1. Privacy protection in health care systems. S2. Biomedical information systems. S3. Presentation of students' seminars with discussion. Exercises: V1. Advanced features of the word processing program. V2. Advanced usage of the spreadsheet program.	

V3. Creating a good quality digital presentation.
V4. Basics of databases.
V5. Decision-making procedures.

Mode of teaching

Lectures, seminars, Exercises

Student obligations

Attendance at all forms of classes is mandatory. A student may justifiably miss 30% of classes.

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

Teaching activity	ECTS	Learning outcome	Student activity	Assessment methods	Grade points	
					Min.	Max.
Class attendance	0.1	1 – 7	Class attendance	Class record	5	10
Seminars	0.3	4 – 6	Preparation of the seminar through teamwork and presentation of the report	Compliance of the report with the instructions and presentation	15	30
Final exam	0.6	3 – 5	Independent work	Written exam	30	60
Ukupno	**2**				50	**100**

Calculation of final grade:
To students who achieved 30 or more points in the final exam points earned during the course are added. The evaluation is performed by absolute distribution, i.e. on the basis of the final achievement and is compared with the numerical system as follows:
A - excellent (5): 90-100 points; B - very good (4): 80-89.99 points; C - good (3): 70-79.99 points; D - sufficient (2): 50-69.99 points.

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

Title	Number of copies in the library	Availability through other media
Kern J, Petrovečki M, editors. Medicinska informatika. Zagreb: Medicinska Naklada; 2009.	12	
Velki T, Šolić K, editors. Izazovi digitalnog svijeta, Fakultet za odgojne i obrazovne znanosti; 2019.	-	University's digital repository
Teaching materials of the course leader		Merlin e-learning system

Additional reading

1. Štefanović, M, editor. Laboratorijska informatika s odabranim područjima medicinske informatike, Hrvatska komora medicinskih biokemičara; 2017.
2. Coiera E. Guide to Health Informatics. London: Arnold; 2003.
3. Shortliffe E, Cimino JJ, urednici. Biomedical Informatics: Computer Applications in Health Care and Biomedicine. New York: Springer; 2006.

Course evaluation procedures

Anonymous, quantitative, standardized student survey on the subject and work of teachers conducted by the Office for Quality of the Medical Faculty Osijek.
Note /Other
E-learning is not included in the norm of course hours, but is used in teaching and contains teaching materials of the course leader, links to various pages, video and audio materials available on the Internet.