TALLINNA TERVISHOIU KÕRGKOOL

DENTAL TECHNICIAN

80166

Tallinn 2017

Educational institution	**TALLINN HEALTH CARE COLLEGE**
Code of educational institution	70003980
Title of the curriculum	***HAMBATEHNIK***
Title of the curriculum in English	**DENTAL TECHNICIAN**
Higher education level	Professional higher education
Curriculum code in the Estonian Education Info-System (EHIS)	80166
Data about the right for conducting studies in the curriculum	Curriculum belongs to the "Medicine" curriculum group in which the right to conduct studies has been granted by the Government of Estonia in 18.12.2008 with Decree no 178.
Primary registration of the curriculum	23.05.2005
Approval date of the version of the curriculum in the educational institution	The curriculum has been approved by the Council of Dental Technician Curriculum on 04.05.2017. The curriculum has been approved by the Tallinn Health Care College Council with Decision No 4.4 from 23.05.2017.

Study area	Health and well-being
Field of studies	Health
Curriculum group	Medicine
Main field of study (or studies) of the curriculum and their volume (ECTS)	Dental Technician 210 ECTS
Minor field (or fields) of study and other possible specializations in the curriculum and their volume (ECTS)	The curriculum has no minor fields of study or specializations
Forms of study	Daytime learning
Nominal length of studies	3,5 years
Volume of the curriculum in European credit point system (ECTS)	210
Volume of compulsory subjects (ECTS)	205
Volume of elective subjects (ECTS)	5

Study language	Estonian
Other languages needed for achieving the learning outcomes	English
Admission requirements	Certificate of the secondary or vocational secondary education or equivalent qualification.

Aim of the curriculum

The aim of the Curriculum of Dental Technician is to provide internationally recognized dental technicians with professional higher education, who possess knowledge and skills to prepare dental prostheses and orthodontic appliances as well as conducting applied research, and have readiness to develop the field of the profession and engage in lifelong learning.

Learning outcomes of the curriculum

1. Has a systematic overview of main theoretical concepts of dental technology, material qualities and technologies used in making dental prostheses.
2. Knows the possibilities of application of the profession of dental technician and is aware of current issues of the field, is able to formulate, analyse and connect them to other specialties and offer different solutions.
3. Orientates in evidence-based professional information, is able to independently collect, critically analyse, and use the information.
4. Is able to prepare dentures and orthodontic treatment appliances using appropriate methods and technologies, is able to critically plan and assess potential consequences.
5. Possesses necessary skills in management, entrepreneurship and teamwork needed to work as a dental technician.
6. Is able to explain dental technology problems orally and in writing in Estonian and in English, using modern tools of information technology and communication technology.
7. Is able to apply acquired knowledge and skills in his/her work, is ready to work as a dental technician and is guided by the professional ethics.
8. Understands the principles of lifelong learning and opportunities and possibilities of professional development, keeps abreast of the latest achievements in dental technology.

Conditions of fulfilling the curriculum

Curriculum contains:
9 modules (210 ECTS)

Dental Restorations I	48 ECTS
Dental Restorations II	44 ECTS
Dental Restorations III	36 ECTS
Study of Function	12 ECTS
Basics of Health Care	23 ECTS
Basics of Material and Colour Studies	8 ECTS
Professional Development	14 ECTS
Research Methodology	20 ECTS
Elective Subjects	5 ECTS
Volume of Practical Training	59 ECTS

Volume of Graduation Thesis	5 ECTS
Volume of Elective Subjects	5 ECTS

Options for passing the curriculum	In addition to obligatory subjects in the curriculum, it is required to pass 5 ECTS of elective subjects in order to create possibilities to realize students' individual needs and intellectual interests.
Graduation requirements	Completing the curriculum in full and receiving a positive grade in defending the graduation thesis.
Type of diploma issued upon graduation	*Rakenduskõrghariduse diplom* Diploma of Professional Higher Education
Documents issued upon graduation	Diploma of Professional Higher Education with academic transcript and Diploma Supplement in English.
Possibilities for continuing studies	Master`s studies
Access to labour market	Has acquired the learning outcomes for working as a dental technician.
Additional information	http://www.ttk.ee/et/kontaktileht

LETTER OF EXPLANATION FOR THE CURRICULUM OF DENTAL TECHNICIAN

Since the academic year 2017/2018 the following changes have been introduced to the Curriculum of Dental Technician:

1. On the basis of previously existing subjects, the following common subjects to all specialties have been introduced in Tallinn Health Care College on the volume of 30 ECTS:

