

**MINISTRY OF HEALTH, LABOUR AND SOCIAL PROTECTION
NICOLAE TESTEMITANU STATE UNIVERSITY OF MEDICINE AND PHARMACY**



APPROVED
at the University Council Meeting
minutes no. _____
_____ 2017
registration number _____

“APPROVED”
Rector, academician of A.S.M.
PhD, professor ,
Ion Ababii _____

**FACULTY OF MEDICINE No.2
CURRICULUM
FOR INTEGRATED HIGHER EDUCATION**

Academic year 2017-2018

Qualification level according to ISCED: **7**
General field of study: **091 Health**
Field of training: **0912 Medicine**
Curriculum: **0912.1 Medicine**
Total number of credits: **360**
Degree type: **Licentiate in Medicine**
Admission basis: **The baccalaureate diploma or an equivalent study document and the admission examination**
Language of training: **English**
Form of study: **Full-time**

CHISINAU 2017

EXPLANATORY NOTE
TO THE CURRICULUM FOR SPECIALTY 0912.1 MEDICINE

The Concept of Training of the MEDICAL SPECIALIST:

The mission of the specialty is the training of a highly qualified specialist licentiated in HEALTH, MEDICINE study program. Current trends in the evolution and expansion of medical services in the Republic of Moldova and abroad, as well as the needs of the labor market, have determined the organization of training of specialists in this field. The overall aim of the MEDICINE study program is to develop professional and research skills for a professional career as well as the development of an active professional personality capable to be self-developed and work in a team.

The aim:

The curriculum aims at acquiring basic and specialized knowledge in the medical field, designed to ensure:

- Development of motivation for the profession by carrying out a qualitative educational process;
- Integration of the theoretical activity with the medical practice for acquiring the skills and abilities necessary for practicing the profession of doctor;
- Integration of the students in the scientific research activity, in order to initiate with the principles of scientific research;
- Promotion of higher education on the national and international level;
- Quality Assurance in Higher Education, Improvement of Educational Management;
- Modernization of higher education in the perspective of integration into the European Higher Education Area;
- Improvement, rationalization and compliance of the curricula at national and European level;
- Creation of conditions for real academic mobility and mutual recognition of periods of study and documents.

Characteristics:

The duration of the training in the MEDICINE field is 6 years. According to the *function* in initial professional training by general competencies and specific competencies, the course units are grouped into the following components:

- the fundamental component (code F);
- the component of general skills and competences (code G);
- the socio-humanistic orientation component (U code);
- the qualification component (code S);

During the first 2-3 years, students study the subjects of general, social and fundamental social education, and in the last three years the emphasis is on the qualification disciplines.

By the degree of compulsion and choice, course units are classified into mandatory, optional and free choice.

The basic element of the curriculum is the course unit, which represents activities attributed to a distinct content. Course units are offered autonomously and structured in modules. Modularization of the program is based on the complementary and interdisciplinary principle .

The distribution of disciplines by semesters is conditioned by the logics of the training process. The large amount of teaching material, which mainly requires direct contact with the teacher both in courses, practical classes and seminars, justifies the duration of the 17-week semesters. At the same time, the large number of subjects studied during the semester, proves the distribution of study credits and the selection of the form of assessment of the final results according to the priorities and the importance of each of them in the formation of the future specialist (minimum 1 credit per discipline, assessment forms: a pass-fail exam - C, colloquium with mark (differentiated) - DC and exam – E).

In the 1-3 years of study, the duration of the semesters is 17 weeks each, followed by 3-week examination sessions at the end of the semesters. In 4-6 years of study, divided into 2 semesters, the education is modular, each discipline / module being followed by the final assessment. At the end of semesters 4 and 6 there are practical internships in the competent medical institutions (clinics). During the 7th-12th semesters, the practical training is performed during night shifts.

Employability:

Graduates have the right to participate in the admission to postgraduate studies through residency, doctorate and be employment under the legislation of the country of origin.

Further training/education:

During the practical activity period, doctors are certified at professional level according to the legislation of the country in which they work.

Pedagogical approaches

Various study methods are used in the training process: lectures, practical lessons, laboratory work, seminars, practical training, clinical studies, case studies, problem-based studies, videoconferencing, group discussions, patient study, simulation, study by standardized patients, presentation of reports, portfolios, registering medical records, diploma thesis research.

The concept of evaluation focuses on examination of skills for application of knowledge in practice. Academic results of the students are evaluated: during the course of the discipline; at the end of the discipline; at the completion of the integrated higher education program.

The current and final assessment is carried out in accordance with the students' assessment forms approved by the departments. The curriculum provides the following forms and types of assessment of students' theoretical and practical knowledge:

Current assessment (in practical lessons, laboratory and seminar sessions in various ways: testing, including compute-based testing, reports, projects, individual works, medical records, practical skills). The results of the current assessment are taken into account in the final assessment.

Final assessment (presents a combined method consisting of testing, oral examination and practical skills).

The graduation examination for specialty 0911.1 "Medicine" is held under the form of a complex interdisciplinary examination, which includes the main directions of professional activity by assessment of practical skills, control test, oral examination and the diploma thesis defense.

Transferable academic credits ensure students' access to a transparent framework of qualifications and academic mobility and open up perspectives for training throughout the professional activity.

Final results of the studies and skills expected

Final results of the studies are divided into three categories - knowledge, skills, competencies. The 2017 edition of the curriculum reflects the requirements of a modern, student-centred education aimed at acquiring the results of the studies and skills corresponding to the National Qualifications Framework that would enable the formation of competitive specialists on the labour market in the country and abroad .

