#### In the Name of God



# Islamic Republic of Iran Ministry of Health, Treatment and Medical Education Tabriz University of Medical Sciences

# Curriculum of Prosthodontics Postgraduate (MSc) Program

#### In the Name of God

**Section I:** 

**Title: Prosthodontics** 

**Degree: Master of Science in Clinical Dentistry (MSc)** 

<u>Introduction</u> (not more than 100 words including general comments on the field and its developments, advancements and history)

# **Definition** (the main subject of study and services provided by the graduates)

Dental prosthesis is one of the dental specialties majors that is made up of fixed, complete removable, partial removable and maxillofacial removable prosthesis and dental implants and in the case of successful graduation it will lead to the MSc degree.

## The Aim of the Course (including its vision and mission)

The aim of performing this education program is training prosthodontists who are at national and global level from the aspects of knowledge and science level and practical skills. In addition being able to provide preventive and therapeutic services with standard quality in their field besides being capable of providing education service and playing an active role in advancing sciences and expanding science and research limits.

**General Competencies** (including communicative, interviewing, educational, writing, reporting, critical thinking, problem solving, managerial ones as well as professionalism)

Effective communication with patients, accurate examinations, proper application of paraclinical tests, familiarity with modern science and technology, accurate diagnosis and appropriate treatment planning, proposing appropriate preventive and therapeutic strategies, conducting research with the aim of solving existing problems, educating patients, accompaniers and colleagues, and management and executive participation in the health team

## **Specific Competencies and Skills (Special Qualifications)**

Prosthodontic post graduates ought to achieve these capabilities:

- complete familiarity with stomatognathic and occlusion and subsequent disorders
- Capability of diagnosis, treatment plan and intraoral lost tissue regeneration
- Capability of diagnosis, treatment plan and extra oral lost tissue regeneration
- Capability of diagnosis, treatment plan and treating occlusal and TMJ disorders
- Acquiring skill in research and hiring scientific references

# **Professionalism and ethical expectations from graduates:** It is expected that graduates:

- a) In the area of altruism: preferring the patient's interests to their own, observance of justice while working with different patients, considering all physical, psychological, social and belief-related aspects of patients while treating them, spending enough time in all phases of patient care, paying attention to patients' demands and discomforts, observance of the patients' bill of rights.
- b) In the area of dutifulness and responsibility: have enough commitment to do their tasks, answer patients' questions, provide patients and their accompaniers with information regarding the patient's status in the most appropriate way, avoid unnecessary interferences with colleagues' work and interact with the health team members, ask patients' permission for examining and taking any diagnostic-therapeutic measures, and instructing patients properly regarding prevention, appearance of side effects, disease reoccurrence and improvement of life quality.
- c) In the area of honor and honesty: be truthful, honest and confidant and respect patient's privacy.
- d) In the area of respecting others: respect patients' conventions, traditions and habits, respect patient as a human being, respect patients' time and observe order and regularity, respect patients' accompaniers, colleagues and therapeutic team members, and have an appearance appropriate to professional prestige.
- e) In the area of professional career: accept critique, know their scientific limitations, ask for advice and help if needed, improve their knowledge and skills constantly, do diagnostic-therapeutic measures according to available facilities and scientific achievements, and observe the standards of completing medical record and reporting.

# The Terms and Conditions of Admission to the Course (specific

conditions including exams, interview, CV, Recommendations, etc.)

Applicant's documents, including his/her DDS/BDS degree, CV,

Recommendation, etc will be reviewed by the faculty members of Prosthodontics Department. Based on the documents, the applicant will be accepted for either an interview or a three month evaluation period to be an observer in Prosthodontics Department. If he/she could successfully pass the interview/evaluation period, he/she will be accepted to continue as a MSc student.

# **Educational Strategies, Methods and Techniques**

The following educational strategies are considered in Prosthodontics pogram:

Learner-centered education, learning based on problem solving, integration of basic and clinical sciences, evidence-based learning, lifelong community-oriented education, and systematic education.

# **Student Assessment**

A variety of assessment methods including theoretical exam, DOPS, OSCE, Seminar preseantation, portfolio, etc, depending on the course, is implemented.

# Number and Type of Credits and Tables of the Courses

(including compulsory and optional [elective] courses)

The educational system of the Prosthodontics program is semestrial. Theoretical, practical and workshop courses are set in three areas of basic sciences, related sciences and specialty sciences.

