



**UČNI NAČRT PREDMETA / SUBJECT SPECIFICATION**

<b>Predmet:</b>	Izbrane vsebine in novosti v medicinski informatiki
<b>Subject Title:</b>	Selected topics and novelties in medical informatics

Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
Splošna medicina General medicine - EMŠP		2	4

Univerzitetna koda predmeta / University subject code:

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. vaje Labor work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
5	40				45	3

Nosilec predmeta / Lecturer:

Jeziki / Languages:   
 Predavanja / Lecture:  
 Vaje / Tutorial:

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:

Prerequisites:

Vsebina:

Content (Syllabus outline):

Medicinska informatika, izbrana poglavja:

- Informacijski sistemi v medicini,
- Uporaba slik in grafike v medicini,
- Odločitveni sistemi v medicini,
- Inteligentni sistemi v medicini.

Bioinformatika, izbrana poglavja:

- Razmerje z medicinsko informatiko
- Informacijske tehnologije in metode za reševanje problemov v biologiji in medicini
- Informacijske aplikacije v bioinformatiki

Telemedicina, izbrana poglavja:

- telezdravstvo, telenega, telenadzor, telekonzultacije
- Praktični primeri (teledermatologija, telekirurgija, telepatologija, telekardiologija...)

Medical informatics, selected chapters:

- Information systems in medicine
- Pictures and graphics in medicine
- Decision support systems in medicine
- Intelligent systems in medicine

Bioinformatics, selected chapters:

- Relation to medical informatics
- computer-based techniques for solving biological and medical problems
- Information technology applications in bioinformatics

Telemedicine, selected chapters:

- Telehealth, telecare, telecontrol, teleconsultations
- Practical applications (teledermatology, telesurgery, telepatology, telecardiology)

## Temeljna literatura in viri / Textbooks:

### Obvezna literatura:

- Edward H. Shortliffe, James J. Cimino: *Biomedical Informatics*, Springer USA, 2006
- Latifi Rifat, *Telemedicine* (to be published in 2008)

### Dopolnilna literatura:

- Efraim Turban, et al: *Introduction to Information Technology*, 2001.
- Joan M. Kiel (ur.): *Information Technology for the Practicing Physician (Computers in Health Care)*, New York, 2000.
- Jeffrey C. Bauer, Marc A. Ringel: *Telemedicine and the Reinvention of Healthcare*, McGraw Hill, 1999.
- A. Hasman: *Handbook of Medical Informatics*, Springer, 1998.

### Cilji:

Študent se bo na podlagi osnovnih znanj poglobil v nekatera od naštetih poglavij medicinske informatike z namenom globljšega razumevanja in obvladovanja le-teh.

### Objectives:

The student will deepen the knowledge of the selections of listed medical informatics chapters in order to better understand and be able to utilize the acquired knowledge.

### Predvideni študijski rezultati:

Znanje in razumevanje:

Po zaključku tega predmeta bo študent:

- Razumel in poznal področja medicinske informatike, bioinformatike in telemedicine.
- Znal uporabljati določene aplikacije iz naštetih področij.

Prenosljive/ključne spretnosti in drugi atributi:

- Samostojno delo z računalnikom
- Uporaba računalniških programov in informacijske tehnologije
- Sposobnost iskanja podatkov

### Intended learning outcomes:

Knowledge and Understanding:

On the completion of this course the student will:

- Understand and be acquainted with the basics of medical informatics, bioinformatics and telemedicine.
- Be able to use the applications from the listed chapters.

Transferable/Key Skills and other attributes:

- Autonomous work with the computer
- Use of computer applications and information technology
- Ability to search for the information

### Metode poučevanja in učenja:

- Seminar
- E-izobraževanje
- predavanje

### Learning and teaching methods:

- seminar,
- e-learning
- predavanje

### Načini ocenjevanja:

Način (ustno izpraševanje, projekt)

- Seminar
- Ustni zagovor

Delež (v %) /

Weight (in %)

### Assessment:

Type (oral examination, project):

- Seminar
- Oral test

	50	
	50	