



Table 2

3.2. Course description

| Basic description | | |
|---------------------------|--------------------------------------|--------|
| Course coordinator | Doc. dr. sc. Gordana Brumini | |
| Course title | Medical informatics | |
| Study programme | Clinical nutrition graduated study | |
| Course status | compulsory | |
| Year | First | |
| ECTS credits and teaching | ECTS student 's workload coefficient | 2,5 |
| | Number of hours (L+E+S) | 6+10+4 |

| 1. COURSE DESCRIPTION | | |
|---|---|---|
| 1.1. Course objectives | | |
| To provide knowledge and skills necessary for understanding and using information technology in nursing i.e. medical decision support, medical knowledge bases and medical knowledge acquisition, database management; and to understand fundamentals of nursing informatics and its role and importance in health care improvement and continuous education. | | |
| 1.2. Course enrolment requirements | | |
| - | | |
| 1.3. Expected course learning outcomes | | |
| Knowledge and basic skills on useful and responsible usage of information and communication technology in nursing. Medical database management. Knowledge on networking and medical knowledge acquisition. Competence in medical classification and coding systems. Knowledge and basic skills on useful and responsible usage of information and communication technology in medicine. | | |
| 1.4. Course content | | |
| Applications and procedures in medical informatics. Coding and Classification. The electronic health record. Patient-centered and institutional information systems. Biosignal and image processing and analysis. Database management. Medical knowledge bases and medical knowledge acquisition. Health information resources. Evidence based medicine. Decision support — predictive tools for clinical decision support. Models and computer modeling in health care. Security, confidentiality and data integrity in medical information systems. | | |
| 1.5. Teaching methods | <input checked="" type="checkbox"/> lectures <input checked="" type="checkbox"/> seminars and workshops <input checked="" type="checkbox"/> exercises <input type="checkbox"/> long distance education <input type="checkbox"/> fieldwork | <input checked="" type="checkbox"/> individual assignment <input checked="" type="checkbox"/> multimedia and network <input type="checkbox"/> laboratories <input type="checkbox"/> mentorship <input type="checkbox"/> other |
| 1.6. Comments | | |
| 1.7. Student's obligations | | |
| <ul style="list-style-type: none"> - class attendance - to prepare seminar paper and to present it in public | | |



1.8. Evaluation of student's work

| | | | | | | | |
|-------------------|----|---------------------------|----|---------------|----|-------------------|--|
| Course attendance | 11 | Activity/Participation | | Seminar paper | 16 | Experimental work | |
| Written exam | 30 | Oral exam | | Essay | | Research | |
| Project | | Sustained knowledge check | 43 | Report | | Practice | |
| Portfolio | | | | | | | |

1.9. Assessment and evaluation of student's work during classes and on final exam

Students are continually evaluated (seminars and exercises) and during the course they can collect 70% of the whole amount of ECTS points (exercises, seminars, presentation of seminar). During the final exam student can collect 30% of course ECTS points.

1.10. Assigned reading (at the time of the submission of study programme proposal)

Kern J; Petrovečki M (ed.). Medicinska informatika. Zagreb: Medicinska naklada, 2009.

1.11. Optional / additional reading (at the time of proposing study programme)

1. Bemell JH, Musen MA. Handbook of Medical Informatics. Houten/Diegem Springer, 1997.
2. Coiera E. Guide to Health Informatics. Arnold publishers; 2003.
3. Shortliffe EH, Perreault LE (ed.). Medical informatics – Computer Applications in Health Care and Biomedicine. Springer, 2001.
4. Selected chapters written by teachers presented on Departments' web pages (<http://mi.medri.hr>)

1.12. Number of assigned reading copies with regard to the number of students currently attending the course

| <i>Title</i> | <i>Number of copies</i> | <i>Number of students</i> |
|---|-------------------------|---------------------------|
| Kern J; Petrovečki M (ed.). Medicinska informatika. Zagreb: Medicinska naklada, 2009. | 30 | 30 |
| | | |
| | | |
| | | |

1.13. Quality monitoring methods which ensure acquirement of output knowledge, skills and competences

Student's knowledge, skills and competencies are continually evaluated during the course of Medical informatics. Evaluation system is implemented through the grade points. Students can collect a maximum of 100 grade points (70 during classes and 30 on the final exam) during the course.

The course consists of 10 hours of seminars (max. 24 points) and 10 hours of exercises (max. 35 points). Maximum of 11 points is possible to collect for class attendance. At least 40 points must be collected to earn the right to access the final exam.

Final exam is formed as written test. It consists of 15 questions, a total of 30 grade points. Student will pass the exam if he answers correctly to at least 8 questions e.g. collected 16 grade points.

Grade points achieved in the class and at the exam are combined and they form final grade.