Prosthodontics post graduate program duration is three years in full time mode according to dental education council's principles.

#### **Education System:**

Course types are in theoretical, practical, theoretical-practical forms that are presented in basic, related and special science courses forms.

#### Basic science courses:

These courses are considered to be the infrastructure of related science and specialty science courses and their aim is to remind, update, expand and deepen the topics that are presented in this specialty program.

Basic science courses are 8.5 units of post graduate program which is presented as common and specialized basic science.

#### Related science courses:

These courses (2 units) is about the scientific relationship with other specialty fields of dentistry and teach knowledge, creativity and appropriate decision making to residents in the way that the residents will acquire capability of team working for presenting comprehensive treatment plan regarding the modern related science advancements, limitation, priorities and capabilities.

#### Special science courses:

These courses which are the main post graduate program content are taught with the goal of knowledge and science promotion and skill acquisition in prosthodontics.

Specialty science courses are 92.5 h of the post graduate program which will be taught by the related education department faculty members.

Total education hours of post graduate prosthodontics is 1785.

# **Common Basic Science**

			Uni	ts			Hou	rs		
Code	Course	Theoretical	Practical	Workshop	total	Theoretical	Practical	Workshop	total	prerequisite
1	Medical Education(1)	-	-	1	1	-	-	51	51	-
2	Medical Education(2)	-	-	2	2	-	-	102	102	1
3	Research methodology & EBD	-	-	2	2	-	-	102	102	-
4	Clinical photography	-	-	1	1	-	-	51	51	-
5	Medical emergencies	-	-	0.5	0.5	-	-	24	24	-
6	Infection Control & Patient's Safety	-	-	1	1	-	-	51	51	-
total		-	-	7.5	7.5	-	-	381	381	-

# **Specialized Basic Science**

		Units				Hou	rs		
Code	Course	Theoretical	Practical	Workshop	Theoretical	Practical	Workshop	total	prerequisite
7	Immunology and Oral Microbiology	0.5	-	-	9	-	-	0.5	
8	Pharmacology	0.5	-	-	9	-	-	0.5	
total		1	-	-	18	-	-	1	

# **Related Sciences**

		Units				Hou	rs		
Code	Course	Theoretical	Practical	Workshop	Theoretical	Practical	Workshop	total	prerequisite
9	Oral and maxillofacial radiology	0.5	0.5	-	9	17	-	1	
10	Diagnosis and treatment plan intradepartmental seminar	0.5	0.5	-	9	17	-	1	
total		1	1	-	18	34	-	2	

# **Specialized sciences**

			U	nits		Hours			
Code	Course	Theoretical	Practical	Workshop	Theoretical	Practical	Workshop	Total	Prerequisite
11	TMJ Disorders 1	0.5	1	-	9	17	-	1.5	
12	TMJ Disorders 2	0.5	1	-	9	17	-	1.5	
13	Theoretical occlusion 1	1	-	-	17	-	-	1	
14	Theoretical occlusion 2	1	-	-	17	-	-	1	
15	Applicable occlusion 1 (preclinic)	-	1	-	-	34	-	1	
16	Theoretical implant 1	1	-	-	17	-	-	1	
17	Theoretical implant 2	1	-	-	17	-	-	1	
18	Implant preclinic	1	0.5	-	17	17	1	1.5	
19	Practical implant 1-A	-	1	-	-	34	-	1	
20	Practical implant 1-B	-	1	-	-	34	-	1	
21	Practical implant 2-A	-	1	-	-	34	-	1	
22	Practical implant 1-B	-	1	-	-	34	-	1	
23	Implant literature review	1	-	-	17	-	-	1	
24	Partial prosthesis literature review	1	-	-	17	-	-	1	
25	Fixed prosthesis literature review	1	-	-	17	-	-	1	