   Anatomy and Physiology (6 ECTS), Pathology (5 ECTS), General Pharmacology, Work Safety (3 ECTS), Public Health (2 ECTS), Psychology (3 ECTS), Client Service (3 ECTS), Basics of Management and Entrepreneurship (4 ECTS), Introduction to Learning (2 ECTS), Module Research Methodology (Research Methodology I, Research Methodology II, Graduation Thesis I, Graduation Thesis II);

2. The number of modules in the curriculum has been decreased from 11 modules to 9 modules;
3. A new module Basics of Health Care (19 ECTS) has been created to substitute 2 separate modules - Anatomy and First Aid (12 ECTS) and Health and Sickness (20 ECTS);
4. A common module Research Methodology (20 ECTS) has been created instead of 2 separate modules Research and Development Methodology (16 ECTS) and Graduation Thesis (7 ECTS).
5. Previously separate module Pre-Diploma Practical Training (23 ECTS) has been added to the module Dental Restorations I, and the volume of the latter has been increased by 2 ECTS;
6. The wording of learning outcomes of modules and aims of the subjects have been adjusted.

In the Curriculum of Dental Technician, the title of the curriculum, conditions of commencement of studies, the nominal length and volume, study language, possibilities of specialization and the classification of the curriculum content have not been changed.

THE EXPECTED FIELD OF ACTIVITY OF THE GRADUATES

The main field of activity is the profession of dental technology, particularly the work of a dental technician in the dental technology laboratory. The curriculum also allows graduates to be managers in an establishment manufacturing dentures, in a company mediating dental technical products in Estonia as well as abroad and as a lecturer of the Chair of Dental Technology. Dental technicians are able to continue their education in Master`s studies.

BASES OF THE CURRICULUM AND ORGANIZATION OF PRACTICAL TRAINING

The curriculum is based on modern evidence-based information, the thorough knowledge and application of which will ensure esthetics, functionality and hygiene of dental restorations and orthodontic appliances. The dental restorations and orthodontic appliances manufactured on this basis improve a person's quality of life and do not entail any significant risks to his/her health and the surrounding environment. In all specialty subjects students will be familiarized with professional terminology, clinical and laboratory stages of preparing dental prostheses, classification of dental restorations and orthodontic appliances as well as materials, apparatus and other equipment used. With every type of restoration student has to complete basic laboratory stages, consider principles of function, occlusion and esthetics. Student must be able to evaluate the stages of work and analyse all aspects and qualities of prepared work as well as be able to document it.

In order to register theoretical knowledge and acquire practical skills, students get versatile practical experience in different practical training institutions in addition to practical training at the college.

The curriculum is based on the following legal acts and basic documents of the field of activity:

- Republic of Estonia Education Act (30.03.1992)
- Professional Higher Education Institutions Act (16.07.1998);
- Universities Act (18.02.1995);
- Standard of Higher Education , Decree of the Government of Estonia (NO 178, 18.12.2008);
- Professional Standard, Master Dental Technician, level VI (23.05.2013);
- Universities Act, Private Educational Institute Act and Professional Higher Educations Institutions Act and related laws amending laws (19.06.2008);
- Statute of Tallinn Health Care College (29.01.2009);
- Statute of Tallinn Health Care College on Outcome-Based Curriculum(19.04.2011).

REQUIREMENTS SET FOR THE CURRICULUM QUALITY

The Curriculum of Dental Technician is in accordance with the action lines of Tallinn Health Care College and the internal quality standards of the College. The objectives and outcomes of the curriculum meet the general requirements of professional higher education and the requirements necessary for ensuring professional activities of a dental technician.

The curriculum content and curriculum development is monitored and directed by the Council of the Curriculum, the membership of which includes representatives of the Chair of Dental Technology, students, alumni, employers, and an external expert. The Curriculum Council analyses the developments in the field of dental technology and, if necessary, makes suggestions for

improving or changing the curriculum, as well as for the development of the learning environment. The lecturers possess necessary professional qualifications for conducting the studies.

The necessary quality and the professional qualification of the graduates of the evidence-based curriculum are ensured by:

- the compliance of the curriculum with the requirements of the Standard of Higher Education;
- the compliance of the curriculum with the requirements of the Professional Standard;
- modernization of the curriculum by teaching new technologies;
- development of the professional and pedagogical competences of lecturers;
- ensuring internationalization of the curriculum via academic and student mobility and university cooperation; intensive cooperation with other countries via LLP/Erasmus intensive programs; lecturer-mobility;
- the knowledge and skills of the graduates can be evaluated on the basis of achievement of the goals and learning outcomes of the curriculum;
- comprehensive development and enhancement of the cooperation between lecturers and students and their skills of presenting learning outcomes.

