

APPROVED BY
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of Education and Science of the
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2015

DESCRIPTOR OF THE STUDY FIELD OF MEDICINE

CHAPTER I

GENERAL PROVISIONS

1. The Descriptor of the Study Field of Medicine (hereinafter referred to as the “Descriptor”) shall govern the special requirements applied to the study programmes of the study field of medicine.

2. The Descriptor has been prepared in accordance with the Law on Higher Education and Research of the Republic of Lithuania and the Law on the Recognition of Regulated Professional Qualifications of the Republic of Lithuania taking into account Resolution No 535 of the Government of the Republic of Lithuania of 4 May “On the Approval of the Descriptor of the Lithuanian Qualifications Framework”, Order No V-2212 of the Minister of Education and Science of the Republic of Lithuania of 21 November 2011 “On the Approval of the Descriptor of Study Cycles”, Order No V-501 of the Minister of Education and Science of the Republic of Lithuania of 9 April 2010 “On the Approval of the Descriptor of General Requirements for Degree-Awarding First Cycle and Integrated Study Programmes”, Order No V-826 of the Minister of Education and Science of the Republic of Lithuania of 3 June 2010 “On the Approval of the Descriptor of General Requirements for Master’s Study Programmes”, Order No V-2463 of the Minister of Education and Science of the Republic of Lithuania of 15 December 2011 “On the Approval of Recommendations for Developing the Descriptor of a Study Field or Study Fields”, Resolution No. 1359 of the Government of the Republic of Lithuania 31 October 2003 “On the Training of Doctors”, as well as the recommendations of the Thematic Network on Medical Education in Europe (MEDINE) (Cumming AD, Ross MT (2008) The Tuning Project (Medicine) - Learning Outcomes/Competences for Undergraduate Medical Education in Europe. Edinburgh: The University of Edinburgh).

3. This Descriptor aims to:

3.1. inform the academic community, social partners and other stakeholders about the principles of implementation and framework of curriculum for the medical field of study and the main learning outcomes that graduates of these programmes obtain;

3.2. assist higher education institutions in designing, implementing and improving curriculum for the medical field of study;

3.3. provide guidelines for experts who assess study programmes of the study field of medicine.

4. Study programmes for the medical field of study can only be implemented as university-level integrated (first and second cycle) studies.

5. Medicine is a field of study within the group of medical and health fields of study in the area of biomedical sciences.

6. Integrated study programmes in the field of medicine must include the minimum training requirements for doctors as established by Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the Recognition of Professional Qualifications as well as Order No. ISAK-480/V-210 of the Minister of Education and Science of the Republic of Lithuania and the Minister of Health of the Republic of Lithuania of 11 April 2003 on the Minimum Requirements for the Training of Doctors, Dentists, General Practice Nurses, Midwives and Pharmacists:

6.1. A person aspiring to engage in the professional activities of a doctor must have a medical diploma and an internship certificate which confirm that over the entire period of studies, the person:

6.1.1. acquired adequate knowledge on which medicine is based, and has a good understanding of scientific methods, including the principles of measuring biological functions, the evaluation of scientifically established facts and the analysis of data;

6.1.2. gained a sufficient understanding of the structure, physiological functions and behaviour of healthy and sick persons, and of the relationship between the state of health and the physical and social environment of the human being;

6.1.3. gained adequate clinical knowledge and practical skills in terms of mental and somatic diseases, as well as medical prophylaxis, diagnosis and human reproduction;

6.1.4. acquired suitable clinical experience in hospitals under the supervision of professional doctors.

6.2. Medical studies must comprise a total of at least six years of study or 5,500 hours of theoretical and practical training provided at a university or under the supervision of university professors.

7. Curricula in the field of medical studies must include at least 360 credits: the first part of the integrated curriculum (240 credits) is allocated to first cycle studies, and the remaining part is allocated to second cycle studies.

8. Applicants for medical studies must at least have a secondary education and shall be accepted according to their grades, entrance examinations or other criteria established by the higher education institution. The list of competitive subjects according to the field of study and the principles for selection ranking, as well as the minimum entrance rank and other criteria, having received the assessment of student representation, shall be established by the higher education institutions and announced at least two years before the beginning of the corresponding academic year.

