

MINISTER OF EDUCATION, SCIENCE AND SPORT OF THE REPUBLIC OF LITHUANIA

ORDER ON APPROVAL OF THE DESCRIPTOR OF THE STUDY FIELD OF DENTISTRY

15 February 2021 No. V-254 Vilnius

In accordance with Paragraph 11 of Article 53 of the Law on Higher Education and Research of the Republic of Lithuania:

- 1. I approve the Descriptor of the Study Field of Dentistry (enclosed).
- 2. I determine that the higher education institutions have to adjust their study programmes to the Descriptor of the Study Field of Dentistry approved by Clause 1 hereby until 01 September 2021.
- 3. I recognize Order No. V-799 of the Minister of Education and Science of the Republic of Lithuania of 23 July 2015 "On Approval of the Descriptor of the Study Field of Dentistry", as invalid.

Minister of Education, Science and Sport

Jurgita Šiugždinienė

APPROVED

by Order No. V-254 of the Minister of Education, Science and Sport of the Republic of Lithuania of 15 February 2021

DESCRIPTOR OF THE STUDY FIELD OF DENTISTRY

CHAPTER I GENERAL PROVISIONS

- 1. The Descriptor of the Study Field of Dentistry (hereinafter Descriptor) regulates the special requirements for the study programmes in the study field of dentistry (G02) that belongs to the group of study fields of health sciences (G). The Descriptor regulates the study field of dentistry (hereinafter field of dentistry) in the scope not covered by the General Requirements for the Studies approved by Order No. V-1168 of the Minister of Education and Science of the Republic of Lithuania of 30 December 2016 "On approval of the General Requirements for the Studies."
- 2. The Descriptor was prepared in consideration of the Profile and competences for the graduating European dentist of the Association for Dental Education in Europe (2005, 2009), the Lithuanian medical standard governing dentist's practice MN 42:2015 "Dentist. Rights, duties, competences and responsibility", Directive No 2005/36/EC of the European Parliament and of the Council governing recognition of the dentist's qualification in the Member States of the European Union "On the recognition of professional qualifications", and Directive 2013/55/EU of the European Parliament and of the Council amending Directive 2005/36/EC.
- 3. The studies in the field of dentistry may be conducted only as full-time studies according to the university study programmes of integrated studies. They cannot be provided as studies within the study programmes classified under two study fields.
- 4. The persons, who complete the studies in the field of dentistry, receive master's degree in health sciences that is in conformity with the seventh level of the Lithuanian Qualifications Framework and the European Qualifications Framework for lifelong learning, as well as the qualification of dentist, which are attested by the master's diploma and its supplement.
- 5. There are no special requirements established in the Descriptor for the persons, who want to be admitted to the study programmes in the field of dentistry.
- 6. The persons applying to the higher education institution may ask to assess and recognise their competences related to dental care that they have acquired in formal, informal or self-educative mode. The assessment and recognition of competences acquired in informal or self-educative mode shall be performed in the procedure established by the higher education institution.
- 7. If the candidates are from abroad, they have to submit the documents that would prove achievements of the candidate and that would be equivalent to the documents valid in Lithuania. These documents have to prove compliance with the requirements established by the higher education institutions. The persons, who have acquired education in foreign institutions, shall be admitted to the study programme of dentistry, having assessed the foreign competences in accordance with the legal acts.
- 8. The structure of the study programmes in the field of dentistry has to satisfy the General Requirements for the Studies:
- 8.1. the part of the student's self-study shall amount to at least 30 percent of the volume of the study programme;
 - 8.2. the volume of the integral study programme has to amount to 300 study credits;
 - 8.3. total duration of clinical practical training cannot be shorter than 20 study credits;
- 8.4. the study programme shall end in the evaluation of the graduate's knowledge and capacities through defence of the final thesis (project) and the final exam of practical skills and theoretical part of the study programme. At least 15 credits have to be awarded to preparation and defence of the final thesis.

9. The purpose of the studies in the field of dentistry is to prepare the dentists of high quality, who would provide oral health care services, taking the patients' needs into consideration, while working independently, together with other dental practitioners, dental specialists or dental auxiliary.