Upon achievement of learning outcomes, a variety of teaching methods are used among which there are lectures, seminars, e-learning, group work, presentations, discussions, debates, acting as an opponent, reviewing, etc., but as well other methods necessary for conducting research. On development of practical skills, general and direct supervision are added, demonstrations, study visits, practical manual activity, self-assessment, analysis of prepared work, design tasks, etc.

Practice is conducted in dental technology laboratories in Tallinn and other parts of Estonia. In choosing the practical training institutions, the possibilities of achieving needed skills and the availability of necessary technology are taken into account. The goal is to allow the student to pass his/her practice in 3 or 4 different practical training institutions in order to acquire skills needed to use various technological possibilities and get experience and recommendations from different supervisors.

MODULES AND SUBJECTS OF THE CURRICULUM, AIMS AND LEARNING OUTCOMES

Module title: Dental Restorations I		**Maht:** 48 ECTS
Aim	To acquire skills necessary to produce acrylic partial and total dentures.	
Learning outcomes	1. Uses professional terminology. 2. Knows and recognizes the classifications of dental arch defects and acrylic prostheses, the indications and contraindications of prosthetic dentistry, the stages of preparing a denture. 3. Is able to produce removable acrylic partial and complete dentures according to the principles of occlusion, function and esthetics, and by choosing and using materials, apparatus and equipment according to the nature of a task. 4. Is able to describe and evaluate the work process and prepared work, analyse the success or faulty sides and its reasons. 5. Describes and documents dental restorations during the practice, technologies, resources and the teamwork experienced.	
Evaluation of module: subject-based method		
Subjects		
Code	**Subject title**	**Maht**
2DR117/AP1	Acrylic Prostheses I	8 ECTS
Aim	To acquire skills to produce esthetic and functional acrylic partial and complete dentures and knows the clinical and laboratory stages of producing dentures.	
Learning outcomes	1. Uses professional terminology, knows the main stages of prosthetic dentistry. 2. Knows the arch defects and classifications of acrylic dentures, indications and contraindications of prosthetic treatment, the stages of preparing a prosthesis. 3. Is able to produce acrylic removable complete dentures by taking into consideration the principles of function, occlusion and esthetics. 4. Chooses and uses materials, apparatus and equipment according to the type of work and following instructions as well as requirements for safety measures.	
Code	**Subject title**	**Volume**
2DR117/AP2	Acrylic Prostheses II	8 ECTS
Aim	To acquire skills to produce esthetic and functional acrylic partial prosthesis and knowledge of the clinical and laboratory stages of producing a denture.	
Learning outcomes	1. Considers the principles of function, occlusion and esthetics in preparing acrylic prostheses. 2. Can produce acrylic removable partial prosthesis.	

	3. Can describe and evaluate the work process and the prepared work, analyses the technological causes of successful and unsuccessful work.	
Code	**Subject title**	**Volume**
2DR117/PrAP	Practical Training – Acrylic Prostheses	7 ECTS
Aim	To reinforce the previously acquired skills of making acrylic removable partial and complete dentures in a work environment.	
Learning outcomes	1. Uses professional terminology in his/her practical training report and in presenting the practical training documentation. 2. Considers the principles of function, occlusion and esthetics in producing a prosthesis. 3. Knows and recognizes different instruments of processing and finishing prostheses and can process acrylic plate prostheses after polymerization. 4. Can describe and evaluate the work process and the prepared work, to analyse the technological, instructing-related and organizational causes of successful and unsuccessful works. 5. Can document and describe practical training environment, instruction, work organization, technologies, dental restorations prepared, problem-solving, etc.	
Code	**Subject title**	**Volume**
2DR117/PrDE	Pre-Diploma Practical Training	25 ECTS
Aim	To reinforce all knowledge and skills acquired when completing the Curriculum of Dental Technician.	
Learning outcomes	1. Knows and recognizes the laboratory and clinical stages of preparing removable dentures, fixed dentures and orthodontic appliances, is able to prepare them and possesses readiness to forward his/her professional knowledge and skills. 2. Is able to analyse and evaluate in written form as well as during the seminars the work process and final result in terms of instructional and organizational components. 3. Is able to compare the performing of similar or same types of work in different environments, the environments themselves and practical training institutions.	

