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 **TBILISI HUMANITARIAN TEACHING UNIVERSITY**

 ***SILLABUS***

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| **Name of educational course** | Fixed Dental Prosthesis |
| **Code of educational course** | STOM0420DM |
| **Status of educational course** | **C**ompulsory coursefor the one-cycle higher educational Programme-Dentistry |
| **ECTS** | **4 credits. Total: 100 hours**Contact Hours–40 hours (Class Meeting Time Period: 13L/23 Pr) + 4 hours (Midterm:2h and Final Examinations 2h):Individual Work-60 hours |
| **Lecturer**  | Sofia Kraveishvili, MD, Ph.D, THTU invited lecturer Tel. 577743239Consultation days: according to consultation schedule |
| **Goal of educational course** | The goal of the course is to teach the students various fixed dental prostheses with the purpose of orthopedic treatment in case of partial or complete defect of tooth crown. They will acquire techniques of mechanical processing of abutment tooth and taking impression. The course aimed to mastering the student on the various skills that are: Formulate diagnosis of systemic medical conditions that present with oral symptoms and initiate appropriate management; Perform and practice practical procedures effectively and safely; Demonstrate and apply critical thinking to practice problems; Apply and evaluate research and new information to dental practice. |
| **Precondition for admission**  | Dental materials for prosthetic dentistry |
| **System of students’ assessment** | **The assessment system at the Tbilisi Humanitarian Teaching University is divided into the following components:**Out of the total score (100 points) the intermediate assessment makes totally 60 points that are distributed as follows:**A student’s activity during the educational semester** -30 points;**Intermediate exam** - 30 points;**and the final exam** - 40 points.The limit of minimum competence in the component of intermediate assessments totals at least **18 points.**The limit of minimum competence of the final assessment is **50%** of the total sum of the final assessment, i.e.**20 points out of 40 points.****The assessment system allows:****A) Five types of positive assessment:**a.a) **(A) Excellent** - 91-100 points of the assessment;a.b) **(B) Very good** - 81-90 points from maximum marks;a.c) **(C) Good** - 71-80 points from maximum marks;a.d) **(D) Satisfactory** - 61-70 points from maximum marks;a.e) **(E) Sufficient** - 51-60 points from maximum marks.**B) Two types of negative assessment:****b.a) (FX) Did not pass** - 41-50 points from maximum marks, which means that a student needs harder work to pass and is granted one additional attempt with independent work;**b.b) (F) Fail-** 40 points and less from maximum marks, which means the performance a student is not sufficient and he/she has to learn the subject from the beginning.1. In case of one of the negative assessments: (FX) Did not pass, the Teaching University shall appoint an additional exam within at least 5 days after the final exam results are announced and reflected in the exam table.2. The assessmentreceivedat the additional exam is the student's final assessment, which does not reflect the negative points received at the basicfinal exam.If the student receives atthe additional exam from 0 to 50 points, (F) -0 score will be recorded in the student’s final examination record list.  |
| **Content of educationla course** | See Appendix 1 |
| **Assessment forms/methods/****criteria/activities** | **Activity -20 points;****Midterm quiz - 30 points;****Presentation - 4 points;****Discussion - 1 point;****Situational task- 3 points;****Tested exam- 2 points;****Final exam - 40 points;.****Activity:** Each course is evaluated with 2 points. Maximum 20 points**a) Assessment of verbal knowledge - 10** points. A student is assessed 10 times during the term. The maximum assessment – 1 point.**1 point:** The student reveals the perfect, convincing and detailed knowledge of the material, uses specific terminology freely, talks over logically. Actively uses information from reviewed material, is interactive.**0,5 points:** The material is not very well mastered by the student. Reveals only schematic knowledge, coveys material illogically, with less persuasiveness, little mastery of specific terminology, difficulty in analyzing and integration with reviewed material**0 points:** The student is passive, the material is not reviewed.**b) Practical skills - 10 points.** The student’s practical skills are assessed 10 times during the semester, maximum grade of each - 1 point.