After completing the curriculum the graduate is supposed to have the following competencies:

Professional competencies:

PC1. Thorough knowledge of the features of the structure, development and functioning of the human body in various physiological and pathological states.

PC2. Performing of various practical manoeuvres' and procedures for carrying out specific professional medical activities based on the knowledge of fundamental sciences;

PC3. Development of the diagnosis, treatment and rehabilitation plans in various pathological situations and choosing of appropriate therapies, including emergency medical assistance;

PC4. The use of medical techniques, instrumental and laboratory investigations, digital technologies to solve the specific therapeutic cases.

PC5. Planning, coordinating and conducting health promotion activities and prophylactic measures to improve the health condition of individuals and community.

PC6. Evaluation and provision of the quality of medical services in relation to manoeuvres, procedures and associated treatment.

Transversal competences:

TC1. Responsible execution of professional tasks applying the values and norms of professional ethics, as well as the provisions of the legislation in force. Promoting logical reasoning, practical applicability, assessment and self-assessment in decision-making;

TC2. Performing of activities and exercising of roles specific to team work in various medical institutions. Promoting of the spirit of initiative, dialogue, cooperation, positive attitude and respect for others, empathy, altruism and continuous improvement of their own activities;

TC3. Objective self-evaluation of the need for continuing professional training in order to provide quality services and adapt to the dynamics of health policy requirements and for personal and professional development. Effective use of language skills, knowledge in information technologies, research and communication skills.

Diploma Supplement obtained by the graduate details the disciplines studies and, respectively, the accumulated credits.

Degree of novelty:

The mission of the teaching staff is to achieve qualitative professional training, to have specialists who will be competitive on the labour market in the country and abroad. In this respect, the elaboration of the specialized academic curriculum is centred on the student - the future medical specialist.

The modernization of the student training process is one of the main directions of the entire university college. The content of study programs and forms of training is updated, taking into account medical information technology, national and international specialist recommendations as well as the feedback obtained as a result of the ordinary survey of the beneficiaries.

Modernization of the study plans and programs was carried out, including new compulsory disciplines such as dental medicine, obstetrics and gynecology emergencies, differential radiology, palliative medicine. The number of hours of direct contact to some fundamental disciplines has been reduced. Taking into consideration the necessity of communicating of international students with patients, the number of Romanian language classes in the second year of study increased. New optional and free choice disciplines have been created, which are proposed starting with the first semester of studies. Clinical stages have been introduced in several disciplines such as Urology, Ophthalmology, Emergencies in obstetrics and gynecology, Clinical Synthesis (6th year of studies).

Relevance:

Curricular reform is a continuous process, with the medical education plan being updated and correlated with the practice of training European specialists in the field. The skills system of competencies is fully in line with international standards, the proof is the successful integration of graduates into the healthcare system of the countries of origin.

Compliance of the objectives with the program of the institutional development strategy:

In the context of the new modern university-centred, student-centred teaching strategies, the latter together with the teacher are the two actors of the educational process, and under the current conditions of university development, they are counting on enhancing this collaboration. Within the faculty, measures have been taken to involve students in quality of study management, including in discussing the content of the curriculum; students being actively involved in the work of the curricular reform committee at the faculty.

The development strategy of the State University of Medicine and Pharmacy "Nicolae Testemitanu" is aimed at assuring the quality and performance of all didactic, scientific, clinical and institutional management activities in order to successfully integrate into the European Higher Education Area. In this context, the study plan in Medicine specializes in achieving key objectives by developing academic structures to meet European standards and reforming the education system.

Consultation of partners (employers, graduates, teachers, students) and coordination of the program development process according to the quality assurance standards:

The curriculum for the Medicine specialty is linked to the requirements of the Bologna Process and developed in accordance with the experience gained by European universities. At the same time, internal partnership is very important. For the specialty to be viable within the national healthcare system, the study plan and training programs are also coordinated with the health care development strategy in Moldova. The study programs are jointly developed and are consulted with the top specialists within the Ministry of Health, with the heads of medical units.

Based on the concept of preparing the specialists in the field, the departments make assessments, discussions and proposals for updating the study plan. All proposals are discussed and analyzed in detail by the Curriculum Reform Commission established under the Rector's Order. They are then analyzed by the methodological committee and approved by the faculty council. Finally, the institutional framework that approves changes in the curriculum is the Senate of SMPHU "Nicolae Testemitanu".

Quality assurance and enhancement is done through:

Implementation of an annual internal audit program of the educational offer in terms of the following quality factors - beneficiary satisfaction, effectiveness, feasibility;

Internal and external evaluation of the quality of the training programs;

Provision of the permanent feedback to external and internal beneficiaries (students, teachers, managers, etc.) and other stakeholders to improve educational offer;

Self-evaluation and mutual evaluation of staff involved in training, monitoring student competence at preparatory and final stages of graduation;

Development of human and material resources to ensure a productive educational environment and process.