CHAPTER II CONCEPT AND SCOPE OF THE STUDY FIELD

- 10. The main area of professional activities of dentists is personal oral health care. The dentist is a central link of oral health care. He does not simply provide treatment to the patients, but also forms policy of personal and public health together with other specialists. Dentists may work independently or in cooperation with other specialised dentists and other personal and health care specialists.
- 11. The content of the studies in the field of dentistry has to be based on the documents listed in Clause 2 herein and on the following documents:
- 11.1. Law on Recognition of the Regulated Professional Qualifications of the Republic of Lithuania;
- 11.2. The Lithuanian medical standard governing dentist's job MN 42:2015 "Dentist. Rights, duties, competences and responsibility";
- 11.3. Directive No 2005/36/EC of the European Parliament and of the Council governing recognition of the dentist's qualification in the Member States of the European Union "On the recognition of professional qualifications", and Directive 2013/55/EU of the European Parliament and of the Council amending Directive 2005/36/EC.
- 12. The object of the studies in the field of dentistry is related to the study fields of medicine, oral care, public health, pharmacology, education sciences, management, and law. The dentists use the methods to assess the patient's condition in their activities, take part in development and implementation of the preventive oral health promotion programmes, diagnose and treat oral diseases, apply educational strategies, managerial principles of the work organisation in the company, and use achievements of dentistry and medical sciences.
- 13. The following elements of the content have to be included into the study programme in the field of dentistry:
- 13.1. the theoretical part of preparation of a dentist has to include the training of general professional competencies and behavioural skills, theoretical knowledge of fundamental medicine that enables to understand anatomical, physiological, functional and behavioural peculiarities of healthy and ill person, the individual's interaction with physical and social environment, the values, principles safeguarding human rights, medical knowledge related to the course of treatment of oral diseases, variety of oral care problems, critical thinking, implementation strategies and managerial processes of oral health care;
- 13.2. the part of teaching of methods of the dentist's profession that covers diagnostics, treatment and prophylaxis of the diseases of person's stomatognathic system;
 - 13.3. knowledge and application of research methodology;
- 13.4. training of a dentist, who would analyse critically and who would reflect the practical activities of the professional practician.
 - 14. The person, who has acquired the dentist's qualification, has to be able:
 - 14.1. to render first aid;
 - 14.2. to assure continuity and surveillance of dental treatment of oral diseases of the patients;
- 14.3. to comply with the Code of Professional Ethics of Dentists and to respect the patients' rights;
- 14.4. to apply the lawful and advanced preventive, diagnostic and treatment methods and medical technologies;
- 14.5. to inform the patient about his health state, applied treatment and its course, and other provided health care services;

- 14.6. to provide information about the patients' health state, diagnosis and treatment to public authorities and other institutions in accordance with the legal acts of the Republic of Lithuania, and to provide statistical and other compulsory accounting data in the established procedure;
- 14.7. to manage the documents of dental practice in accordance with the legal acts, and to analyse own work results;
 - 14.8. to practice dentistry in accordance with the licencing rules;
- 14.9. to promote healthy life style and measures that prevent diseases, preserve and promote health;
 - 14.10. to improve professional qualification.
- 15. The graduates of the study programmes in the field of dentistry may work in personal health care institutions licensed for dental health care.

CHAPTER III GENERAL AND SPECIAL LEARNING OUTCOMES

- 16. The specialists prepared under the study programmes in the field of dentistry, who acquire the qualification of dentist, will be able to diagnose and treat diseases of stomatognathic system independently in the institutions that have licences for dental health care, and to engage in educational and preventive activities.
- 17. The learning outcomes of the study programme in the field of dentistry have to match each other, not to duplicate but supplement each other. The student has to obtain the necessary basic knowledge in fundamental medical sciences through gradual training of integral approach to the objects of the science of dentistry their creation, development, safe and effective application.
 - 18. General and professional competences have to be developed in the course of studies.
- 19. When the integral studies in the field of dentistry are completed and the qualification of a dentist is obtained, the following learning outcomes have to be achieved:
 - 19.1. acquired practical experience, ethics, basic legal knowledge:
- 19.1.1. to be able to communicate with health care specialists from other fields regardless of their age, social and cultural status;
- 19.1.2. to be able to select individual treatment plans based on holistic approach that reflects scientific achievements;
 - 19.1.3. to know rights and duties of the patient and the dentist;
 - 19.1.4. to aim at further development in own professional field;
- 19.1.5. to have legal and administrative knowledge related to provision of dental services, to be able to plan and organise the work of dentistry practice or clinic;
 - 19.1.6. to comply with ethical principles related to dental procedures;
 - 19.2. communication and social skills:
- 19.2.1. to be able to communicate interactively with the patients, their families and/or guardians, health care specialists from other fields regardless of their age, social and cultural status, to take the patient's wishes and requests into consideration when the treatment plan is made and fulfilled; and to respond to criticism professionally;
- 19.2.2. to assess psychological and social factors, their impact on oral diseases, and having identified them, to be able to treat the patient or to refer him/her to the appropriate specialists;
 - 19.2.3. to perceive the environmental variety and multiculturalism;
- 19.2.4. to understand the peculiarities of development of social-emotional intellect and language of children and teenagers;
 - 19.3. basic knowledge, collection of information, synthesis of received data:
- 19.3.1. to understand the process of sterilisation and disinfection and to be able to prevent spread of cross infection in the clinical practice;
- 19.3.2. to know main safety principles of work in ionizing environment and to be able to apply appropriate measures to assure safety of patients, colleagues and himself/herself;