**1 point:** the student links the theoretical knowledge with the practical work well, performs the intended work accurately and perfectly. Knows the necessary materials and tools well, knows the rules and sequence of their use. At the time of admission of the patient to the clinic, links the theoretical knowledge well: - gathering anamnesis, examining the patient, making a diagnosis, filling in the medical history. Assists the teacher well while receiving the patient.**0,5 points:** The student is not able to perfectly link the theoretical knowledge with the practical work, he/she is not able to perform the practical work perfectly. Has superficial knowledge in necessary materials and tools. Doesn’t know the sequence of their use. Fails to provide proper assistance to the teacher while admitting the patient to the clinic. Cannot perform full examination and diagnosis of the patient.**0 point:** The student is passive, is not able to link theoretical knowledge with practice. He (she) is not able to master practical skills. **Discussion- 1 point****Assessment criteria****1 point** - the student has mastered the material well. Gives correct, convincing answers to questions. Thinks well. Demonstrates good skills of discussion with group;**0,5 points** - the student has a superficial knowledge of the material. Answers the questions with difficulty. Cannot have a good discussion with the group.**0 point** - the student is unable to master the theoretical material and is therefore unable to participate in the discussion. He/she is passive.**Tested exam - 2 points**The student is given 10 tests from the revewed material, each correct answer is assessed by 0.2 points, incorrect - by 0 points.**Presentation assessment. The maximum assessment - 4 points**The presentation is assessed according to the following criteria:**4 points** - the student is well prepared and thoroughly masters the material provided. Demonstrates the ability to present and discuss with the audience as much as possible. The answers to the questions asked are complete, correct and substantiated. The student is well aware of the problematic issues. Has a well-presented illustrations relevant to the topic.**3 points -** the student is properly prepared, masters the subject matter. Gives the right reasoned answers to the questions asked. Has presented relevant illustrations of the topic.**2 points -** the student is insufficiently prepared. Knows only a part of the topic provided. He (she) has difficulty in presenting the material to the audience. The answers to the questions are unreasonable. No demonstration material have b been submitted. Has difficulty in linking with the audience. Weakly demonstrates the ability to lead the discussion with the audience. **1 point -** The student is poorly prepared. The answers to the questions asked are incomplete. Has not presented relevant demonstration material of the topic, has no ability to lead the discussion. Unable to connect with audience.**0 point** - The student is not prepared.**Situational task** **- 3 points.****Assessment criteria:****3 points -** the student understands the situation well. Demonstrates the theoretical knowledge. He/she has good analytical skills, uses in making conclusions and therefore correctly diagnoses and makes decisions independently.**2 points -** the student understands the situation, demonstrates the general theoretical knowledge but is not able to make correct decisions.**1 point -** the student doesn’t understand the situation, demonstrates general theoretical knowledge, cannot make the right decisions.**0 point -** the student does not understand the situation at all or does not participate at all.**Midterm quiz - maximum 30 points (Written)****a) Work (test form) -** open test consists of 15 questions concerning the material passed. Each correct answer is assessed by 1 point, incorrect - by 0 point. Maximum - 15 points.**b)** Each ticket containing closed questions includes 3 closed questions / topics. Each closed question / topic is evaluated with 0-5 points.**Criteria for evaluating a 5-point quiz:** **5 points -** the answer is complete. The answer is conveyed accurately and exhaustively. The student has a thorough knowledge of the past material provided by the program, has a good mastery of both basic and supplementary literature, the terminology is kept, demonstrates a good ability to analyze and generalize.**4 points** - the answer is complete but shortened; Terminologically correct; There is no substantial error; The student is well versed in the past material provided by the program; Has the mastery of the basic literature, demonstrates the ability to analyze and generalize.**3 points -** the answer is incomplete; The issue is satisfactorily conveyed; The terminology is imperfect; The student possesses the material provided by the program, but with a few errors noted, weak analysis of the issue presented by him/her.