9. Medical studies can only be carried out as full-time studies.

10. Medical studies cannot be studies of two fields of study (a major field of study and a minor field of study established by the higher education institution and elected by the student) upon completion of which a double degree is conferred (the major field/branch of study and the minor field/branch of study).

11. Upon completion of a medical studies programme, a Master's degree is awarded which meets level 7 of the Lithuanian Qualifications Framework and the European Qualifications Framework and the qualification of a doctor. An internship certificate should be issued together with the diploma which specifies the medical doctor professional qualification that has been conferred.

12. Graduates of medical study programmes who would like to work as family physicians or medical specialists have the right to enrol in non-degree residency programmes designed to help prepare for independent family physician or medical specialist practice.

CHAPTER II

CONCEPT AND SCOPE OF THE FIELD OF STUDY

13. The curriculum for the medical field of study is designed to train doctors. The stages of medical training are:

13.1. university-level integrated studies in the field of medicine and an internship to earn a Master's degree in medicine and the professional qualification of medical doctor;

13.2. residency – a non-degree study programme for doctors who would like to obtain or change the field of medical practice of their medical doctor professional qualification and prepare for independent family physician or medical specialist practice;

13.3. medical practice specialisation for the acquisition of additional medical practice knowledge, skills and professional qualification for the particular medical practice in question.

14. A doctor's primary field of professional activities is health care. Doctors must:

14.1. provide emergency medical assistance;

14.2. competently examine, diagnose and treat illnesses; recommend and organise preventive measures; ensure the quality of health care services provided; and promote a healthy lifestyle, disease prevention and the preservation of health, as well as educational measures;

14.3. cooperate with other employees, teachers and other professionals in the fields of personal and public health care, nursing and social welfare;

14.4. implement mandatory health programmes;

14.5. properly manage medical practice documents, provide statistical and other information according to the procedures established by legislation of the Republic of Lithuania, and analyse the results of their work;

14.6. heed to the principles of medical ethics, and respect and not violate the rights of patients;

14.7. improve their professional qualifications on a regular basis;

14.8. comply with the medical practice licensing rules;

14.9. ensure the quality of personal health care services provided;

14.10. perform other duties established by legislation of the Republic of Lithuania.

15. The professional activities of a doctor include the formation of personal and public health care policy as well as the implementation thereof (active participation in protecting and developing personal and public health, patient enlightenment, training, education, and counselling, administration of health care institutions or their departments, and so on), so basic skills must be cultivated during medical studies.

16. The specific nature of the work determines that doctors in the field of personal and public health care must be able to work together with health care professionals (such as nurses, dentists, pharmacists and public health specialists), i.e. to be team players and organise and lead teamwork.

17. Doctors must continually take measures to improve their qualification.

CHAPTER III

GENERAL AND SPECIAL LEARNING OUTCOMES

18. Studies must create conditions for the integration of knowledge, values and skills. In major studies within the medical field of study, students must acquire the general provisions of professional activity and develop skills related to behaviour, the dissemination of professional experience and professional erudition, as well as the special skills needed to engage in health care, continue their studies in residency and continually improve their knowledge and skills.

19. Outcomes for integrated studies:

19.1. General:

19.1.1. in professional activities, the ability to act honestly and think critically and self-critically; to be empathetic and creative; to take initiative and hold to ethical obligations;

19.1.2. the ability to organise and plan one's activities, work independently, communicate and work in a team, and solve problems and make decisions, especially in new situations; the ability to assess the limits of one's competency, and seek help if necessary;

19.1.3. the ability to continue to study and pursue independent lifelong learning; to apply acquired knowledge in practice and to teach others;

19.1.4. the ability to work in an international and multicultural environment, to take other people's customs into account, and to develop one's knowledge in fields outside of medical science.