26	Complete prosthesis literature review	1	-	-	17	-	-	1	
27	Dental prosthesis literature review 1	3	-	-	51	-	-	3	
28	Thesis 1	1	1	2	-	1	102	2	
29	Thesis 2	1	1	2	-	1	102	2	
30	Thesis 3	1	2	-	-	68	-	2	
31	Thesis 4	-	-	2	-	-	102	2	
32	Thesis 5	-	-	2	-	-	102	2	
33	Theoretical fixed prosthesis 1	1.5	-	-	26	-	-	1.5	
34	Theoretical fixed prosthesis 2	1.5	-	-	26	-	-	1.5	
35	Practical fixed prosthesis 1 (preclinic)	-	5	-	-	170	-	5	
36	Practical fixed prosthesis 2	-	4	-	-	136	-	4	
37	Practical fixed prosthesis 3- A	-	2	-	-	68	-	2	
38	Practical fixed prosthesis 3- B	-	2	-	-	68	-	2	
39	Practical fixed prosthesis 4- A	-	2.5	-	-	85	-	2.5	
40	Practical fixed prosthesis 3-	-	2.5	-	-	85	-	2.5	

	В								
41	Theoretical removable partial prosthesis 1	1.5	-	-	26	-	-	1.5	
42	Theoretical removable partial prosthesis 2	1.5	1	-	26	-	,	1.5	
43	Theoretical complete removable prosthesis 1	1.5	1	-	26	-	1	1.5	
44	Theoretical complete removable prosthesis 2	1.5	1	-	26	-	,	1.5	
45	Theoretical maxillofacial prosthesis 1	1.5	-	-	26	-	-	1.5	
46	Theoretical maxillofacial prosthesis 2	1.5	-	-	26	-	-	1.5	
47	Practical removable prosthesis 1 (preclinic)	-	6	-	-	204	-	6	
48	Practical removable prosthesis 2	,	4	-	-	136	,	4	
49	Maxillofacial preclinic 1	-	1	-	-	34	-	1	
50	Maxillofacial  – applicable removable prosthesis 3- A	,	3	-	-	102	,	3	
51	Maxillofacial  – applicable removable prosthesis 3- B	-	3	-	-	102	-	3	
52	Maxillofacial  – applicable removable prosthesis 4-	-	3	-	-	102	-	3	

	A								
53	Maxillofacial  – applicable removable prosthesis 3- B	-	3	-	-	102	-	3	
54	Aesthetic Dentistry	1	-	-	17	-	-	1	
55	Case presentation 1-A	0.5	0.5	-	9	17	-	1	
56	Case presentation 1-B	0.5	0.5	-	9	17	-	1	
57	Case presentation 2-A	0.5	0.5	-	9	17	-	1	
58	Case presentation 2-B	0.5	0.5	-	9	17	-	1	
59	Case presentation 3-A	0.5	0.5	-	9	17	-	1	
60	Case presentation 3-B	0.5	0.5	-	9	17	-	1	
61	Applicable dental materials 1	1	-	-	17	-	-	1	
62	Applicable dental materials 1	1	-	-	17	-	-	1	
	Total	31	53.5	8	535	1785	408	92.5	

# **Ethical issues**

The graduates should,

• Observe the Patient's Bill of Rights<sup>1</sup> when working with the patients.

- Strictly observe Biosafety and Patient Safety Rules\* concerning the patients, personnel and workplace.
- Observe the Rulebook for Dress Code<sup>2</sup>.
- Strictly observe the Regulations of Working with the Laboratory Animals<sup>3</sup>.
- Carefully preserve resources and equipment.
- Truly respect faculty members, the staff, classmates and other students and work for creating an intimate and respectful atmosphere.
- Observe social and professional ethical considerations in criticism.
- 1, 2 and 3 are contained in the Enclosures.

<sup>\*</sup> Biosafety and Patient Safety Rules will be set out by the Educational Departments and will be available to the students.

# **Section II**

Unit Title: Medical Education 1 Unit

Code: 1

Number and type of unit: 1 Workshop unit Educational hours during the course: 56h

Aims: The goal of medical education 1 and 2 is about acquiring necessary capabilities by resident for participation in teaching and evaluation in theoretical, workshop, preclinical, clinical courses in the field.