Module title: Dental Restorations II		**Volume:** 44 ECTS
Aim	To acquire technological skills of preparing partial and combined prostheses and orthodontic appliances.	
Learning outcomes	1. Uses professional terminology. 2. Knows and recognizes the classifications of dental arch defects and casted framings of partial prosthesis as well as orthodontic appliances, the indications and contraindications of prosthetic dentistry, the completing stages of denture. 3. Considers the principles of function and occlusion in preparing partial and combined prostheses and orthodontic appliances. 4. Can describe and evaluate the work process and the prepared work, to analyse the technological, instructing related and organizational causes of successful and unsuccessful works, is good at teamwork.	
Evaluation of module: subject-based method		
Subjects		
Code	**Subject title**	**Volume**
2DR217/PBP1	Partial or Bugel Prostheses I	10 ECTS
Aim	To acquire technological skills for preparing partial prosthesis during practical rehearsal works.	
Learning outcomes	1. Uses professional terminology of the subject. 2. Considers the principles of esthetics, function, and occlusion in producing a partial prosthesis. 3. Knows how to add final finish to the partial prosthesis. 4. Can describe and evaluate the work process and the prepared work, to analyse the technological, instructing related and organizational causes of successful and unsuccessful works.	
Code	**Subject title**	**Volume**
2DR217/PBP2	Partial or Bugel Prostheses II	5 ECTS
Aim	To acquire knowledge on the elements of partial prosthesis and the technological methods for producing and modeling partial prosthesis framework.	
Learning outcomes	1. Considers the principles of esthetics, function, and occlusion in producing a partial prosthesis. 2. Knows how to use a parallelometer. 3. Knows the requirements set for a framework of a partial prosthesis; location, esthetics, functionality, hygiene. 4. Can add final finish to a partial prosthesis.	
Code	**Subject title**	**Volume**
2DR217/OD	Orthodontics	7 ECTS

Aim	To acquire an overview of the development stages of face, skull and morphological-functional characteristics of occlusion, occlusion anomalies, the classification of orthodontic appliances and the principles of orthodontic treatment; the principles of constructing orthodontic appliances and the requirements for the appliances.	
Learning outcomes	1. Knows and recognizes the principles of constructing orthodontic appliances and can use professional terminology. 2. Knows and recognizes the classifications of occlusion and orthodontic appliances, the indications and contraindications of orthodontic treatment, the completing stages of orthodontic appliances. 3. Can produce different orthodontic appliances, knows their advantages and disadvantages, is aware of differences in orthodontic treatment in children and adults, can interpret a doctor's treatment plan. 4. Can describe and evaluate the construction process and the finished appliance.	
Code	**Subject title**	**Volume**
2DR217/PrPP1	Practical Training – Partial Prostheses I	6 ECTS
Aim	To reinforce the acquired skills of preparing esthetic and functional partial prostheses and orthodontic treatment appliances.	
Learning outcomes	1. Can prepare diagnostic gypsum models. 2. Knows the elements of partial prostheses and can model and produce a casted framework partial prosthesis according to the rules of work safety. 3. Can describe and evaluate the work process and the finished work, to analyse the technological, instructing related and organizational causes of successful and unsuccessful works. 4. In the practical training report, compares the reasons for choosing certain dental restorations, work regulations, technologies, resources, etc. in different practical training institutions.	
Code	**Subject title**	**Volume**
2DR217/PrPP2	Practical Training – Partial Prostheses II	8 ECTS
Aim	To reinforce the knowledge and skills in constructing esthetic and functional partial prostheses and orthodontic appliances in clinical cases.	
Learning outcomes	1. Knows and recognizes the requirements for a framework of a partial prosthesis (measures, location, esthetics, functionality, hygiene, etc). 2. Knows and recognizes the requirements for orthodontic appliances (measures, location and effect of clasps and springs). 3. Continues to evaluate the work process and prepared work, analyses the technological, intruction-related and organizational reasons to succesful and unsuccesful works. 4. In the practical training report, is able to compare the reasons behind the choices of dental restorations, work regulations, technologies and resoures used.	
Code	**Subject title**	**Volume**

2DR217/KP	Combined Prostheses	8 ECTS
Aim	To acquire knowledge on combined prostheses and their possibilities of usage, on different types of attachments and the required skills to produce basic combined prostheses.	
Learning outcomes	1. Knows and recognizes the classification, indications and contraindications of using combined prostheses, knows the stages of production. 2. Can produce root attachments and attach an overdenture on it. 3. Can produce crowns with attachments and attach a partial prosthesis with a metal cast framework on it.	