19.2. Special:

19.2.1. the ability to consult patients, identifying and evaluating the patient's medical needs;

19.2.2. the ability to identify, evaluate and describe the clinical signs of diseases and the ways in which they may manifest; to order appropriate investigations and interpret the results; to make differential diagnoses, negotiate a management plan for treatment and monitoring of the patient, and to discuss it with the patient and caregivers (guardians);

19.2.3. the ability to recognise and systematically assess acute health problems and begin to treat them: provide first aid, restore and maintain basic vital functions, and perform the relevant clinical procedures in a safe and effective manner;

19.2.4. the ability to assign treatment: characterise the mechanisms of the effect of medication, assign adequate and proper treatment, take the clinical situation into account to select appropriate medication and other methods of treatment, and assess their potential benefits and harm;

19.2.5. the ability to perform procedures: measure blood pressure, perform venepuncture and intravenous cannulation, assign intravenous therapy and use tools for infusion, perform subcutaneous and intramuscular injections, assign oxygen therapy, transport and tend to a patient, suture wounds, perform blood transfusions, urinary catheterisation, urine tests, electrocardiograms, and basic respiratory function tests;

19.2.6. the ability to apply the principles, methods, knowledge and achievements of biomedical science (anatomy, histology, genetics, immunology, microbiology, pathology, physiology, etc.) in medical practice;

19.2.7. the ability to convey information to patients, patients' relatives, disabled and colleagues, and communicate orally and in writing (including medical documentation) in a clear, sensitive and effective manner;

19.2.8. the ability to apply ethical and legal principles in medical practice: to perform clinical work in accordance with national and European legislation, and taking ethical principles into account;

19.2.9. the ability to assess the psychological and social aspects of a patient's illness: to identify and assess the impact of psychological, behavioural and social factors, including alcohol dependency, on health, morbidity and the manifestations of diseases, as well as to respond thereto – to explain advise, persuade;

19.2.10. the ability to apply in practice scientifically-based evidence found by systematically searching for and critically evaluating the corresponding information sources;

19.2.11. the ability to effectively use information and information technology in medical practice: to use a computer, computer programmes, and the achievements of computer science and information technology;

19.2.12. the ability to apply scientific principles, method and knowledge to medical practice and research;

19.2.13. the ability to promote health, engage with population health issues and work effectively in a health care system: to demonstrate an understanding of how to analyse public health problems, identify their causes and consequences, and apply knowledge about disease prevention and opportunities to improve public health.

CHAPTER IV

TEACHING, LEARNING AND ASSESSMENT

20. Teaching of curriculum for the medical field of study must be based on scientific research results and must reflect the relationship with other fields of study and science. Those studying must be taught not only basic knowledge (fundamentals), but also the latest evidence-based medical knowledge.

21. Learning must help students acquire a medical doctor's professional motivation and form a professional identity, create an opportunity for students to achieve the general and special learning outcomes, develop personal, research, social and special abilities, and enable students to perform their professional functions while they are still studying.

22. The methods of teaching and learning must be effective and diverse, and self-study work assignments must be in keeping with the learning outcome of the study programme and motivate students to use their own time and that of their teachers, as well as material resources (libraries, laboratories, equipment, etc.) in a rational manner.

23. Curriculum for the medical field of study must include transmission (information is transmitted to the students) and heuristic (information is immediately linked to an assignment which requires active learning on behalf of the student) methods of teaching and learning.

24. It is suggested that multifaceted heuristic methods of teaching and learning related to clinical practice be used as the primary methods of teaching and learning. The teaching and learning process should include the following methods: practicals using models and demonstrative tissue and organ preparations, exercises in simulation classes, viewing of visual teaching material, listening to audio recordings, patient examination and clinical case studies in the operating room, intensive care units and surgery and therapy departments, and preparation of medical history.

25. In the sixth year of medical school, studies should primarily consist of an internship during which general medical practice is carried out according to the regulations and programme approved by the higher education institution in clinical practice settings under the supervision of the internship supervisor. During the internship, the medical knowledge and skills acquired while studying in the first five years of the medical degree programme are linked with clinical experience and the ability to function in a real clinical setting, work as part of a team and critically assess the limits to one's competence.

26. Conditions must be created in the medical degree programme for an active learning process during which the students study independently. This process should include all elements of studying (literature search and analysis, preparation and execution of projects and presentations, communication between the students and teachers).

