



CD 8.5.1 DISCIPLINE CURRICULUM

Edition: 06

Date: 20.09.2017

Page. 1/6

FACULTY OF MEDICINE

STUDY PROGRAM 0912.1 MEDICINE

Nicolae Testemitanu Chair of Social Medicine and Health Management

APPROVED

at the meeting of the Commission for Quality Assurance and Evaluation of the Curriculum faculty Medicine

Minutes No. 6 of 22.02.18

Chairman, PhD, associate professor

Suman Serghei

(signature)

APPROVED

at the Council meeting of the Faculty Medicine no. II

Minutes No. 4 of 20.09.17

Dean of Faculty, PhD, associate professor

Bețiu Mircea

(signature)

APPROVED

approved at the meeting of the chair Nicolae Testemitanu Social Medicine and Health Management

Minutes No. 6 of 15.01.2018

Head of chair, PhD, professor,

Tintiuc Dumitru

(signature)

SYLLABUS

DISCIPLINE THE HISTORY OF MEDICINE

Integrated studies

Type of course: **Free choice discipline**

Chisinau, 2018



CD 8.5.1 DISCIPLINE CURRICULUM

Edition: 06

Date: 20.09.2017

Page. 2/6

I. INTRODUCTION

- **General presentation of the discipline: place and role of the discipline in the formation of the specific competences of the professional / specialty training program.**

The history of medicine is an area of study that focuses both on the evolution of medicine as a science and on the various personalities that have contributed to its development. The history of medicine, as an element of general and professional culture, contributes to the professional and intellectual training of the physician. Understanding the historical path of medical practice and research provides a key to integrating students into the current and proactively positioning them towards the challenge of the future medicine. The knowledge of great personalities in the history of medicine and their achievements provides a key to motivating students on a professional level and deciding them for the highest deontological values. The content of the course is correlated with students' level of education, similar to other European universities with up-to-date information, and represents the necessary baggage of knowledge in order to know the history of medicine at international level.

- **Mission of the curriculum (aim) in professional training:**

Knowledge and understanding of the origins and evolution of medical practice and science from a historical perspective. Acquiring the basics of medical culture: the stages of universal medicine development, biomedical doctrines, their personalities and contributions.

- Language (s) of the course: English, French.
- Beneficiaries: students of the I year, faculty Medicine II.

II. MANAGEMENT OF THE DISCIPLINE

Code of discipline		Free choice discipline	
Name of the discipline		The History of Medicine	
Person(s) in charge of the discipline		Obreja G., Penina O., Raevschi E.	
Year	I	Semester/Semesters	I
Total number of hours, including:			60
Lectures	10	Practical/laboratory hours	12
Seminars	13	Self-training	25
Clinical internship			
Form of assessment	CD	Number of credits	2

III. TRAINING AIMS WITHIN THE DISCIPLINE

At the end of the discipline study the student will be able to:

- **at the level of knowledge and understanding:**
 - Prerequisites and stages of development of human medicine from origins to the present;
 - The most important milestones in the history of various preclinical, medical and surgical specialties;
 - Principles of the development of medicine in different time periods;
 - The particularities of the development of each age and its significance in the evolution and progress of medicine.
 - Scientific medical science schools, their conceptions and role in the development of medicine;
 - The most outstanding personalities who have made important contributions to the progress of medicine;
 - Achievements of renowned scholars in correlation with the evolution of medical sciences.
- **at the application level:**
 - Development of skills in the elaboration of scientific papers on the evolution of medical conceptions, disciplines and events;
 - Development of verbal and written communication skills by drawing up and presenting reports on the life and activity of outstanding personalities in the field;
 - Create a PowerPoint presentation on the history of medicine and its public support.
- **at the integration level:**
 - To integrate knowledge in the history of medicine with the clinical ones;
 - To apply the knowledge acquired for the realization of the personal scientific researches within the bachelor's thesis, the University Days and as a future doctor-clinician and young researcher.



CD 8.5.1 DISCIPLINE CURRICULUM

Edition: 06

Date: 20.09.2017

Page. 3/6

IV. PROVISIONAL TERMS AND CONDITIONS

1. Language requirements (intermediary level);
2. Basic computer skills (MS Office Word, EXCEL, PowerPoint);
3. Ability to work in a team;
4. Non-work related activities are strictly forbidden, disconnected mobile phones;
5. Lateness is not tolerated.