Module title: Dental Restorations III		**Volume:** 36 ECTS
Aim	To acquire knowledge to produce full casted, full ceramic, metal ceramic and metal-plastic crowns, and bridge-dentures, therewith acquiring theoretical knowledge and techniques of practical work.	
Learning outcomes	1. Uses professional terminology. 2. Knows and recognizes the classifications of dental defects and fixed dentures, the indications and contraindications of prosthetic dentistry, the clinical and laboratory stages of completing dentures. 3. Can select and use materials, apparatuses and work instruments according to the work's nature by observing instructions, requirements for safety measures. 4. Is able to produce crowns, bridge-dentures, inlays and other fixed dentures.	
Evaluation of module: subject-based method		
Subjects		
Code	**Subject title**	**Volume**
2DR317/FP1	Fixed Prostheses I	13 ECTS
Aim	To acquire knowledge to produce full casted, metal ceramic crowns and bridge-dentures.	
Learning outcomes	1. Knows and uses professional terminology. 2. Knows and recognizes the classifications of dental defects and fixed dentures, the indications and contraindications of prosthetic dentistry, the clinical and laboratory stages of completing dentures. 3. Learns to select and use materials, apparatuses and work instruments according to the work's nature by observing instructions and requirements for safety measures. 4. Learns to prepare a combined model. 5. Learns to process and finish fixed dental restorations.	
Code	**Subject title**	**Volume**
2DR317/PrFP1	Practical Training – Fixed Prostheses I	7 ECTS
Aim	To reinforce the knowledge and skills to produce full casted and metal ceramic crowns as well as bridges in clinical cases.	
Learning outcomes	1. Considers the principles of esthetics, function and occlusion in producing a denture. 2. Can prepare a combined model and can mount the combined gypsum models into various articulators. 3. Can set sprues to wax models and insert fixed dentures to be produced as metal cast, can produce a metal cast. 4. In the practical training report is able to compare the reasons behind the choices of dental restorations, work regulations, technologies and resources used.	

Code	Subject title	Volume
2DR317/FP2	Fixed Prostheses II	10 ECTS
Aim	To acquire skills to produce metalloplastic and full ceramic crowns and bridge-prostheses.	
Learning outcomes	1. Considers the principles of esthetics, function and occlusion in producing prostheses. 2. Learns to use CAD/CAM circonium restorations, technologies of preparation and handling. 3. Can process and finish fixed dental restorations.	
Code	**Subject title**	**Volume**
2DR317/PrFP2	Practical Training – Fixed Prostheses II	6 ECTS
Aim	To reinforce the knowledge and skills to produce esthetic and functional full casted and metalloceramic crowns in clinical cases.	
Learning outcomes	1. Is able to make sprues and insert full-ceramic crowns for pressurization. 2. Knows different materials needed to produce fixed prostheses and the requirements for handling. 3. In the practical training report, is able to compare the reasons behind the choices of dental restorations, work regulations, technologies and resources used.	

Module title: Study of Function		**Volume:** 12 ECTS
Aim	To acquire skills on the principles of occlusion, articulation and esthetics on producing dental restorations and to understand the connection between morphology and occlusion.	
Learning outcomes	1. Uses the professional terminology of esthetics, occlusion and articulation. 2. Knows and recognizes the internal relation between occlusion and chewing, between speech and the outlook of face, the principles of occlusion therapy. 3. Understands the general connections between morphology and occlusion, can differentiate the morphological structures on tooth surface and can name them. 4. Can model teeth and perform wax-ups that correspond to the tooth's morphological features and harmonize with natural teeth, considering function, occlusion and esthetics.	
Evaluation of module: subject-based method		
Subjects		
Code	**Subject title**	**Volume**
2FÕ17/EFO	Esthetics, Function and Occlusion	6 ECTS
Aim	To acquire knowledge and skills to connect the principles of esthetics, occlusion and articulation with these skills of producing dental restorations; on the associations of morphology and occlusion, to produce esthetic and functional dental prostheses.	
Learning outcomes	1. Understands and uses the terminology of esthetics, occlusion and articulation. 2. Knows and recognizes the most important factors influencing esthetics and occlusion, the biomechanics of stomatognatic system, the criteria of optimal functional occlusion, the connections between lower and upper teeth in case of different occlusions. 3. Is able to choose teeth according to the size, shape, colour and occlusion anomaly. 4. Knows and is able to shape esthetic gingival line taking into account the anatomy and hygienic requirements of the mouth.	
Code	**Subject title**	**Volume**
2FÕ17/HM	Morphology of Teeth	3 ECTS
Aim	To acquire knowledge on the connections between teeth morphology and occlusion, and provide skills to model and esthetic crown to the artificial tooth root according to the morphological characteristics of a tooth.	
Learning outcomes	1. Knows, recognizes and uses professional terminology. 2. Understands general connections between morphology and occlusion, can detect different morphological structures on the surface of the tooth and is able to name them. 3. Is able to model teeth and create wax-ups, which are in accordance with	