ACADEMIC CALENDAR

| ACADEMIC CALENDAR FOR 1-3 YEAR OF STUDY | | | | | | | | | |
|--|---------------|--|--|----------------------|-------------------------------|-------------|-------------|-------------|-------------|
| No. | Year of study | Teaching activities | | Examination sessions | | Internship | Vacations | | |
| | | Semester I | Semester II | Winter | Summer | | Winter | Spring | Summer |
| 1 | I year | 01.09-29.12 | 05.02-08.06 | 09.01-26.01 | 11.06-30.06 | | 30.12-08.01 | 08.04-16.04 | 02.07-31.08 |
| 2 | II year | 01.09-29.12 | 05.02-08.06 | 09.01-26.01 | 11.06-30.06 | 02.07-20.07 | 30.12-08.01 | 08.04-16.04 | 02.07-31.08 |
| 3 | III year | 01.09-29.12 | 05.02-08.06 | 09.01-26.01 | 11.06-30.06 | 02.07-27.07 | 30.12-08.01 | 08.04-16.04 | 02.07-31.08 |
| ACADEMIC CALENDAR FOR 4-6 YEAR OF STUDY | | | | | | | | | |
| No. | Year of study | Teaching activities and examination sessions (after modules) | | | Internship | Vacation | | | |
| | | Semester I | Semester II | | | Winter | Spring | Summer | |
| 1 | IV year | 01.09-02.02 | 05.02-30.06 | | During modules (night shifts) | 26.12-08.01 | 08.04-16.04 | 02.07-31.08 | |
| 2 | V year | 01.09-02.02 | 05.02-30.06 | | | 26.12-08.01 | 08.04-16.04 | 02.07-31.08 | |
| 3 | VI year | 01.09-22.12 | 09.01-04.05 Graduation examination 07.05-13.06 | | | 26.12-08.01 | 08.04-16.04 | - | |

THE CONTENT OF THE CURRICULUM BY THE YEARS OF STUDY

| Code | Course unit/module name | Total hours | | | No. of hours by the type of activity | | | | Type of assessment | No. of credits |
|---|--|-------------|----------------|---------------|--------------------------------------|------------|----------------------|------------|--------------------|----------------|
| | | Total | Direct contact | Self-training | Intern-ship | Course | Laboratory /practice | Seminar | | |
| I YEAR, I SEMESTER (17 WEEKS) | | | | | | | | | | |
| Mandatory disciplines (O): | | | | | | | | | | |
| F.01.O.001 | Human anatomy | 180 | 119 | 61 | | 17 | 51 | 51 | E | 6 |
| U.01.O.002 | Anthropology and Medical Philosophy | 90 | 51 | 39 | | 17 | 0 | 34 | DC | 3 |
| F.01.O.003 | Biophysics | 120 | 68 | 52 | | 17 | 25 | 26 | E | 4 |
| F.01.O.004 | Molecular Biology | 150 | 85 | 65 | | 34 | 25 | 26 | E | 5 |
| F.01.O.005 | Histology, cytology and embryology | 150 | 85 | 65 | | 34 | 25 | 26 | C | 5 |
| G.01.O.006 | Romanian language | 120 | 102 | 18 | | 0 | 0 | 102 | C | 4 |
| G.01.O.007 | Latin language and Medical terminology | 60 | 34 | 26 | | 0 | 0 | 34 | C | 2 |
| Optional disciplines (A). Set I | | | | | | | | | | |
| G.01.A.008 | <i>Introductory university course (Informational technology and basics of the informational culture)</i> | 30 | 20 | 10 | | 20 | 0 | 0 | C | 1 |
| G.01.A.009 | <i>Techniques of communication in Medicine based on IT</i> | | | | | | | | | |
| | Total I semester (O+A) | 900 | 564 | 336 | | 139 | 126 | 299 | 3E, 1DC, 4C | 30 |
| I YEAR, I SEMESTER (17 WEEKS) | | | | | | | | | | |
| Mandatory disciplines (O): | | | | | | | | | | |
| F.02.O.010 | Human anatomy | 180 | 119 | 61 | | 17 | 51 | 51 | E | 6 |
| F.02.O.011 | Structural biochemistry | 90 | 51 | 39 | | 17 | 17 | 17 | DC | 3 |
| U.02.O.012 | Medical communication and behaviour | 90 | 51 | 39 | | 17 | 0 | 34 | DC | 3 |
| F.02.O.013 | Human genetics | 150 | 85 | 65 | | 34 | 25 | 26 | E | 5 |
| F.02.O.014 | Histology, cytology and embryology | 150 | 85 | 65 | | 34 | 25 | 26 | E | 5 |
| G.02.O.015 | Romanian Language | 120 | 102 | 18 | | 0 | 0 | 102 | DC | 4 |
| S.02.O.016 | Medical emergencies and primary care | 90 | 51 | 39 | | 17 | 17 | 17 | DC | 3 |
| Optional disciplines (A). Set II | | | | | | | | | | |
| S.02.A.017 | <i>Basic vital support and external automatic defibrillation</i> | 30 | 20 | 10 | | 20 | 0 | 0 | C | 1 |
| S.02.A.018 | <i>Live anatomy of nervous, vascular and internal organ systems</i> | | | | | | | | | |
| | Total II semester (O+A) | 780 | 564 | 318 | | 156 | 135 | 273 | 3E, 4DC, 1C | 30 |
| | TOTAL I YEAR (O+A) | 1680 | 1128 | 654 | | 295 | 261 | 572 | 6E, 5DC, 5C | 60 |