**2 points** - the answer is incomplete; The terminology is erroneous and inaccurate; Relevant material on the issue is presented partially; The student has insufficiently mastered the basic literature; Due to insufficient theoretical training, the student finds it difficult to analyze the material in practice and draw valid conclusions.**1 point** - the answer is not perfect; The terminology is not used; The answer is fundamentally wrong. Only separate fragments of the relevant material are presented. The student is unable to analyze practical material **0 point** - the answer to the question is not relevant or not given at all.**Final exam maximum 40 point****a) Work (test form)** - the open test consists of 15 questions referring to the material passed, each correct answer is evaluated by 1 point. Incorrect answer - 0 point.**b) Practical skills** - 5 points.**Assessment criteria:****5 points -** the student thoroughly demonstrates theoretical knowledge, which is well matched with practical work. Accurately differentiates the defects and diagnoses. Chooses the proper dental impression spoon and impression material. Precisely follows the stages of imprinting and modeling. Accurately and perfectly restores the insert from wax.**4 points** - the student demonstrates theoretical knowledge well, which is reflected in his / her practical work: he / she is good at differentiating defects and making diagnoses. Demonstrates good practical skills in impression making, model casting and inlay modeling. The work done is complete.**3 points -** the student has appropriate theoretical knowledge but is unable to fully link with the practical work. While practical work he/she can not follow the sequence of processes. It is difficult to maintain ethics in the work process. Cannot use the specified time properly. The work done is less complete.**2 points -** the student doesn’t have relevant theoretical knowledge, which is revealed in his/her practical work. It is difficult to analyze and link theoretical knowledge with practical work. Less reveals practical skills in the work process The work performed by him /her is incomplete.**1 point** - the student doesn’t have sufficient theoretical knowledge. Can not analyze what is reflected to his/her practical work. Fails to demonstrate practical skills in the work process. Cannot analyze theoretical knowledge and links with practical work. The work done is inaccurate.**0 point -** The student is passive. Unable to complete a practical task.**c) Ticket with closed questions.** Each ticket will include three questions. Each case is evaluated with 5 points. **Criteria for assessing a 5-point quiz:** **5 points -** the answer is complete. The answer is conveyed accurately and exhaustively. The student has a thorough knowledge of the past material provided by the program, has a good mastery of both basic and supplem supplementary literature, the terminology is kept, demonstrates a good ability to analyze and generalize.**4 points** - the answer is complete but shortened; Terminologically correct; There is no substantial error; The student is well versed in the past material provided by the program; Has the mastery of the basic literature, demonstrates the ability to analyze and generalize.**3 points -** the answer is incomplete; The issue is satisfactorily conveyed; The terminology is imperfect; The student possesses the material provided by the program, but with a few errors noted, weakly demonstrates the ability to analyze.**2 points** - the answer is incomplete; The terminology is erroneous and inaccurate; Relevant material on the issue is presented partially; The student has insufficiently mastered the basic literature; Due to insufficient theoretical training, the student finds it difficult to analyze the material in practice and draw valid conclusions.**1 point** - the answer is not perfect; The terminology is not used; The answer is fundamentally wrong. Only separate fragments of the relevant material are presented. The student is unable to analyze practical material **0 point** - the answer to the question is not relevant or not given at all. |
| **Mandatory literature** | 1. Contemorary Fixed Prothodontics // Rosensteil, Land, Fujimoto (fifth Edition), ics , parode2016, |
| **Additional****literature**  | 2.Contemorary Fixed Prothodontics // Rosensteil, Land, Fujimoto (Fourth Edition), 2006, |
| **Study results. Field competences** | **Knowledge**1. Student describes fixed prosthesis based on general classification
2. Student determines basic principles of formation of tooth cavity for inlay
3. Student explains importance of taking therapeutic measures before prosthetics
4. Student describes the method of making artificial crowns