#### Subtitles:

1. Faculty member's role in the field of education

- 2. Learning-Teaching principles
- 3. Types of learning
- 4. Teaching process skills
- 5. Faculty member's duties and characteristics
- 6. Lesson plan
- 7. Educational goals
- 8. Educational content provision principles
- 9. Lecture note
- 10.Q&A note
- 11.Education in small groups
- 12. Various methods of group education
- 13. Simulation and role playing
- 14. Clinical education
- 15.Learning assist tools
- 16.Smart boards
- 17. PowerPoint preparation

Unit Title: Medical Education 2 Unit

Code: 2

Number and type of unit: 2 Workshop unit Educational hours during the course: 102h

Aims: The goal of medical education 1 and 2 is about acquiring necessary capabilities by resident for participation in teaching and evaluation in theoretical, workshop, preclinical, clinical courses in the field.

- 1. Special course planning
- 2. Students' evaluation and its methods
- 3. Multi choice questions
- 4. Descriptive questions
- 5. Exam questions leveling
- 6. Evaluation during the work
- 7. Dops planning
- 8. OSCE exams
- 9. Oral exams
- 10. Question analysis
- 11.Plan evaluation
- 12. Course planning
- 13.Log book
- 14.Port Folio
- 15.Learning skill based attitude
- 16.Standard patent
- 17.Integration in education

Unit Title: EBD and research methodology

Unit Code:

3

Number and type of unit: 2 Workshop unit Educational hours during the course: 102h

Aims: Acquiring knowledge about research scientific basis and familiarity with research methods in the field of education and acquiring skill in research results publication.

No	Title	Learning-Teaching method	Course hours
1	Research and evidence based dentistry principles- question designing principles in evidence based dentistry	Problem oriented lecture	3
2	Literature review	Problem oriented lecture	3
3	Search engines and important and practical websites in dentistry	Workshop	6
4	Familiarity with scientific reference management software of various studies in dental research	Practical	9
5	Types of studies in dental research	Cooperative lecture	3
6	Descriptive studies	Lecture, discussion in small groups	3
7	Health and Disease measuring scales	Problem oriented lecture	3
8	Relation measuring scales	Problem oriented lecture	3
9	Observation – Annalistic studies ` principles	Lecture	3
10	Experimental studies	Problem oriented lecture	3
11	Reviewing studies	Lecture	3
12	Diagnostic tests evaluation	Problem oriented	3

		lecture	
13	Errors and causes	Problem oriented lecture	3
14	Descriptive Statistics principles	Problem oriented lecture	6
15	Theory estimation and examination	Problem oriented lecture	6
16	Critical evaluation	Lecture	3
17	Prioritizing and subject selection and problem statement	Lecture, discussion in small groups	3
18	Goals and, variables, research management and research ethics	Lecture, discussion in small groups	3
19	Data collection methods and questionnaire	Lecture, discussion in small groups	3
20	Sampling and sample volume calculation	Lecture, discussion in small groups	3
21	Research errors and bias	Problem oriented lecture	3
22	Research interaction and errors – confounding variable	Problem oriented lecture	3
23	Case control and cohort studies special considerations	Lecture, discussion in small groups	3
24	Experimental studies special consideration	Lecture, discussion in small groups	3
25	Diagnostic tests` evaluation special consideration	Lecture, discussion in small groups	3
26	Qualitative studies	Problem oriented lecture	3
27	Familiarity with statistics tests application in dentistry	Problem oriented lecture	6

Unit Title: Clinical Photography\*

Unit Code:

4

Number and type of unit: 1 Workshop unit Educational hours during the course: 51h

Aims: The resident should always be aware and dominate on what to do in emergencies and show on standardized patient. It is therefore necessary for the resident to expose the emergency treatment workflow.

No	Title	Learning-Teaching method	Course hours
1	Familiarity with types of appropriate and standard cameras and familiarity with their application method and use of support	Workshop	1
2	Familiarity with types of retractors and mirror and their application	Workshop	1
3	Portrait and profile photograph	Workshop	1
4	Intra and extra oral photographs	Workshop	1
5	Taking photograph of casts and radiographs	Workshop	1
6	Familiarity with 3D photography and taking it	Workshop	1
7	Familiarity with solving possible problems during photography in groups and workshop	Workshop	1
8	Conducting standard photograph in the field and their analysis (by the related attending)	Workshop	3
9	Conducting 3D photographs and their analysis	Workshop	3
10	Superimposition of radiograph and photographs method	Workshop	1

11	Familiarity with photographs storage	Workshop	1
12	Familiarity with software related to photograph and their storage	Workshop	1
13	Slide presentation with PowerPoint	Workshop	1

# Course main references:

Mastering Digital Dental Photography 2006 and Specialized books of each major

<sup>\*</sup>This is an optional course

Unit Title: Medical Emergencies

Unit Code: 5

Number and type of unit: 0.5 Workshop unit Educational hours during the course: 24h

Aims: Acquiring skill for diagnosis and treatment of common medical emergencies in dental clinics in Skill lab and with training models.