| II YEAR, III SEMESTER (17 WEEKS) | | | | | | | | | | |
|---|---|-------------|----------------|---------------|--------------------------------------|------------|----------------------|------------|---------------------|----------------|
| Code | Course unit/module name | Total hours | | | No. of hours by the type of activity | | | | Type of assessment | No. of credits |
| | | Total | Direct contact | Self-training | Intern-ship | Course | Laboratory /practice | Seminar | | |
| Mandatory disciplines (O): | | | | | | | | | | |
| F.03.O.019 | Clinical anatomy | 180 | 85 | 95 | | 34 | 25 | 26 | E | 6 |
| F.03.O.020 | Biochemistry | 180 | 85 | 95 | | 34 | 25 | 26 | C | 6 |
| U.03.O.021 | Biostatistics. Methodology of scientific research | 120 | 68 | 52 | | 17 | 0 | 51 | E | 4 |
| F.03.O.022 | Human Physiology | 210 | 102 | 108 | | 34 | 34 | 34 | C | 7 |
| F.03.O.023 | General hygiene | 90 | 51 | 39 | | 17 | 17 | 17 | C | 3 |
| U.03.O.024 | Medical psychology | 90 | 51 | 39 | | 17 | 0 | 34 | DC | 3 |
| Optional Disciplines (A) Set III | | | | | | | | | | |
| S.03.A.025 | <i>Surgery. Operative techniques</i> | 30 | 20 | 10 | | 20 | | 0 | C | 1 |
| S.03.A.026 | <i>Regenerative Medicine</i> | | | | | | | | | |
| | Total III semester (O+A) | 900 | 462 | 438 | | 173 | 101 | 188 | 2E, 1DC, 3C | 30 |
| *Extra-curricula mandatory discipline (EM): | | | | | | | | | | |
| G.03.OE.027 | Romanian language | 102 | 102 | | | | | 102 | C | |
| II YEAR, IV SEMESTER (17 WEEKS) | | | | | | | | | | |
| Mandatory disciplines (O): | | | | | | | | | | |
| F.04.O.028 | Biochemistry | 180 | 85 | 95 | | 34 | 25 | 26 | E | 6 |
| U.04.O.029 | Bioethics | 30 | 20 | 10 | | 10 | 0 | 10 | DC | 1 |
| S.04.O.030 | Patients' care and communication | 60 | 34 | 26 | | 6 | 14 | 14 | DC | 2 |
| F.04.O.031 | Human physiology | 210 | 102 | 108 | | 34 | 34 | 34 | E | 7 |
| F.04.O.032 | General hygiene | 90 | 51 | 39 | | 17 | 17 | 17 | E | 3 |
| F.04.O.033 | General medical microbiology. Immunology | 180 | 85 | 95 | | 34 | 25 | 26 | E | 6 |
| S.04.O.034 | Practical training (nursing assistant) | 120 | 90 | 30 | 90 | 0 | | 0 | E | 4 |
| Optional disciplines (A). Set IV | | | | | | | | | | |
| S.04.A.035 | <i>Patient's personal hygiene</i> | 30 | 20 | 10 | | 20 | | 0 | C | 1 |
| S.04.A.036 | <i>Nutrition as the body mass modelling tool</i> | | | | | | | | | |
| | Total IV semester (O+A) | 900 | 487 | 413 | 90 | 155 | 115 | 127 | 5E, 2DC, 1 C | 30 |
| | TOTAL II YEAR (O+A) | 1800 | 949 | 851 | 90 | 328 | 216 | 315 | 7E, 3DC, 4 C | 60 |
| *Extra-curricular mandatory discipline (OE): | | | | | | | | | | |
| G.04.OE.037 | Romanian language | 102 | 102 | | | | | 102 | DC | |

*No credits for Extra-curricular mandatory discipline

| III YEAR, V SEMESTER (17 WEEKS) | | | | | | | | | | |
|---|---|-------------|----------------|---------------|--------------------------------------|------------|----------------------|------------|--------------------|----------------|
| Code | Course unit/module name | Total hours | | | No. of hours by the type of activity | | | | Type of assessment | No. of credits |
| | | Total | Direct contact | Self-training | Intern-ship | Course | Laboratory /practice | Seminar | | |
| Mandatory disciplines (O): | | | | | | | | | | |
| F.05.O.038 | Medical bacteriology and virology | 90 | 68 | 22 | | 17 | 25 | 26 | DD | 3 |
| U.05.O.039 | Biostatistics. Methodology of scientific research | 90 | 68 | 22 | | 17 | 0 | 51 | E | 3 |
| S.05.O.040 | Surgical diseases. Semiology | 90 | 68 | 22 | | 17 | 25 | 26 | C | 3 |
| S.05.O.041 | Internal diseases. Semiology | 180 | 102 | 78 | | 34 | 34 | 34 | C | 6 |
| F.05.O.042 | Pharmacology | 120 | 85 | 35 | | 34 | 25 | 26 | C | 5 |
| F.05.O.043 | Pathophysiology | 120 | 85 | 35 | | 34 | 25 | 26 | C | 5 |
| F.05.O.044 | Pathomorphology | 120 | 85 | 35 | | 34 | 25 | 26 | C | 5 |
| S.05.O.045 | Radiology and radioprotection | 60 | 51 | 9 | | 17 | 17 | 17 | E | 2 |
| Optional disciplines (A). Set V | | | | | | | | | | |
| S.05.A.046 | <i>Clinical psychology</i> | 30 | 20 | 10 | | 20 | | 0 | C | 1 |
| S.05.A.047 | <i>Social psychology</i> | | | | | | | | | |
| | Total V semester (O+A) | 900 | 632 | 336 | | 224 | 176 | 181 | 1E, 1DC, 6C | 30 |
| III YEAR, VI SEMESTER (17 WEEKS) | | | | | | | | | | |
| Mandatory disciplines (O): | | | | | | | | | | |
| S.06.O.048 | Surgical diseases. Semiology | 90 | 85 | 5 | | 34 | 25 | 26 | E | 3 |
| S.06.O.049 | Internal diseases. Semiology | 180 | 102 | 78 | | 34 | 34 | 34 | E | 6 |
| F.06.O.050 | Pharmacology | 150 | 85 | 65 | | 34 | 25 | 26 | E | 4 |
| F.06.O.051 | Pathophysiology | 150 | 85 | 65 | | 34 | 25 | 26 | E | 4 |
| F.06.O.052 | Pathomorphology | 150 | 85 | 65 | | 34 | 25 | 26 | E | 4 |
| S.06.O.053 | Practical training (Nursing) | 150 | 150 | 0 | 150 | | | | E | 5 |
| Optional disciplines (A). Set VI | | | | | | | | | | |
| S.06.A.054 | <i>Biochimia clinică/ Clinical Biochemistry</i> | 30 | 20 | 10 | | 20 | | 0 | C | 1 |
| S.06.A.055 | <i>Microbiologia clinică/ Clinical Microbiology</i> | | | | | | | | | |
| | Total VI semester (O+A) | 900 | 612 | 288 | 150 | 190 | 134 | 138 | 6E, 1C | 30 |
| | TOTAL III YEAR (O+A) | 1800 | 1244 | 624 | 150 | 414 | 310 | 319 | 7E, 1DC, 7C | 60 |