- 19.3.3. to know main anatomical, physiological and functional peculiarities of a healthy individual:
 - 19.3.4. to know main symptoms of general diseases;
- 19.3.5. to know main signs of pathology of main systems of organs and possible manifestations of systemic diseases in the mouth;
 - 19.3.6. to know the mechanisms of etiopathogenesis of oral diseases;
- 19.3.7. to have pharmacological knowledge and to be able to prescribe medicaments for treatment of oral diseases, and to know their side effects;
- 19.3.8 to be able to collect and use information from various sources, and to assess it critically;
- 19.3.9 to be able to assess possible risk of treatment of diseases and to apply preventive measures on time:
 - 19.4. collection of clinical information:
- 19.4.1. to be able to collect general anamnesis of the patient, to identify and evaluate possible risk factors and their impact on oral health;
 - 19.4.2. to be able to collect and document dental anamnesis;
- 19.4.3. to be able to fill in the patient's medical documentation in the course of implementation of the treatment plan;
- 19.4.4. to be able to identify location, spread and activeness of the tooth's decay (caries), dental attrition, trauma-related or development anomalies of other dental structures and their causes;
 - 19.4.5. to be able to identify non-carious dental lesions;
 - 19.4.6. to be able to evaluate sensual and motor oromaxillary functions;
 - 19.4.7. to be able to diagnose oral pathology, including pre-cancer and cancerous diseases;
 - 19.4.8. to be able to evaluate function and possible pathology of salivary glands;
 - 19.4.9. to be able to evaluate and differentiate facial pains;
 - 19.4.10. to be able to determine normal occlusion and malocclusion;
- 19.4.11. to recognise signs of abuse and to know the methods, how to notify the competent authorities thereof;
 - 19.5. urgent dental care and skills of the first aid and resuscitation:
- 19.5.1. to be able to recognize and evaluate critical health states and to render first medical aid in emergency, and to refer the patient to other institutions;
- 19.5.2. to be able to render first aid in case of acute dental conditions, for example, if dental trauma happens;
 - 19.5.3. to be able to render urgent help to the patients in the course of orthodontic treatment;
- 19.6. diagnostics of diseases of stomatognathic system (mouth) and planning of their treatment:
- 19.6.1. to be able to recognise, evaluate and describe the peculiarities of disease manifestations, their course and clinical signs;
 - 19.6.2. to be able to prescribe the purposive tests and to interpret their results;
 - 19.6.3. to be able to perform differential diagnostics of oral diseases;
- 19.6.4. to be able to provide dental care services to the medically compromised patients and patients with special needs;
- 19.6.5. to be able to plan and to analyse the made treatment plan, to link the dental treatment with possible restoration of integrity of dental arches;
- 19.6.6. to be able to describe the characteristics of used dental materials and the caused adverse reactions;
 - 19.6.7. to be able to diagnose pathology of oral organs and tissues;
- 19.6.8. to be able to diagnose the diseases of marginal and apical periodontium and to suggest a treatment plan, upon assessment of the clinical situation;
- 19.6.9. to be able to diagnose maxillofacial condition, to recognise clinical characteristics of acute and chronic somatic, myofascial, neurogenic pain, to be able to determine and treat possible causes of the pain;