#### Subtitles:

- 1. Observation taking method, medical history and its role in preventing and diagnosing emergencies and examinations
- 2. Equipment and tools in emergencies
- 3. Common emergencies and their treatment method: including allergy reactions, respiratory disorders, change consciousness
- 4. CPR
- 5. Immediate applicable techniques related to circulation-airway-breathing
- 6. Medication application in medical emergencies
- 7. Practical skills in medical emergencies (injections-serum therapy etc.)
- 8. Familiarity with emergency materials and equipment available in the department or common facilities available in the faculty

NOTE: it is suggested those educational sessions to be held in 3 hours workshop by oral and maxillofacial surgery attending (it can be held with help of Emergency Medicine department)

Unit Title: Infection control and patient safety

Unit Code:

6

Number and type of unit: 1 Workshop unit Educational hours during the course: 51h

Aims: Familiarity with patient safety methods and skills in dental and hospital clinics.

#### **Subtitles:**

1. Patient safety

- 2. Importance of human factors in patients` safety
- 3. Familiarity with complex and efficient systems in patient care and safety
- 4. Efficient team formation and application
- 5. Experience from last mistakes for prevention of future hazards
- 6. Medical hazards familiarity and management
- 7. Quality promotion methods for safety promotion
- 8. Patients further contact with staff
- 9. Attention, prevention and infection control
- 10. Safety in infectious diseases
- 11. Medication safety promotion
- 12.Dental common infectious diseases microbiology and its transfer
- 13.\*Presence in the department and employing the taught lessons

In teamwork every resident discuss about assigned topics.

\*This section consists of 5 integrated sessions during resident's clinical actions in the department with employing taught lessons, clinical and complementary evaluation and educations. It is expected that with such trainings, education tips will be planted in the residents and will be evaluated in the next semester.

Textbook: Patient Safety Curriculum Guide, Multi-professional Edition which is available in <a href="http://whqlibdoc.who.int/publications/2011/9789241501958\_eng.pdf">http://whqlibdoc.who.int/publications/2011/9789241501958\_eng.pdf</a>

Unit Title: Management and clinical governance\*

Unit Code:

Number and type of unit: 1 Workshop unit Educational hours during the course: 51h Aims: Familiarity with models and service quality management tools, service promotion demands, patient safety, management and evaluation and believing the necessity of oral health care quality promotion with implication of models and quality management tools such as clinical service governance model and employing these.

Minimum expected skills: Residents are expected to hire clinical service governance while presenting oral health services and in higher semesters to represent these spontaneously

No	Title	Learning-Teaching method	Course hours
1	Quality and its improvement systems	workshop	1
2	Oral health quality service management	workshop	1
3	Clinical service governance and perquisites	workshop	1
4	Models and quality management tools	workshop	1
5	Patient's safety	workshop	1
6	Clinical effectiveness	workshop	1
7	Clinical effectiveness principles and evidence based dentistry and clinical audit	workshop	1
8	Cooperation with patients companions and society	workshop	1
9	Staff, education and management	workshop	1
10*	Quality improvement in specialized services	workshop	5
11*	Evaluation of realization and clinical governance principles employment in the field	workshop	3

\*This item is simultaneous with clinical service in the specialized majors with the difference that necessary educations about clinical service governance management will be presented in these sessions.

\*This is an optional course.