| IV YEAR, VII SEMESTER (17 WEEKS) | | | | | | | | | | |
|---|--|-------------|----------------|---------------|--------------------------------------|------------|----------------------|------------|----------------------|----------------|
| Code | Course unit/module name | Total hours | | | No. of hours by the type of activity | | | | Type of assessment | No. of credits |
| | | Total | Direct contact | Self-training | Intern-ship | Course | Laboratory /practice | Seminar | | |
| Mandatory disciplines (O): | | | | | | | | | | |
| S.07.O.056 | Surgical diseases | 210 | 184 | 26 | 44 | 40 | 50 | 50 | E | 7 |
| S.07.O.057 | Internal medicine. Allergology | 30 | 20 | 10 | 6 | 4 | 5 | 5 | C | 1 |
| S.07.O.058 | Internal medicine. Pneumology | 120 | 98 | 22 | 7 | 26 | 32 | 33 | E | 4 |
| S.07.O.059 | Neurosurgery | 60 | 35 | 25 | | 10 | 12 | 13 | DC | 2 |
| S.07.O.060 | Neurology | 120 | 105 | 15 | | 30 | 37 | 38 | E | 4 |
| S.07.O.061 | Ophthalmology | 90 | 55 | 35 | 6 | 14 | 17 | 18 | E | 3 |
| S.07.O.062 | Orthopedics and traumatology | 90 | 77 | 13 | | 22 | 27 | 28 | E | 3 |
| S.07.O.063 | Pneumophysiology | 60 | 35 | 25 | | 10 | 12 | 13 | DC | 2 |
| S.07.O.064 | Urology | 90 | 55 | 35 | 6 | 14 | 17 | 18 | E | 3 |
| Optional disciplines (A). Set VII | | | | | | | | | | |
| S.07.A.065 | Bioinformatics | 30 | 20 | 10 | | 20 | | 0 | C | 1 |
| S.07.A.066 | Inborn errors in metabolism | | | | | | | | | |
| Total VII semester (O+A) | | 900 | 684 | 216 | 69 | 190 | 209 | 216 | 6E, 2DC, 2C | 30 |
| IV YEAR, VIII SEMESTER (17 WEEKS) | | | | | | | | | | |
| Mandatory disciplines (O): | | | | | | | | | | |
| U.08.O.067 | Bioethics | 30 | 20 | 10 | | 10 | 0 | 10 | DC | 1 |
| S.08.O.068 | Endocrinology | 90 | 70 | 20 | | 20 | 25 | 25 | E | 3 |
| S.08.O.069 | Epidemiology | 90 | 70 | 20 | | 20 | 25 | 25 | DC | 3 |
| S.08.O.070 | Medical genetics | 30 | 20 | 10 | | 10 | 5 | 5 | DC | 1 |
| S.08.O.071 | Hematology | 90 | 70 | 20 | | 20 | 25 | 25 | E | 3 |
| S.08.O.072 | Medical imaging (cardio-pulmonary and musculoskeletal apparatus) | 30 | 27 | 3 | | 9 | 9 | 9 | C | 1 |
| S.08.O.073 | Dental medicine | 60 | 35 | 25 | | 10 | 12 | 13 | DC | 2 |
| S.08.O.074 | Internal medicine. Cardiology | 180 | 152 | 28 | 12 | 40 | 50 | 50 | E | 6 |
| S.08.O.075 | Internal Medicine. Nephrology | 60 | 48 | 12 | 6 | 12 | 15 | 15 | E | 2 |
| S.08.O.076 | /Internal medicine. Rheumatology | 60 | 48 | 12 | 6 | 12 | 15 | 15 | E | 2 |
| U.08.O.077 | Social medicine and management | 60 | 35 | 25 | | 10 | 0 | 25 | DC | 2 |
| S.08.O.078 | Oncology | 90 | 56 | 34 | | 16 | 20 | 20 | E | 3 |
| Optional disciplines (A). Set VIII | | | | | | | | | | |
| S.08.A.079 | Differential diagnostic problems in rheumatology | 30 | 20 | 10 | | 20 | | 0 | C | 1 |
| S.08.A.080 | Actual problems in the diagnosis and treatment of kidney disease | | | | | | | | | |
| Total VIII semester (O+A) | | 900 | 671 | 254 | 24 | 209 | 189 | 234 | 6E, 3DC, 3C | 30 |
| TOTAL IV YEAR (O+A) | | 1800 | 1355 | 470 | 93 | 399 | 398 | 450 | 12 E, 5DC, 5C | 60 |