	morphological characteristics of a tooth and harmonize with natural teeth, taking into consideration function, occlusion and esthetics.	
Code	**Subject title**	**Volume**
2FÕ13/ESO	Specialty Intense Studies	3 ECTS
Aim	To acquire skills to connect the principles of occlusion and articulation with producing dental restorations and understands the connection between morphology and occlusion.	
Learning outcomes	1. Knows and recognizes the internal relation between occlusion and mastication, between speech and the face, the principles of occlusion therapy. 2. Uses occlusion compass in modeling dental crowns and is able to consider function, occlusion and esthetics in preparing dental prostheses.	

Module title: Basics of Health Care		**Volume:** 23 ECTS
Aim	To acquire basic knowledge needed for the professional activities on the function of human organism, organ systems and their normal and pathological functioning; in-depth knowlege on the post-prosthetic hygiene and pathology of teeth and oral cavity. To acquire knowledge on the theoretical bases of the field of public health, the principles of public health policies and safe work environment.	
Learning outcomes	1. Knows the structure and functioning of human organism, the biological basics of functioning. 2. Possesses knowledge on the post-prosthetic hygiene and diseases of teeth and oral cavity. 3. Knows the nature of pathological and genetic processes and their action mechanisms. 4. Is familiar with the main principles of legislation, public health and legislation of work health care as well as the criteria of assessing and improving the health condition of the population.	
Evaluation of module: subject-based method		
Subjects		
Code	**Subject title**	**Volume**
AnF17	Anatomy and Physiology	6 ECTS
Aim	To acquire basic knowledge in anatomy and physiology.	
Learning outcomes	1. Uses appropriate anatomy and physiology related terminology. 2. Knows and is able to explain the structure of the human body and the mechanisms regulating its functioning and development. 3. Knows the shape, structure and location of organs in human body by body systems.	
Code	**Subject title**	**Volume**
HaOp17	Pathology	5 ECTS
Aim	To acquire foundation knowledge about causes and onset of diseases, signs and disease-related changes in the human body.	
Learning outcomes	1. Knows fundamental processes and concepts of general pathology. 2. Knows etiopathogenesis and pathogenesis of most prevalent diseases, and ways to prevent the diseases treating each organ system separately. 3. Has basic knowledge about microbiology and function of the immune system, most common micro-organisms and diseases caused by them affecting human functioning. 4. Knows genetic bases and understands the nature of heredity and mutability, has foundation knowledge about more common chromosomal and genetic diseases, and possibilities to apply genetics in medicine.	
Code	**Subject title**	**Volume**

RaTer17	Public Health	2 ECTS
Aim	To form knowledge about theoretical foundations and functions of public health, public health policy principles, and give an overview of the situation and organizational arrangement of public health in Estonia.	
Learning outcomes	1. Understands the nature of public health field, tasks, public health policy principles, and is able to interact health factors having effect on an individual and the community. 2. Knows most common health problems of population in Estonia and activities within the frames of the National Health Development Plan to prevent diseases and promote health. 3. Has an overview of the organizational arrangement of public health in Estonia and creates connections between activities of different institutional sectors and levels.	
Code	**Subject title**	**Volume**
TO17	Occupational Safety	3 ECTS
Aim	To acquire first aid skills, ability to act safely in the work environment and in case of fire hazard.	
Learning outcomes	1. Knows the principles of quality and risk management in health care organization. 2. Is able to assess risk factors in the work environment and develop a risk analysis. 3. Knows, how to use ergonomic job methods and promote health at workplace. 4. Is able to give first aid without any medical devices. 5. Is able to act in case of fire hazard.	
Code	**Subject title**	**Volume**
2THA17/AF2	Anatomy and Physiology II	4 ECTS
Aim	To acquire knowledge on the anatomy and physiology of the skull and teeth and the ability to determine teeth based on their characteristic features.	
Learning outcomes	1. Knows the anatomy and physiology of the skull. 2. Is able to explain the structures of an oral cavity (mucous membranes, salivary glands, frenum, etc.) and their importance in preparing dentures. 3. Knows the structure of teeth and is able to identify teeth according to their characteristic features. 4. Knows the anatomical shape and structure of teeth.	
Code	**Subject title**	**Volume**
2THA17/SHH	Oral Hygiene and Pathology	3 ECTS
Aim	To acquire knowledge on post-prosthetic hygiene and diseases of teeth and oral cavity, on damage caused by prostheses and radiographic changes.	
Learning outcomes	1. Knows, recognizes and uses professional terminology. 2. Possesses knowledge on diseases of oral cavity caused by micro-organisms.	