Unit Title: Oral immunology and microbiology

Unit Code: 7

Number and type of unit: 0.5 theoretical units

Educational hours during the course: 9h

- 1. General immunology principles such as immune system components acquired and innate immunity, humoral and cellular immunity, complement system, immune response regulation, allergy reaction, autoimmunity etc.
- 2. Oral and salivary immunology
- 3. Dental pulp and preapical tissues immune response
- 4. Effective immune responses in bone resorption and periodontal diseases
- 5. Immune response against dental plaque and caries
- 6. Drug sensitivity and its relation with immune system
- 7. Oral microbial flora
- 8. Microorganisms in dental plaque
- 9. Microorganisms related to periodontal diseases
- 10.Microorganisms related to pulp and preapical tissues diseases
- 11. Microorganisms related to common oral infections and dental abscesses
- 12. Practical familiarity with above microorganisms` diagnosis methods
- 13. Discussion and Q&A about residents interesting topics in the field

Unit Title: Pharmacology Unit Code:

8

Number and type of unit: 0.5 theoretical units

Educational hours during the course: 9h

#### Subtitles:

1. A review to the principles

- -Absorption, distribution and excretion mechanisms of drugs in the body
- -Effects and side effects of drugs (toxic effects, idiosyncrasy,

hypersensitivity etc.)

- -Drugs cross effect
- -Prescription in pregnancy and breast milking
- 2. Prescription principles
- 3. Analgesics and their pharmacology
- 4. Steroid and non-steroid anti-inflammatory drugs pharmacology
- 5. Antibiotic types and mechanisms (antimicrobials, antifungals and antivirals)
- 6. Antihistamines
- 7. Local anesthetics
- 8. Effective drugs on central and autonomic nervous system
- 9. General anesthetic drugs
- 10. Effective drugs on saliva excretion volume
- 11.Acquiring knowledge about immune system suppressing drugs in treatment of non- cancerous diseases

Unit Title: Oral and maxillofacial radiology

Unit

Code: 9

Number and type of unit: 1 theoretical-practical\* (0.5 unit theoretical, 0.5 unit practical)

Educational hours during the course: 26h

Aims: Familiarity with common modern intra and extra oral radiograph techniques and subsequent differential diagnosis of oral and dental lesions

- 1. Familiarity with radiobiology and irradiation safety
- 2. Familiarity with infection control in radiology
- 3. Familiarity with intra oral radiograph techniques application and comparison, localization and landmarks
- 4. Familiarity with various extra oral techniques application and anatomic landmarks( panoramic, cephalometry, TMJ, paranasal sinuses and scar)
- 5. Familiarity with special radiographic techniques (digital imaging, sonography, CT scan, MRI and nuclear medicine)
- 6. Familiarity with interpretations and radiographic patterns of various oral and maxillofacial lesions

<sup>\*</sup>Interpretation of CBCT and TMJ radiographs will be taught to the residents in practical part

Unit Title: Diagnosis and treatment plan interdepartmental seminar

Unit Code: 10

Number and type of unit: 1 theoretical-practical (0.5 unit theoretical, 0.5 unit

practical)

Educational hours during the course: 26h

Aims: Fortification of diagnosis and treatment plan skills of patients with complicated multidisciplinary problems, criticizing the treatment plan and performed treatment based on evidence, increasing multidisciplinary contact skills

- Every resident is out to present a multidisciplinary case
- Attendings of restorative, endodontics, orthodontics, oral medicine, periodontics and oral and maxillofacial surgery will take part in the sessions such as suits the case

Unit Title: TMJ disorders 1 Unit

Code: 11

Number and type of unit: 1.5 theoretical-practical (0.5unit theoretical, 1 unit practical)

Educational hours during the course: 26h

Amis: Familiarity with TMJ disorders and its classification, occlusion correction on cast and fabrication of splint on diagnostic casts

- 1. Functional anatomy and biomechanics of masticatory systems
- 2. Functional neuroanatomy and physiology of masticatory muscles
- 3. TMJ disorders etiology
- 4. Signs and symptoms of TMJ disorders
- 5. Taking history and examination of TMJ disorders
- 6. TMD diagnosis
- 7. Familiarity with splint types
- 8. Performing of occlusal adjustment on mounted casts on the articulator
- 9. Fabrication of occlusal splint with different designs on diagnostic casts

<sup>\*</sup>The resident will diagnose at least 3 patients with TMJ disorders in addition to passing the theoretical principles of TMD after completion the documents.