| V YEAR, IX SEMESTER (17 WEEKS) | | | | | | | | | | |
|---|--|-------------|----------------|---------------|--------------------------------------|------------|----------------------|------------|--------------------|----------------|
| Code | Course unit/module name | Total hours | | | No. of hours by the type of activity | | | | Type of assessment | No. of credits |
| | | Total | Direct contact | Self-training | Internship | Course | Laboratory /practice | Seminar | | |
| Mandatory disciplines (O): | | | | | | | | | | |
| S.09.O.081 | Clinical pharmacology | 90 | 70 | 20 | | 20 | 25 | 25 | DD | 3 |
| S.09.O.082 | Medical imaging | 60 | 35 | 25 | | 10 | 12 | 13 | DC | 2 |
| S.09.O.083 | Palliative care | 60 | 40 | 20 | | 12 | 14 | 14 | DC | 2 |
| S.09.O.084 | Internal Medicine. Gastrology | 150 | 115 | 35 | 10 | 30 | 37 | 38 | E | 5 |
| S.09.O.085 | Medical parasitology. Tropical diseases | 90 | 70 | 20 | | 20 | 25 | 25 | DC | 3 |
| S.09.O.086 | Pediatrics | 302 | 302 | 0 | 36 | 76 | 95 | 95 | E | 10 |
| S.09.O.087 | Neonatology | 60 | 49 | 11 | | 14 | 17 | 18 | | 2 |
| S.09.O.088 | Puericulture | 60 | 35 | 25 | | 10 | 12 | 13 | | 2 |
| Optional disciplines (A). Set IX | | | | | | | | | | |
| S.09.A.089 | <i>Laboratory medicine</i> | 30 | 20 | 10 | | 20 | | 0 | C | 1 |
| S.09.A.090 | <i>Dietetics</i> | | | | | | | | | |
| | Total IX semester (O+A) | 902 | 736 | 166 | 46 | 212 | 237 | 241 | 2E, 4DC, 1C | 30 |
| V YEAR, X SEMESTER (17 WEEKS) | | | | | | | | | | |
| Mandatory disciplines (O): | | | | | | | | | | |
| S.10.O.091 | Anesthesiology and intensive care | 90 | 62 | 28 | 6 | 16 | 20 | 20 | DC | 3 |
| S.10.O.092 | Surgical diseases | 240 | 184 | 56 | 44 | 40 | 50 | 50 | E | 8 |
| S.10.O.093 | /Family medicine | 90 | 63 | 27 | | 18 | 22 | 23 | E | 3 |
| S.10.O.094 | Obstetrics and gynecology | 270 | 230 | 40 | 20 | 60 | 75 | 75 | E | 9 |
| S.10.O.095 | Otorhinolaryngology | 120 | 90 | 30 | 6 | 24 | 30 | 30 | E | 4 |
| S.10.O.096 | Medical emergencies | 60 | 56 | 4 | | 16 | 20 | 20 | DC | 2 |
| Optional disciplines (A). Set X | | | | | | | | | | |
| S.10.A.097 | <i>Practical cardiology</i> | 30 | 20 | 10 | | 20 | | 0 | C | 1 |
| S.10.A.098 | <i>Management of chest pain in acute coronary syndrome</i> | | | | | | | | | |
| | Total X semester (O+A) | 900 | 705 | 195 | 76 | 194 | 217 | 218 | 4E, 2DC, 1C | 30 |
| | TOTAL V YEAR (O+A) | 1802 | 1441 | 361 | 122 | 406 | 454 | 459 | 6E, 6DC, 2C | 60 |

| VI YEAR, XI SEMESTER (16 WEEKS) | | | | | | | | | | |
|---|---|--------------|----------------|---------------|--------------------------------------|-------------|----------------------|-------------|-----------------------------|----------------|
| Code | Course unit/module name | Total hours | | | No. of hours by the type of activity | | | | Type of assessment | No. of credits |
| | | Total | Direct contact | Self-training | Intern-ship | Course | Laboratory /practice | Seminar | | |
| Mandatory disciplines (O): | | | | | | | | | | |
| S.11.O.099 | Infectious diseases | 150 | 84 | 66 | | 24 | 30 | 30 | E | 5 |
| S.11.O.100 | Internal medicine. Clinical synthesis | 510 | 360 | 150 | 80 | 80 | 100 | 100 | DC | 17 |
| S.11.O.101 | Clinical radiology | 90 | 70 | 20 | | 20 | 25 | 25 | DC | 3 |
| S.11.O.102 | Emergencies in obstetrics and gynecology | 120 | 76 | 44 | 6 | 20 | 25 | 25 | DC | 4 |
| Optional disciplines (A). Set XI | | | | | | | | | | |
| S.11.A.103 | <i>Alternative and complementary medicine</i> | 30 | 20 | 10 | | 20 | | 0 | C | 1 |
| S.11.A.104 | <i>Plastic surgery</i> | | | | | | | | | |
| Total semester XI | | 900 | 610 | 255 | 86 | 164 | 192 | 193 | 1E, 4DC, 1C | 30 |
| VI YEAR, XII SEMESTER (15 WEEKS) | | | | | | | | | | |
| Mandatory disciplines (O): | | | | | | | | | | |
| S.12.O.105 | Infectious diseases in children | 90 | 70 | 20 | | 20 | 25 | 25 | DC | 3 |
| S.12.O.106 | Pediatric surgery | 60 | 56 | 4 | | 16 | 20 | 20 | DC | 2 |
| S.12.O.107 | Dermatovenereology | 90 | 70 | 20 | | 20 | 25 | 25 | E | 3 |
| S.12.O.108 | Geriatrics | 60 | 35 | 25 | | 10 | 12 | 13 | DC | 2 |
| S.12.O.109 | Internal medicine. Occupational diseases | 60 | 35 | 25 | | 10 | 12 | 13 | DC | 2 |
| S.12.O.110 | Forensic medicine. Medical law | 90 | 70 | 20 | | 20 | 25 | 25 | DC | 3 |
| S.12.O.111 | Psichiatria/Psychiatry | 120 | 91 | 29 | | 26 | 32 | 33 | E | 4 |
| S.12.O.112 | Medical rehabilitaion. Physical medicine | 60 | 35 | 25 | | 10 | 12 | 13 | DC | 2 |
| Optional disciplines (A). Set XII | | | | | | | | | | |
| S.12.A.113 | <i>Family planning</i> | 30 | 20 | 10 | | 20 | | 0 | C | 1 |
| S.12.A.114 | <i>Andrology and sexopathology</i> | | | | | | | | | |
| S.12.O.115 | Graduation exam | 240 | 60 | 180 | 180 | | | 60 | EA | 8 |
| Total semester XII | | 900 | 542 | 373 | 195 | 152 | 163 | 212 | 1EA, 2E, 6DC, 1C | 30 |
| Total VI year | | 1800 | 1152 | 628 | 281 | 316 | 355 | 405 | 1EA, 3E, 10DC, 2C | 60 |
| OVERALL TOTAL | | 10322 | 6639 | 3273 | 1941 | -- | 1994 | 2520 | 1EA, 41 E, 30DC, 13C | 331 |
| OVERALL TOTAL | | 360 | 240 | 120 | | 200 | | | 12C | 29 |
| OVERALL TOTAL | | 10682 | 7630 | 3588 | 736 | 2189 | 1994 | 2520 | 1EA, 41E, 30DC, 25C | 360 |
| Extra-curricular mandatory disciplines (OE): | | 204 | 204 | | | | | 204 | 1DC, 1C | |