V. THEMES AND ESTIMATE ALLOCATION OF HOURS

Lectures, practical hours/ laboratory hours/seminars and self-training

Nr. d/o	THEME	Number of hours		
		Lectures	Practical hours	Self-training
1.	The place of history of medicine between medical sciences and its role in training in the professional and intellectual training of the doctor.	1	1	-
2.	Prehistoric and Ancient Medicine. Medical Sciences in Greece and Ancient Rome.	1.5	5	5
3.	Medieval medicine.	1.5	4	5
4.	The Medicine of Rebirth and Enlightenment.	2	5	5
5.	Modern medicine.	2	5	5
6.	Postmodern medicine. Main Trends and Challenges Facing Medicine in the Postmodern Age.	2	5	5
Total		10	25	25

VI. REFERENCE OBJECTIVES OF CONTENT UNITS

Objectives	Content units
Theme (chapter) 1. <u>Medicine before 1800: primitive medicine, ancient, medieval medicine of rebirth and enlightenment</u>	
<ul style="list-style-type: none"> - <i>To define</i> the main stages of the evolution of science and medical practice from a historical perspective. - <i>To know</i> the most outstanding personalities and their contributions to ancient, medieval, renaissance and enlightenment medicine; - <i>To demonstrate</i> the knowledge of the most important discoveries in the medical sciences in the Renaissance and Enlightenment era - <i>To apply</i> knowledge in the field of medical development up to 1800 to understand basic concepts in medicine; - <i>To integrate</i> advances in medical practice and science with public health and today's medicine. 	<ol style="list-style-type: none"> 1. Introduction. Methods of approach in the study of medicine history. Methods of study. 2. Archaic and primitive medicine; 3. Ancient Medicine: Egypt, Mesopotamia, India, China; 4. Greek Ancient Medicine. Hypocratic medicine. Hellenic medicine. Alexandrina School; 5. Medicine in the Roman Empire. Galen; 6. Middle Age Medicine: Medicine in the Christian World; medicine in the Arab-Muslim world; 7. Medicine in the Renaissance (XIV-XVII). Historical and cultural conditions. Developing medical sciences. Anatomists. Major epidemics; 8. Medicine in the Age of Enlightenment (XVIII).
Theme (chapter) 2. <u>Developing medical sciences in the XIXth century (modern medicine)</u>	



CD 8.5.1 DISCIPLINE CURRICULUM

Edition: 06

Date: 20.09.2017

Page: 4/6

Objectives	Content units
<ul style="list-style-type: none"> - <i>To define</i> the particularities of the development of medicine in the sec. XIX; - <i>To know</i> the most important discoveries in the era of modern medicine; - <i>To demonstrate</i> the knowledge of the most outstanding personalities of the modern medicine era and their contribution to the progress of medicine; - <i>To apply</i> modern medical knowledge in research and clinical activity; - <i>To integrate</i> progress in the medical practice and science of the sec. XIX with the current public health and medical challenges. 	<ol style="list-style-type: none"> 1. The beginnings of experimental medicine. The foundation and development of physiology. Creating the concept of "Cell Pathology"; 2. Fundamental discoveries in the world of microorganisms. Development of Microbiology. Verification of germ theory. Pioneers of bacteriology. 3. Important advances in the diagnosis and treatment of diseases. Introduction of narcosis and anesthesia. Introducing the stethoscope. Discover X-rays and radios; 4. Major discoveries at the end of the nineteenth century: the foundation of parasitology, preventive medicine, psychiatry.

Theme (chapter) 3. Medicine and surgery in the 20th and early 21st century (postmodern medicine)	
<ul style="list-style-type: none"> - <i>To define</i> the premises and peculiarities of the development of medicine in the sec. XX; - <i>To know</i> the most outstanding personalities and scientific medical schools in the postmodern medicine era; - <i>To demonstrate</i> the understanding of the correlation between the progress of XXth century medicine and the evolution of demographic processes in the world; - <i>To apply</i> the knowledge in the field of postmodern medicine history in research and clinical activity; - <i>To integrate</i> advances in medical practice and science with current health challenges in the population. 	<ol style="list-style-type: none"> 1. Infectious diseases and chemotherapy. Ehrlich and arson. Sulphonamide. Detection of antibiotics: penicillin, antituberculous preparations, other antibiotics. The problem of antibiotic resistance in contemporary medicine. Development of tropical medicine (malaria, yellow fever, leprosy); 2. Immunology. Historical chronology of vaccination against infections caused by bacteria and viruses. Spanish influenza from 1918-1919. Construction of an electronic microscope; 3. Development of cell biology. New discoveries in physiology and biochemistry. Biomedical engineering. 4. Endocrinology. Discovery of insulin and cortisone. Sex hormones and contraceptive pills. Nutrition and vitamins. 5. Progressions in the diagnosis and treatment of neoplasms. Development of chemotherapy, radiotherapy, understanding of risk factors (eg smoking risks, etc.); 6. Developing Surgery in the Twentieth Century: <ul style="list-style-type: none"> - until the First World War; - First World War; - between the two world wars; - Second World War and post-war period; 7. Progressions in disease diagnosis: introduction of computed tomography, nuclear magnetic resonance tomography and ultrasound examinations; 8. Evolutions and revolutions in public health. Current trends and challenges in practice and medical research. 9. The history of medicine development in Moldova.