	3. Has an overview of the microflora of oral cavity, gums and teeth and knows the main principles of hygiene concerning oral cavity and post-prosthetic situation. 4. Possesses knowledge on radiographic changes. 5. Knows the damage caused by prostheses. 6. Has an overview of injuries of facial bones as well as of maxilla and mandibula.

Module title: Basics of Material and Colour Studies		**Volume:** 8 ECTS
Aim	To acquire knowledge on the materials used to produce dental prostheses, their physical and mechanical properties and develop the skills of colour perception.	
Learning outcomes	1. Knows, recognizes and uses specialty terminology. 2. Knows and recognizes the history of the materials used to produce dental prostheses, methods or producing, their physical and chemical properties based on the study of material strength. 3. Knows and recognizes the mutual suitability of the materials used, the classification of materials and is able to analyse the possible mistakes made on handling different materials. 4. Knows and recognizes the colours of light and object, wavelengths of specter colours, and can connect them with tooth shade guides and with natural tooth colours.	
Evaluation of module: subject-based method		
Subjects		
Code	**Subject title**	**Volume**
2MVA17/MÕ1	Material Studies I	3 ECTS
Aim	To acquire basic knowledge on the technologies of preparing materials used to produce dental prostheses, their composition, structure and advantages as well as disadvantages, mutual suitability and classification of materials used.	
Learning outcomes	1. Uses the professional terminology of the field. 2. Knows the physical and mechanical properties of the materials used in dental technology, methods of their determination. 3. Is familiar with the effect of disinfection agents on different dental technology materials.	
Code	**Subject title**	**Volume**
2MVA17/MÕ2	Material Studies II	3 ECTS
Aim	To acquire knowledge on the materials and technologies in preparing the materials to produce dental prostheses, their consistence, structure, advantages, classification, disadvantages and mutual suitability.	
Learning outcomes	1. Is familiar with the duplication materials, insertion masses, metals and their alloys and their handling principles. 2. Knows the concept of electrolytes and acids. 3. Acquires knowledge of strength of materials.	
Code	**Subject title**	**Volume**
2MVA17/MVÕ	Material and Colour Studies	2 ECTS
Aim	To acquire knowledge on the materials used for producing dentures, their physical and mechanical features; their consistence, structure, advantages, classification, disadvantages and mutual suitability, to develop the skills of	

	colour perception.
Learning outcomes	1. Knows and recognizes different light-curing composites. 2. Knows and recognizes the consistence and physical properties of ceramic masses. 3. Knows and recognizes the colour of light and object as well as colour physiology and is able to connect it to tooth shade.

Module title: Professional Development		**Volume:** 14 ECTS
Aim	To create prerequisites for professional self-development and entrepreneurship by implementing basic knowledge in psychology, ethics, client service, and management.	
Learning outcomes	1. Is familiar with the content of the curriculum of dental technician, with the organization of studies and practical training as well as learning and counselling system. 2. Is capable of planning and directing independent work and career as well as develop one's learning skills. 3. Knows how to systemize and generalize what has been learnt during the curriculum subjects, apply theoretical knowledge into practice. 4. Knows how to critically analyse, discuss and defend one's viewpoints. 5. Knows, implements and develops different communication techniques. 6. Values and uses the principles of teamwork.	
Evaluation of module: subject-based method		
Subjects		
Code	**Subject title**	**Volume**
SO17	Introduction to Learning	2 ECTS
Aim	To create possibilities for managing successfully in study process in Tallinn Health Care College.	
Learning outcomes	1. Has an overview of Estonian higher education system and possibilities for international cooperation. 2. Knows organization of studies and practical training, and study counselling system in Tallinn Health Care College. 3. Is able to compose and execute letters and study documents. 4. Knows foundations of studies, teamwork, stress and time management, and career planning.	
Code	**Subject title**	**Volume**
JuEt17	Management and Entrepreneurship	4 ECTS
Aim	To create possibilities for developing basic skills related to organization management and starting enterprise.	
Learning outcomes	1. Can describe an organization and its management process, including personnel management, and associate them with his/her specialty. 2. Knows different forms of enterprise and principles for choosing them. 3. Chooses and analyses a business idea, can develop a business plan, and plan and carry out projects. 4. Has elementary knowledge about foundations of tax system and accountancy, and can apply to financial institutions or funds for getting financing. 5. Knows principles of product and service development, and marketing.	
Code	**Subject title**	**Volume**