OPTIONAL DISCIPLINES

| Code | Course unit/module name | Total hours | | | No. of hours by the type of activity | | | Type of assessment | No. of credits |
|-----------------|---|-------------|----------------|------------------|--------------------------------------|-----|---|--------------------|----------------|
| | | Total | Direct contact | Individual study | C | L/P | S | | |
| Set I | | | | | | | | | |
| G.01.A.008 | <i>Introductory university course (Informational technology and basics of the informatonal culture)</i> | 30 | 20 | 10 | 20 | 0 | 0 | C | 1 |
| G.01.A.009 | <i>Techniques of communication in Medicine based on IT</i> | | | | | | | | |
| Set II | | | | | | | | | |
| S.02.A.017 | <i>Basic vital support and external automatic defibrillation</i> | 30 | 20 | 10 | 20 | 0 | 0 | C | 1 |
| S.02.A.018 | <i>Live anatomy of nervous, vascular and internal organ systems</i> | | | | | | | | |
| Set III | | | | | | | | | |
| S.03.A.025 | <i>Surgery. Operative techniques</i> | 30 | 20 | 10 | 20 | 0 | 0 | C | 1 |
| S.03.A.026 | <i>Regenerative Medicine</i> | | | | | | | | |
| Set IV | | | | | | | | | |
| S.04.A.035 | <i>Patient's personal hygiene</i> | 30 | 20 | 10 | 20 | 0 | 0 | C | 1 |
| S.04.A.036 | <i>Nutrition as the body mass modelling tool</i> | | | | | | | | |
| Set V | | | | | | | | | |
| S.05.A.046 | <i>Clinical psychology</i> | 30 | 20 | 10 | 20 | 0 | 0 | C | 1 |
| S.05.A.047 | <i>Social psychology</i> | | | | | | | | |
| Set VI | | | | | | | | | |
| S.06.A.054 | <i>Clinical Biochemistry</i> | 30 | 20 | 10 | 20 | 0 | 0 | C | 1 |
| S.06.A.055 | <i>Clinical Microbiology</i> | | | | | | | | |
| Set VII | | | | | | | | | |
| S.07.A.065 | <i>Bioinformatics</i> | 30 | 20 | 10 | 20 | 0 | 0 | C | 1 |
| S.07.A.066 | <i>Inborn errors in metabolism</i> | | | | | | | | |
| Set VIII | | | | | | | | | |
| S.08.A.079 | <i>Differential diagnostic problems in rheumatology</i> | 30 | 20 | 10 | 20 | 0 | 0 | C | 1 |
| S.08.A.080 | <i>Actual problems in the diagnosis and treatment of kidney disease</i> | | | | | | | | |
| Set IX | | | | | | | | | |
| S.09.A.089 | <i>Laboratory medicine</i> | 30 | 20 | 10 | 20 | 0 | 0 | C | 1 |
| S.09.A.090 | <i>Dietetics</i> | | | | | | | | |
| Set X | | | | | | | | | |
| S.10.A.097 | <i>Practical cardiology</i> | 30 | 20 | 10 | 20 | 0 | 0 | C | 1 |
| S.10.A.098 | <i>Management of chest pain in acute coronary syndrome</i> | | | | | | | | |
| Set XI | | | | | | | | | |
| S.11.A.103 | <i>Alternative and complementary medicine</i> | 30 | 20 | 10 | 20 | 0 | 0 | C | 1 |
| S.11.A.104 | <i>Plastic surgery</i> | | | | | | | | |
| Set XII | | | | | | | | | |
| S.12.A.113 | <i>Family planning</i> | 30 | 20 | 10 | 20 | 0 | 0 | C | 1 |
| S.12.A.114 | <i>Andrology and sexopathology</i> | | | | | | | | |