27. Studies must be linked to scientific research and the dissemination thereof in practice. They should be carried out by choosing forms such as: academic/practical seminars, student scientific research carried out at institutions of clinical practice, joint publications on practical work carried out by students, teachers and doctors, and reports at scientific conferences.

28. A final scientific research paper must be prepared in training or scientific research laboratories or a clinical practice setting (outpatient and/or inpatient health care institutions). These papers must include a thorough examination of scientific literature, scientific experimental data, clinical cases, and patient examination and treatment data, and retrospective, prospective and other investigative methods should be applied.

29. The assessment system should help implement the goals of the curriculum for the medical field of study, achieve the general and special learning outcomes, reinforce student motivation and encourage independent learning.

30. The assessment system must meet the following requirements: each assessment or examination must have clear objectives, assessment criteria and methodologies; clear rules for the submission and consideration of appeals and complaints must be provided.

31. The following basic types of assessment are recommended for medical degree programmes: diagnostic (to check knowledge and skills prior to the commencement of studies), formative (to foresee learning perspective), summative (upon completion of a subject, module or study programme), and cumulative (for multifaceted assessment of a student's achievements). When using cumulative assessment, all of the interim evaluations which form the final grade should be described, as well as their weight and the evaluation criteria that was formulated.

32. The following methods of assessment are recommended: evaluation of student presentations during seminars and practical training, oral and written tests of knowledge and skills, lab reports, analysis of tests, clinical situations and other data, medical history assessment, demonstration of skills while working in the laboratory, evaluation of clinical readiness in intensive care units, operating rooms and therapy or surgical departments in researching, advising patients or carrying out treatment under the supervision of a teacher, clinical practice reports, practical data collection reports, assessment of reviews of the latest medical literature, clinical examinations using real or simulated (acting) patients, objective structured clinical examinations and other advanced methods of assessing knowledge of the medical field of study.

33. When developing assessment criteria, it is recommended that threshold criteria which defines the minimum, mandatory level of competence and allows the student to be assessed positively be specified.

34. In order to thoroughly check all of a student's acquired knowledge, abilities and competences, not one, but various and diverse methods of evaluation should be used which make it possible to check the level of education of all of the persons studying and the correspondence thereof with the learning outcomes defined in the study programme, module or separate subject of study.

35. Students enrolled in study programmes in the medical field of study must be given the opportunity to participate in the development of methods for the assessment of learning outcome achievements, the number and scope of assignments, and evaluation criteria.

CHAPTER V

REQUIREMENTS FOR THE IMPLEMENTATION OF STUDY PROGRAMMES

36. An institution organising a curriculum for the medical field of study must carry out biomedical research.

37. General requirements for teachers of study programmes in the medical field of study:

37.1. at least half of the volume (credits) of the subjects (modules) in the field of study must be taught by scientists, of whom at least 60 per cent of the study field subject (module) teachers are teaching subjects which correspond to their line of scientific activity;

37.2. up to 40 per cent of the teachers teaching study area subjects may be practitioners who have acquired at least three years of professional experience corresponding to the applicable subjects (modules) over the past seven years. The professional experience specified in this subparagraph is mandatory for teachers of the applied subjects (modules) designated in the study programme description. At least 20 per cent of the volume of subjects (modules) in the field of study must be taught by professors.

38. Requirements for study programme framework:

38.1. a study programme may include no more than seven subjects per semester;

38.2. at least 220 credits must consist of subjects in the field of study;

38.3. at least 15 credits must consist of general subjects;

38.4. subjects established by the higher education institution and elected by the student cannot make up more than 36 credits;

38.5. the overall volume of practical training must make up at least 18 credits;

38.6. the study of each subject or module must be completed with an examination or an assessment of a paper (project) carried out independently by the student.

39. The higher education institution must establish the ratio of contact and self-study work for each part of the studies, taking the specific characteristics of the part into account.

40. A study programme in the field of medical studies must be concluded with an assessment of whether the student has acquired sufficient theoretical and clinical knowledge, practical skills and clinical experience: if the student has carried out clinical medical practice, prepared and presented a thesis, and passed the final examination(-s) for the study programme. At least 30 credits must be allotted for these activities.