VII. PROFESSIONAL (SPECIFIC (SC)) AND TRANSVERSAL (TC) COMPETENCES AND STUDY OUTCOMES

✓ Professional (specific) (SC) competences

Not the case

✓ Transversal competences (TC)

Not the case

✓ Study outcomes

The student at the end of the course will be capable:

- To identify the main stages in the evolution of medicine and the defining characteristics of the respective stages;



CD 8.5.1 DISCIPLINE CURRICULUM

Edition: 06

Date: 20.09.2017

Page. 5/6

- To appoint the most prominent medical figures for each age in the history of medicine and to identify the major contribution of these personalities;
- To know the therapeutic remedies and medical practices throughout the history;
- To identify the philosophical concepts and historical events that have shaped the concept and medical practice from the beginning to the present;
- To identify the main challenges faced by medicine in the postmodern era and their possible influences on medical practice;
- Developing skills to study the history of medicine.

Note. Study outcomes (are deduced from the professional competencies and formative valences of the informational content of the discipline).

VIII. STUDENT'S SELF-TRAINING

No.	Expected product	Implementation strategies	Assessment criteria	Implementation terms
1.	Working with information sources	To read the material carefully for the corresponding theme from the methodological recommendations. Study of the minimum and additional bibliography.	The ability to extract the essentials, the ability to interpret and to present the didactic material.	During the semester
3.	Students' project presentations	Selection of the research theme, carrying out the research according to the plan for the realization of the Research Project for students in the discipline "The History of Medicine".	The volume of work, the degree of penetration into the researched problem, the quality of the conclusions, the quality of the public presentation.	During the semester

IX. METHODOLOGICAL SUGGESTIONS FOR TEACHING-LEARNING-ASSESSMENT

- **Teaching and learning methods used**

For more effective learning in the course "Biostatistics. Methodology of Scientific Research", both traditional methods (exposure, conversation, exercise) and those considered today to be more effective for university education (active based learning based learning, case study, project method, modeling) are used. Practical methods use frontal methods, individual activity methods, group activity methods. Practical training within the course uses computer-assisted training / self-training (MS Office EXCEL, PowerPoint).

- **Applied teaching strategies / technologies (specific to the discipline)**

Communication Technologies such as PowerPoint presentations are used during the theoretical lectures and practical seminars.

- **Methods of assessment (including the method of final mark calculation)**

Current:

The current assessment during the semester include a midterm test and a Power Point project presentation. The topic for the presentation is selected by a student from the list of topics proposed by the teacher. The semester mark is calculated as the average of the mark for the midterm test and the project presentation mark.

Final: differentiated colloquium.

Those students who have the semester mark less than 5.0 and / or did not recover their absence(s) for the practical seminars (no absences are admitted for the practical seminars) are not admitted to the differentiated colloquium by the Department.

The differentiated colloquium represents the test-grid test which includes 30 random questions from each of the studied themes. The test-grid covers 40% single-choice questions and 60% multiple-choice questions. The student has at his/her disposal 30 minutes to answer to the grid-test.



CD 8.5.1 DISCIPLINE CURRICULUM

Edition: 06

Date: 20.09.2017

Page. 6/6

The **final mark** is calculated as the average of the semester mark and the mark for the test-grid obtained at the differentiated colloquium.

Method of mark rounding at different assessment stages

Intermediate marks scale (annual average, marks from the examination stages)	National Assessment System	ECTS Equivalent
1,00-3,00	2	F
3,01-4,99	4	FX
5,00	5	E
5,01-5,50	5,5	
5,51-6,0	6	
6,01-6,50	6,5	D
6,51-7,00	7	
7,01-7,50	7,5	C
7,51-8,00	8	
8,01-8,50	8,5	B
8,51-8,00	9	
9,01-9,50	9,5	A
9,51-10,0	10	

The average annual mark and the marks of all stages of final examination (computer assisted, test, oral) - are expressed in numbers according to the mark scale (according to the table), and the final mark obtained is expressed in number with two decimals, which is transferred to student's record-book.

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

X. RECOMMENDED LITERATURE:

A. Compulsory:

DOUGLAS JAMES GUTHRIE, PHILIP RHODES, et al., 2017, "History of medicine", *Encyclopedia Britannica*.
<https://www.britannica.com/science/history-of-medicine>

B. Additional

BYNUM William, 2008, *The History of Medicine: A Very Short Introduction*, 1 edition, Oxford ; New York, Oxford University Press, 184 p.

JACKSON Mark, 2013, *The Oxford Handbook of the History of Medicine*, Reprint edition, Oxford, United Kingdom, Oxford University Press, 696 p.

PORTER Roy (ed.), 2001, *The Cambridge Illustrated History of Medicine*, Cambridge ; New York, Cambridge University Press, 400 p.