**Skills** 1. Student makes conclusions based on the indications and contraindications usages of fixed crowns;
2. Student prepares tooth for applying crowns;
3. Student makes models and adjustment of delivery crowns.
4. Student detects the mistakes made in the course of making artificial crowns
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| **Teaching methods and forms** | Lecture, Practical trainingDiscussion / debatesDemonstration of practical skillsIndependent work of a student and making a presentation |

**Appendix 1**

**Content of educational course**

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| **Day**  | **Teaching method** | **Number of hours** | **Topic of practical or laboratory training of Lecture/work in the working group** | **Literature** |
| **I**  | **Lecture** | 2 | Classification and general description of fixed prosthesis.**1.** Contemorary Fixed Prothodontics // Rosensteil, Land, Fujimoto (Fourth Edition)2006, **pp. 84-87ics , parode** |  |
| **Practical training\seminar** | 1 | Syllabus Presentation |  |
| **II**  | **Lecture** | 1 | Denture treatment with inlays in case of defect of tooth crown. **1.**Contemorary Fixed Prothodontics // Rosensteil, Land, Fujimoto (Fourth Edition)2006, **pp.225-226,245-247** | ics , parode |
| **Practical training\seminar** | 2 | Classification and general description of fixed prosthesis  |  |
| **III**  | **Lecture** | 1 | Clinical methods of denture treatment with inlays.Consideration of mistakes that may be made in the process of making inlays. .Contemorary Fixed Prothodontics // Rosensteil, Land, Fujimoto (Fourth Edition)ics , parode 2006,**pp.245-247**2.Contemorary Fixed Prothodontics // Rosensteil, Land, Fujimoto (fifth Edition)ics , parode2016,**pp.236-246** |  |
| **Practical training\seminar** | 2 | * Classification of tooth crown cavity according to Black’s
* classification and consideration of basic principles of formation of tooth cavity for inlay.
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| **IV**  | **Lecture** | 1 | Semi-crowns, veneers or vestibular semi-crowns1.Contemorary Fixed Prothodontics // Rosensteil, Land, Fujimoto (Fourth Edition) 2006, **pp.245-247**ics , parode p 244-247 p 2.Contemorary Fixed Prothodontics // Rosensteil, Land, Fujimoto (fifth Edition)ics , parode2016,**pp.246-263** |  |
| **Practical training\seminar** | 2 | * Direct, indirect and combined rule of making an inlay.
* Consideration of mistakes that may be made in the process of making inlays.
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| **V**  | **Lecture** | 1 | Anaesthsea in prosthetic dentistry1.Contemorary Fixed Prothodontics // Rosensteil, Land, Fujimoto (fifth Edition)2016,**pp.169-180** |  |
| **Practical training\seminar** | 11 | * Indications for making half crowns and preparation of abutment tooth.
* Indications for making veneer, direct and indirect methods of manufacture.
* Component parts of telescopic crowns.

Quiz |  |
| **VI**  | **Lecture** | 1 | Tooth prosthetics with artificial crowns 1.Contemorary Fixed Prothodontics // Rosensteil, Land, Fujimoto (Fourth Edition)2006,**pp.209-214** |  |
| **Practical training\seminar** | 2 | * Local and general reactions of a patient.
* Impact of temperature, vibration and mechanical effect on teeth and adjoining tissues.
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| **VII**  | **Lecture** | 1 | Types of artificial crowns and principals of support teeth preparation .Contemorary Fixed Prothodontics // Rosensteil, Land, Fujimoto (Fourth Edition)2006, **pp.215-224**2.Contemorary Fixed Prothodontics // Rosensteil, Land, Fujimoto (fifth Edition)ics , parode2016,**pp.209-222** |  |
|  | **Practical training\seminar** | 2 | * Artificial crowns and requirements to be met.
* Indications and counterindications for making a crown.
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| **VIII**  |  | 2 | Intermediate exam |  |
| **IX**   | **Lecture** | 1 | Metal crown. Metal crowns with different facing.Contemorary Fixed Prothodontics // Rosensteil, Land, Fujimoto (fifth Edition)ics , parode2016,**pp. 647-671** |  |
| **Practical training\seminar** | 2 | * Types of artificial crowns and principles of preparation of abutment teeth.
* Method of making artificial crowns.
* Principle of mechanical processing of abutment tooth for artificial crowns made of different materials.
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| **X**  | **Lecture** | 1 | Porcelain and plastic artificial crowns. 1.Contemorary Fixed Prothodontics // Rosensteil, Land, Fujimoto (fifth Edition)ics , parode2016,**pp.222-236** |  |
| **Practical training\seminar** | 2 | * Molded and pressed metal crowns.
* Metal crowns with plastic and porcelain facing.
* Methods of taking impression.
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| **XI**  | **Lecture** | 1 | Metal-ceramic and metal-plastic artificial teeth 1.Contemorary Fixed Prothodontics // Rosensteil, Land, Fujimoto (fifth Edition)2016,**pp.209-222** |  |
| **Practical training\seminar** | 2 | Indications and counter indications for making plastic and porcelain teeth. |  |
| **XII**  | **Lecture** | 1 | Direct and indirect methods of making pin teeth. Denture treatment with plastic pin tooth. Advantages of crown prosthetics on pin artificial stump. 1.Contemorary Fixed Prothodontics // Rosensteil, Land, Fujimoto (fifth Edition)ics , parode2016,**pp. 144-145** |  |
|  | **Practical training\seminar** | 2 | * Porcelain fused to metal and metal-plastic artificial crowns.
* Mistakes made in the course of making artificial crowns.
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| **XIII**  | **Lecture** | 1 | Summery |  |
|  | **Practical training\seminar** | 2 | Presentation |  |
| **XIV-XV** |  | 2 | **Final exam** |  |
|  |  |  | **Additional exam** |  |