| CODE | Discipline | Credits | PC1 | PC2 | PC3 | PC4 | PC5 | PC6 | TC1 | TC2 | TC3 |
|-------------|---|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Free choice | History of medicine | 1 | | | | | | | + | + | + |
| Free choice | The chemical bases of living matter | 1 | + | | | | | | + | | |
| Free choice | Health psychology | 1 | + | | | | + | + | + | + | + |
| Free choice | Social psychology | 1 | + | | | | + | + | + | + | + |
| Free choice | Nutrition and health | 1 | + | | + | | + | + | + | + | + |
| Free choice | Sanitary microbiology | 1 | + | + | + | + | + | + | + | + | + |
| Free choice | Ethics and deontology | 1 | | | | | | + | + | + | + |
| Free choice | Pediatric orthopedy and traumatology | 1 | + | + | + | + | + | + | + | + | + |
| Free choice | Leadership in medical services | 1 | | | | | | + | + | + | + |
| Free choice | Clinical pathomorphology | 1 | + | + | | + | | + | + | + | + |
| Free choice | Malpraxis and moral decision in clinical medicine | 1 | + | + | + | + | + | + | + | + | + |
| Free choice | Entrepreneurship in medicine | 1 | | | | | | + | + | + | + |

ALLOCATION OF HOURS ON GROUPS OF DISCIPLINES

| Discipline category | Hours | | No. of credits ECTS | Share (out of total hours) |
|--|--------------|--------------------------|---------------------|----------------------------|
| | Total | Including direct contact | | |
| Fundamental disciplines (F) TOTAL | 3540 | 1921 | 107 | 32% |
| - mandatory | 3540 | 1921 | 107 | 32% |
| - optional | | | | |
| General disciplines (G) TOTAL | 534 | 462 | 11 | 3% |
| - mandatory | 504 | 442 | 10 | |
| - optional | 30 | 20 | 1 | |
| Humanistic disciplines (U) TOTAL | 600 | 364 | 20 | 5% |
| - mandatory | 600 | 364 | 20 | |
| - optional | | | | |
| Specialty disciplines (S) TOTAL | 6242 | 4602 | 215 | 55% |
| - mandatory | 5882 | 4362 | 205 | 53% |
| - optional | 360 | 240 | 10 | 3% |
| Mandatory activities TOTAL | 510 | 300 | 17 | 5% |
| - internships | 270 | 240 | 9 | 3% |
| - graduation examinations | 240 | 60 | 8 | 2% |
| TOTAL HOURS | 10826 | 7589 | 370 | 100% |

INTERNSHIPS

| No | Specialty Practical Training | Semester | Duration (weeks) | Duration (hours) | Period | Credits |
|------|--|----------|------------------|------------------|----------------------|---------------------------------|
| 1. | Practical Training (Nursing assistant) | 4 | 2 | 90 | II year | 4 |
| 2. | Practical Training (Nursing) | 6 | 4 | 150 | II year | 5 |
| 3. | Practical Training during academic year | | | | | |
| 3.1 | Pneumology | 7 | | 7 | IV year night shifts | Allocated within the discipline |
| 3.2 | Allergology | 7 | | 6 | IV year night shifts | Allocated within the discipline |
| 3.3 | Surgical diseases | 7 | | 44 | IV year night shifts | Allocated within the discipline |
| 3.4 | Ophthalmology | 7 | | 6 | IV year night shifts | Allocated within the discipline |
| 3.5 | Urology | 7 | | 6 | IV year night shifts | Allocated within the discipline |
| 3.6 | Cardiology | 8 | | 12 | IV year night shifts | Allocated within the discipline |
| 3.7 | Nephrology | 8 | | 6 | IV year night shifts | Allocated within the discipline |
| 3.8 | Rheumatology | 8 | | 6 | IV year night shifts | Allocated within the discipline |
| 3.9 | Pediatrics | 9 | | 36 | V year night shifts | Allocated within the discipline |
| 3.10 | Gastrology | 9 | | 10 | V year night shifts | Allocated within the discipline |
| 3.11 | Anesthesiology and intensive care | 10 | | 6 | V year night shifts | Allocated within the discipline |
| 3.12 | Surgical diseases | 10 | | 44 | V year night shifts | Allocated within the discipline |
| 3.13 | Obstetrics and gynecology | 10 | | 20 | V year night shifts | Allocated within the discipline |
| 3.14 | ORL/Otorhinolaryngology | 10 | | 6 | V year night shifts | Allocated within the discipline |
| 3.15 | Internal Medicine. Clinical Synthesis | 11 | | 80 | VI year night shifts | Allocated within the discipline |
| 3.16 | Emergencies in obstetrics and gynecology | 11 | | 6 | VI year night shifts | Allocated within the discipline |
| 4 | Research practice | | | | | |
| 4.1 | Diploma thesis | 12 | | 180 | During the semester | 6 |

GRADUATION EXAMINATION

| Code | No. credits | Name of activity | Period |
|------------|-------------|--|---------------|
| S.12.O.115 | 6 | Licentiate thesis defence | May 2018 |
| | 2 | Written-test in specialty disciplines: Internal Medicine, Surgery, Pediatrics, Obstetrics and Gynecology | May-June 2018 |
| | | Oral interview in specialty disciplines: Internal Medicine, Surgery, Pediatrics, Obstetrics and Gynecology | |

Vice-Rector for Quality Assurance
and Integration into Education
Olga Cernetchi _____

Head of Department of Didactics and Academic Management
Associate professor
Silvia Stratulat _____

Dean of Faculty of Medicine 2
Associate professor
Mircea Betiu _____