Approved
by the meeting of the Council of the Faculty of Medicine No.2
Minutes No. 6
of 17.06.2014

Approved
by the meeting of the Department of Social Medicine and Sanitary Management "Nicolae Testemiţanu".
Minutes No. 4 of 01.04.2014

Dean of the Faculty of Medicine No.2
PhD, associate professor
M. Beţiu

Head of the department,
PhD, professor
D. Tintiuc

SYLLABUS FOR THE STUDENTS OF THE

FACULTY OF MEDICINE NO. 2

Name of the course: **Medical Information System**

Code of the course: **S.11.A.108**

Type of course: **Optional subject**

Total number of hours – 20

including course 10 hours, practical work 10 hours

Number of credits provided for the course: 1

Lecturers who teach the course:

PhD, lecturer Raisa Puia

Chisinau 2014

I. Aim of the discipline

Training and deepening of basic notions in the field of application of information technologies and familiarity with computer systems, used in medical practice in hospitals and primary health care institutions. Acquirement of knowledge necessary when using the modern information systems in medical practice, assimilation of some theoretical elements of the requirements for the computer systems used in practical work with patients. Use of information technologies as support for health and care activities.

II. Objectives obtained in teaching the discipline

At the level of knowledge and understanding

- to be familiar with the fundamental concepts of operation of the information systems in medicine;
- to develop a clear and coherent vision, able to manage the information about the treatment of patients with the help of the computer;
- to be familiar with the principles, technology, method and techniques used in the computer systems;
- to understand the correlation between the components of information systems of different levels applied in the process of treatment of patients and collecting statistical data for various purposes of health management;
- to conceive the possibilities of analysis and interpretation of the data accumulated in the computer systems, electronic patient record and restrictions on use of computers in medical practice.

At the level of application

- to be familiar with the context of notions, theoretical and practical models of the use of information systems in medicine;
- to apply the techniques and computer-aided methods in the treatment of patients;
- to demonstrate the ability of evaluation and analysis, interpretation and presentation of the results supplied by the computer;
- to apply the basic knowledge about the information technologies necessary to understand the operation of the information systems in medicine;
- to possess the language and terminology used in the field of information systems;
- to be able to use the techniques of working with the computer systems of the medical institution in which the future physician will work.

At the level of integration

- to appreciate the possibilities of the computer systems in medical institutions;
- to understand the integration of the computer systems that are used in the treatment of patients, classification of the data sought in the large databases, data transmission in the networks within the health systems management.

III. *Provisional terms and conditions*

The use of information systems in health is an interdisciplinary field that requires a broad spectrum of knowledge both in the field of medicine and in the field of use of information technologies. They allow the integration of the knowledge acquired by studying the basic and applied disciplines. The use of computer systems is necessary in order to carry out treatment activities in compliance with medical standards. Being a discipline of integration, it correlates with disciplines that use computers in medicine. For a more efficient assimilation of the discipline, it is required knowledge in the field of fundamental and applied medical disciplines, as well as computer work habits is an indispensable requirement.

IV. *Main theme of the course*

A. *Lectures:*

No.	Theme	Hours
1.	General notions about information technologies. Operation of the computer and peripheral network devices. Networking with Windows operating system.	2
2.	Health systems. Definitions, generalities. Health Information Management and System.	2
3.	Hospital information systems.	3
4.	Information systems for primary medicine.	3

B. *Practical lessons:*

No.	Theme	Hours
1.	HIPOCRATE Information System (European Soft Company).	2
2.	Information system Hospital Manager Suite (Info WORLD).	2
3.	Information system Hospital Manager SCH for hospitals.	2

4.	Information System Health Manager SCH in primary medicine.	2
5.	Information system Medex-2.	2

IV. Recommended literature:

A. Compulsory:
1. Tintiuc Dumitru, Grosu Iu., (2007) Public Health and Management. Chisinau, 875 p.

B. Additional
1. Purcarea Victor Lorin – Hospital Information System Management, University Publishing House "Carol Davila", 2007 Bucharest
2. Bolun Ion, Covalenco Ion – Bases of Applied Informatics, ASEM Publishing House, Chisinau, 2006.
3. Evaluation of health information systems in the Republic of Moldova, Chisinau, 2007, http://www.who.int/healthmetrics
4. http://www.scritube.com/Medicina/Sistemul-informational-si-relational-in-medicina-de-familie

VI. Teaching and Learning Methods

Both classical methods and those considered today to be more effective for university education are used for more effective learning of the discipline "Medical Information System": synthetic learning method, analytic or sequential learning method, progressive learning method with recurrent repetitions. Forms of teaching being: hearing, formation of skills during computer-assisted practical lessons.

VII. Suggestions for individual activity

In the context of European integration of the university education, where the proportion of the individual activity of the student is the dominant one, the individual activity in the learning process that gains more importance. Thus, as suggestions for studying the subject "Information systems in medicine" can be proposed:

1. Fragment or divide the material into logical, unitary and compact study units.

2. Learn each study unit established according to the integral education model, namely follow the steps below:

- integral reading of familiarization with the content of the text,

- a second reading for thorough understanding of the text,

- a third reading for taking notes,

- a repetition in the presence of extracted notes, followed by a last repetition in memory.

This active processing of the material provides an in-depth memorizing and long-term remembering of the information.

VIII. Methods of assessment

The discipline "Medical Information System" is provided with final assessment, which is carried out in the form of oral examination.
The oral examination is carried out by giving each student a question card that contains three theoretical questions. The student has 15 minutes in order to prepare the answer.
The oral examination is assessed with "passed" or "failed".

Absence on examination without good reason is recorded as "absent" and is equivalent to 0 (zero). The student has the right to re-take the exam twice.

IX. Language of study

Romanian, English, French, Russian