KL17	Client Service	3 ECTS
Aim	To acquire knowledge about client service foundations and provide readiness for understanding and fulfilling clients` needs in service process.	
Learning outcomes	1. Knows foundations and ethical aspects of client service. 2. Knows the nature of service process and can participate properly in this. 3. Knows types of products/service and is able to plan and carry out (sales) conversation. 4. Uses appropriate communication techniques in client service.	
Code	**Subject title**	**Volume**
PSU17	Psychology	3 ECTS
Aim	To acquire knowledge of psychology and provide readiness for understanding the needs of a patient/client.	
Learning outcomes	1. Has knowledge about concepts of psychology (including developmental, personality and social psychology) and main approaches. 2. Understands the nature and causes of an individual`s development and social behaviour. 3. Is able to apply different communication techniques and knows teamwork principles.	
Code	**Subject title**	**Volume**
2PA17/EA	Specialty Development	2 ECTS
Aim	To provide knowledge on the importance of personal professional development and knowledge on how to develop his/her profession in terms of lifelong learning and purposeful planning of his/her career.	
Learning outcomes	1. Can systematize and generalize what has been learnt and uses professional terminology, understands the importance of lifelong learning. 2. Knows, recognizes and uses different learning styles and communication techniques. 3. Acquires knowledge on leadership, supervision and teamwork.	

Module title: Research Methodology		**Volume:** 20 ECTS
Aim	To create possibilities and support for conducting research and developing academic writing skills.	
Learning outcomes	1. Can find and use reliable evidence-based scientific sources for the professional research. 2. Can analyse and report information found from different sources. 3. Knows foundations of statistics, can methodically collect data and analyse them properly. 4. Knows ethics in research and can follow this. 5. Can set professional problems, and based on the research, give recommendations for solving them.	
Evaluation of module: subject-based method		
Subjects		
Code	**Subject title**	**Volume**
UTM1-17	Foundations of Research I	5 ECTS
Aim	To create readiness for collecting and analysing evidence-based information.	
Learning outcomes	1. Can apply principles of systematic literature search and record search results. 2. Can independently use scientific data bases and analyse relevant evidence-based materials. 3. Can report professional scientific literature in English and Estonian. 4. Knows foundations of statistics and is able to find and interpret statistics. 5. Can compose and form independent works, and uses scientific language.	
Code	**Subject title**	**Volume**
UTM2-17	Foundations of Research II	5 ECTS
Aim	To create skills for conducting research.	
Learning outcomes	1. Understands concepts and principles of scientific research and differences between types of research. 2. Knows different research methods, and planning the research, can choose the most suitable method for collecting and analysing data. 3. Can collect or find statistical data and relevant evidence-based sources, analyse, report and refer properly them in his/her paper. 4. Understands principles of ethics in science and medicine, is able to pay attention to ethical aspects, when composing his/her research.	
Code	**Subject title**	**Volume**
LP1-17	Graduation Thesis I	5 ECTS
Aim	To acquire skills for using his/her professional knowledge to search independently and analyse critically a particular problem or situation in	

	practice.	
Learning outcomes	1. Is able to independently plan and carry out a research, and present properly its results. 2. Can pay attention to professional problems and research focuses. 3. Is able to give research-based recommendations for solving professional problems.	
Code	**Subject title**	**Volume**
LP2-17	Graduation Thesis II	5 ECTS
Aim	To show a student`s ability to apply his/her knowledge and practical skills developed across the curriculum, to carry out a research using different research methods.	
Learning outcomes	1. Understands research ethics and principles of reliability, and considers them when carrying out the research. 2. Is able to go through and analyse scientific literature associated with a research problem. 3. Knows the way of data collection and method of analysis used in the research. 4. Can explain research results and importance of them in specialty. 5. Is able to analyse critically and defend his/her viewpoints presented in the research, and discuss the searched topic.	

Module title: Elective Subjects		**Volume:** 5 ECTS
Evaluation of module: subject-based method		
Subjects		
Code	**Subject title**	**Volume**
VA17/ÜHM	Overview of the Morphology of Teeth	5 ECTS
VA17/PH	Prostheses Maintenance	5 ECTS