- 19.6.10. to be able to diagnose pathological conditions of temporomandibular joint and facial muscles;
- 19.6.11. to be able to assess the requirements of aesthetics of the patient and their implementation possibilities;
 - 19.6.12. to be able to determine needed orthodontic treatment;
- 19.6.13. to be able to determine indications of sedation and general anaesthesia in the course of dental treatment, to foresee and explain them to the patients;
 - 19.7. treatment of diseases of stomatognathic system (mouth):
- 19.7.1. to be able to apply principles, methods and knowledge of health sciences in clinical practice;
- 19.7.2. to be able to apply the treatment methods and measures to remove maxillofacial pain, including temporomandibular joint's pain;
 - 19.7.3. to be able to treat periodontal diseases;
 - 19.7.4. to be able to treat caries and other diseases of hard dental tissues;
 - 19.7.5. to be able to treat pulp and apical periodontal pathology;
 - 19.7.6. to be able to restore damaged hard tooth structure and integrity of dental arches;
 - 19.7.7. to be able to select and prescribe drugs needed for dental treatment;
- 19.7.8. to be able to perform infiltration and regional anaesthesia, to choose appropriate local anaesthetic means;
- 19.7.9 to be able to perform professional oral hygiene, to use manual and ultrasonic instruments, to select individual preventive measures;
- 19.7.10. to be able to explain to the patient the necessity of periodontal surgical procedures, if indicated;
- 19.7.11. to be able to evaluate the results of periodontal treatment and to create the necessary follow-up plan;
 - 19.7.12. to apply the procedures intended to preserve vitality of the pulp;
- 19.7.13. in case of pathology of apical periodontium, to apply appropriate treatment methods and materials for root canals;
- 19.7.14. to be able to explain to the patients the indications of dental implants, the factors of their durability, and peculiarities of prosthesis on the implants;
 - 19.7.15. to be able to explain contraindications of dental implant use;
 - 19.7.16. to be able to extract the tooth or root;
- 19.7.17. to be able to refer the patient to another specialist because of the life-threatening oral state (for example, cancer of oral organs);
 - 19.7.18. to know secondary risk factors of periodontal pathology;
 - 19.7.19. to know laboratory stages of making the tooth prostheses;
 - 19.7.20. to know the peculiarities of growth and development of face and skull;
 - 19.7.21. to know general principles of treatment of maxillofacial anomalies;
- 19.7.22. to have knowledge about general diseases of the patients and their treatment principles;
- 19.8. prophylaxis of diseases of stomatognathic system (mouth). Solution of public health issues and efficient work in the health protection system:
- 19.8.1. to be able to explain the importance and benefit of prophylaxis of oral diseases to the patients, to select individual preventive measures of oral diseases with regard to the patient's age, health state, and oral health state;
- 19.8.2. to promote healthy life-style principles to the patients and to be able to explain their importance;
- 19.8.3. to be able to apply oral fluoride products individually, when needed, and to seal the pits and fissures of the tooth using dental sealants;
 - 19.8.4. to be able to apply protective measures that prevent spread of infections;
- 19.8.5. to be able to hold the public position in improvement of personal and public health state;

19.8.6. to be able to explain the possible relation between nutrition, general health state, drugs and their possible impact on oral health.

CHAPTER IV TEACHING, LEARNING AND ASSESSMENT

- 20. The teaching of the study programme in the field of dentistry has to be evidence based and to reflect the links with other study and research fields. Not only the basic information has to be provided to the students, but also the latest evidence based dental knowledge.
- 21. The studying has to help the students to acquire professional motivation of the dentist, to form the professional identity, to achieve the planned learning outcomes in the field of dentistry, and to enable the students to carry out their professional functions in the course of studies already.
- 22. The teaching has to train the holistic approach of the student to the patient's treatment, the concept of team and interdisciplinary work.
- 23. The teaching and learning methods have to be based on the lifelong learning principle and to induce continuous professional development. The students should be trained to assume responsibility for their learning.
- 24. The teaching and learning methods have to be effective and versatile; the tasks for self-study have to be in compliance with the learning outcomes of the study programme, to motivate the students to use rationally time of students and teachers and material resources (libraries, laboratories, equipment, etc.).
- 25. The representative (information is presented to the students) and heuristic (information is matched with the task that demands active work of the student) teaching methods are applied in the study programme.
- 26. In order to develop the students' independence and critical thinking, the priority should be given to the heuristic teaching methods related to the clinical practice (*internship*), so, the following methods have to be included into the study process: practical training with the help of moulage, studying in the simulation classes, viewing of visual teaching aids, analysis of clinical cases, practical work with patients, laboratory works, demonstration of patients and analysis of clinical cases in the operating theatre, units of reanimation and intensive care, surgical and therapeutic profiles, preparation of case history.
- 27. In the fifth year of studies, at least 20 credits of the study programme have to be attributed to the clinical practice (*internship*) that consolidates the accumulated knowledge in general dentistry, skills and clinical experience.
- 28. The conditions for active learning process have to be created in the study programme, when the student is studying independently; therefore, the teaching and learning methods have to be interactive, giving the priority to seminars and consultations in small groups.
- 29. The scientific research work and its application in clinical practice are among the most important training forms of self-study and critical thinking. They help to train the students' critical thinking, analytical, practical and transferable skills. The following forms should be chosen: search and analysis of literature, preparation, presentation and fulfilment of projects, scientific practical seminars, scientific researches and presentations in scientific conferences made by the students.
- 30. The assessment strategy has to strengthen the students' motivation to study and to induce their independent learning. Therefore, the students have to receive timely feedback, while assessment has to be based on clear criteria and standards, taking the work performance conditions and resources into consideration.
- 31. The assessment system has to be directed to the outcomes of the study programme in the field of dentistry and it has to assure achievement of the learning outcomes and to satisfy the following requirements: the goals and methods of each assessment have to be clear; the rules of filing and examination of appeals and complaints have to be clear.