41. The evaluation commission for the final examination and defence of the thesis must be made up of competent specialists/scientists within the field (branch) of study, professional practitioners and representatives of social partners. At least one member of the commission (preferably the commission chairperson) must be from another institution of education/studies.

42. An internship must be concluded with an evaluation of general medical practical knowledge and skills, clinical experience obtained, and special learning outcomes achieved. Students must record the mandatory skills required to acquire according to the programme in their internship journals, and must pass an internship practical examination. The examination must be graded by a special evaluation commission made up of competent specialists/scientists within the field (branch) of study, professional practitioners and representatives of social partners. It is recommended that the commission chairperson be a social partner.

43. The following material base is necessary for successful implementation of a curriculum for the medical field of study:

43.1. a prosectorium which meets occupational safety and hygiene requirements;

43.2. anatomy, histology and pathology preparation collections;

43.3. physiology, histology, biochemistry, pathology, microbiology and genetics teaching laboratories which meets occupational safety and hygiene requirements;

43.4. classrooms equipped with modern audio and video equipment which meets occupational safety and hygiene requirements;

43.5. special rooms (with moveable furniture and equipment) suitable for working in groups, developing practical skills (simulation classes) and communication skills, and so on;

43.6. a sufficient number of computers with word processing, quantitative and qualitative data processing, and innovative educational programmes;

43.7. libraries/reading rooms with a sufficient amount of scientific literature, textbooks, methodology publications and manuals in Lithuanian and foreign languages necessary to complete the study programme. Libraries must be equipped with computers with online access to international databases;

43.8. information related to the studies (study plans, subject parts, schedules, etc.) must be available for the public on the website of the higher education institution;

43.9. a training base which is part of the higher education institution or a health care institution evaluated and selected by the higher education institution to carry out the medical degree programme and the practical part thereof, which must ensure the regulated content and framework of studies, the qualification of its teachers and directors, and the material and methodological base necessary for the studies.

44. Requirements for the execution of practical training:

44.1. Practical training is an integral and compulsory part of studies;

44.2. Practical training must be organised in accordance with the procedure for organising practical training prepared by the higher education institution;

44.3. Practical training can be a separate subject (module) of study and/or an integral part of a subject (module);

44.4. The higher education institution must offer students a list of places with which cooperation agreements have been signed for the execution of practical training. Students may find places to carry out practical training on their own, provided that they meet the requirements of the higher education institution and have been coordinated therewith. Upon choosing an institution for practical training, a tripartite agreement is concluded between the student, the higher education institution and the aforementioned institution.

CHAPTER VI

DESCRIPTOR OF LEVELS OF ACHIEVED LEARNING OUTCOMES

45. In medical studies, the following levels of achievement are applied: typical (standard, average requirements) and excellent (better than average requirements). In light of the specific nature of the specialty of medical doctor, only the typical level shall be understood as the level that must be achieved by all medical students receiving a diploma.

46. Typical achievement level. Practical skills and understanding of the field of medical studies are good, but limited to what was presented in the programme. Methods of action or problem solving are applied in a smooth and assured manner in many topics of the field. The graduates understand what knowledge and skills can be applied in changing situations. They absorb new knowledge with ease and confidence. Medical knowledge and abilities acquired during their studies have been fully applied in a clinical setting under the direct supervision of a teacher or experienced medical professional. Have a good understanding of scientific literature and are able to justify research methodology and apply it in carrying out research. Good special abilities are demonstrated. General and social abilities are good and are clear in everyday (professional) activities. The students have good general knowledge and are able to manage an agenda.

47. Excellent achievement level. Practical abilities and understanding of the field of medical studies are comprehensive and exceed the information that was presented during the medical degree programme. Medical knowledge and abilities acquired during their studies have been fully applied in a real clinical setting under the minimal supervision of a teacher or experienced medical professional, or do not require any help or supervision. New knowledge is absorbed quickly and assuredly. Taking the occurrence under investigation into account, the students are able to select the most appropriate research methodology, justify it in a comprehensive and reasoned manner, and apply it in carrying out research. Special abilities are applied creatively. Stand out for their excellent personal and social abilities, which are used in everyday (professional) activities. The students have outstanding general abilities and are able to manage an agenda.