- 32. The following assessment methods may be applied: evaluation of the students' presentations during seminars and workshops, oral and written examinations, surveys during immersive lectures, reports of laboratory works, analysis of tests and clinical situations, assessment of case history, demonstration of skills while working in the laboratory, continued evaluation of clinical work with the patient under the teacher's supervision, accounting of clinical practice.
- 33. When the assessment criteria are formed, it is recommended to indicate the threshold criteria that describe the minimum compulsory level of competence and that enable to give the minimal positive evaluation to the student. When the assessment method is selected, it is necessary to take into consideration the size of the group of students, assessment goals, aimed learning outcomes of the taught subject, and assessment object. Several, more versatile methods may be used instead of a single one in order to check the level of all the achievements of the students and whether that level is in compliance with the aimed learning outcomes.
- 34. The assessment strategy of the learning outcomes has to be documented. In the beginning of the semester, the teacher has to inform the students about assessment procedure of learning outcomes, state the thorough curriculum, goals of the subject, expected learning outcomes, particular assessment strategy of the learning outcomes of the taught subject, criteria, etc. The possibilities have to be created for the students to take part in development of the assessment methods of the learning outcomes.

CHAPTER V REQUIREMENTS FOR IMPLEMENTATION OF STUDY PROGRAMMES

- 35. The study programme in the field of dentistry has to be in compliance with the scientific developments and unite the evidence-based theory and clinical practice of dentistry. Therefore, the higher education institution that provides the study programme has to carry out the scientific researches in the fields if dentistry, medicine and public health continuously and to update the study programme regularly in accordance to the scientific changes.
- 36. The teachers have to show interest in scientific novelties, perform scientific researches, create new projects, communicate fluently in at least one foreign language used for international cooperation, to take part in the professional development programmes, and to have gained recognition of professional or scientific communities.
- 37. At least half of the subjects of the study programme in the field of dentistry has to be taught by scientists, who have published scientific articles in the name of the higher education institution. All the subjects should be taught by the teachers, who have research and professional experience in the taught subjects. The practitioners teaching in the study programme must have gained at least 3-year practical experience of the taught applied subjects (modules) in the last 7 years. The experience of professional work indicated in this clause is compulsory for the teachers of the applied subjects (modules). At least 20 percent of the volume of the subjects in the study field of dentistry have to be taught by teachers, who have a title of professor. The assessment commission of final examination or defence of final thesis (project) has to be formed from competent specialists in the area of dental studies, scientists, professional practicians, and representatives of stakeholders. At least one member of the commission has to be from another research and higher education institution.
- 38. In order to assure fulfilment of the study programme, the following material facilities are needed:
- 38.1. lecture halls, laboratories, and other premises for teaching and self-study that satisfy the hygiene and work safety requirements;
- 38.2. the number of computers in the computer classes and lecture halls has to satisfy the needs of the study programme;
- 38.3. the libraries must have computers with online access to international databases; the students must have free access to the databases linked with the main teaching sources indicated in the descriptors of studies;

- 38.4. the dissecting room that satisfies the hygiene and work safety requirements;
- 38.5. collections of anatomic, histological and pathological preparations;
- 38.6. physiological, histological, biochemical, pathological, microbiological and genetic teaching laboratories that satisfy the hygiene and work safety requirements;
 - 38.7. special premises intended for work in groups;
 - 38.8. imitation class with phantom models and equipment simulating dentist's work place;
- 38.9. clinical facilities with modern, ergonomic and certified dentistry equipment for practical training (when the patient undergoes treatment) that would ensure individual formation of practical skills with regard to the programme's content;
 - 38.10. radiological examination equipment;
 - 38.11. equipment that assures infection control while working with the patients;
- 38.12. laboratory of dental and maxillary prosthesis or contracts with the laboratories performing these functions;
- 38.13. information related to studies (curricula, descriptors of subjects, timetables, etc.) has to be presented publicly on the website of the higher education institution;
- 38.14. the teaching facilities of the higher education institution has to assure the regulated content and structure of studies, qualification of teachers and managers, and the material and methodical facilities needed for the studies.