Unit Title: TMJ disorders 2

Unit Code:

12

Number and type of unit: 1.5 theoretical-practical (0.5unit theoretical, 1 unit practical)

Educational hours during the course: 26h

Amis: Familiarity with TMJ disorders and its classification, occlusion correction on cast and fabrication of splint on diagnostic casts

- 1. Functional anatomy and biomechanics of masticatory systems
- 2. Functional neuroanatomy and physiology of masticatory muscles
- 3. TMJ disorders etiology
- 4. Signs and symptoms of TMJ disorders
- 5. Taking history and examination of TMJ disorders
- 6. TMD diagnosis
- 7. Familiarity with splint types
- 8. Performing of occlusal adjustment on mounted casts on the articulator
- 9. Fabrication of occlusal splint with different designs on diagnostic casts

<sup>\*</sup>The resident will diagnose at least 3 patients with TMJ disorders in addition to passing the theoretical principles of TMD after completion the documents.

Unit Title: theoretical Occlusion 1 Unit

Code: 13

Number and type of unit: 1 theoretical unit Educational hours during the course: 17h

Aims: Evaluation of occlusion /craniofacial relation, diagnosis and treatment of occlusion disorders

#### Subtitles:

- 1. Occlusion determining factors
- 2. TMJ and masticatory muscles anatomy
- 3. CR and its recording
- 4. Occlusion classification
- 5. Vertical dimension
- 6. Neutral zone
- 7. Range of movement
- 8. Anterior guidance
- 9. Mandibular anterior teeth restoration
- 10.Long centric
- 11.Occlusal plan
- 12.Posterior occlusion

Educational method: seminar

Unit Title: theoretical Occlusion 2

Unit

Code: 14

Number and type of unit: 1 theoretical unit Educational hours during the course: 17h

#### Subtitles:

1. criterias of stable occlusion

- 2. Wax up
- 3. Occlusion diagnosis
- 4. Restorative considerations in order to:
  - -Resolving occlusal disorders due to attrition
  - -Treating patients with deep bite
  - -Treating patients with anterior overjet
  - Treating patients with anterior open bite
  - Treating patients with edge to edge occlusion
  - Treating patients with splayed anterior teeth
  - Treating patients with cross bite
  - Treating patients with crowding
  - Treating patients with arch complex disorders

Unit Title: Practical Occlusion 1(preclinic)

Unit

Code: 15

Number and type of unit: 1 practical unit Educational hours during the course: 34h

Aims: Familiarity with theoretical and practical basis of functional wax up

#### Subtitles:

1. Performing diagnostic wax up in order to produce processed temporary

2. Performing functional wax up

Unit Title: Theoretical implant 1 Unit Code: 16

Number and type of unit: 1 theoretical unit Educational hours during the course: 17h

Aims: Familiarity with implantology science

- 1. Introduction to dental implants
- 2. Implant components' terminology
- 3. Radiographic techniques
- 4. Stress and its roll in implants
- 5. Prosthodontic aspects of implant
- 6. Diagnosis and treatment
- 7. Bone density
- 8. Treatment plan suitable to implant site and number
- 9. Aesthetic and biomechanical considerations in relation to implant size
- 10. Available bone related to implant
- 11. Practical considerations related to implant
- 12. Preimplant prosthodontics
- 13. Diagnostic casts and surgical templates
- 14. Edentulous mandible implant supported overdenture

Unit Title: Theoretical implant 2 Unit Code: 17

Number and type of unit: 1 theoretical unit Educational hours during the course: 17h

Aims: Familiarity with clinical and laboratory process of various implant supported prosthesis and subsequent treatment

- 1. Fully edentulous mandible treatment plan for fixed restorations
- 2. Various treatment plans for missed teeth restoration
- 3. Maxillary implant consideration(fixed prosthesis and overdenture)
- 4. Treatment plan for posterior and edentulous region of upper jaw with implant
- 5. Treatment plan for fully and partially edentulous arches
- 6. Medical considerations in patients seeking implants
- 7. Implant treatment pharmacology
- 8. Implant related anatomic considerations
- 9. Infection spreading in head and neck
- 10.Implant related biomaterial
- 11.Implant related biomechanic considerations
- 12.Bone physiology metabolism and biomechanic
- 13.A review to implant surface characteristics
- 14.Bone response to mechanical forces
- 15. Single tooth restoration in anterior and posterior region
- 16.Surgical regeneration

Unit Title: Implant preclinic Unit Code: 18

Number and type of unit: 1.5 theoretical-practical units (1 theoretical unit, 0.5

practical unit)

Educational hours during the course: 34h

Aims: Familiarity with theoretical and practical surgical and prosthodontic principles

#### Subtitles:

1. History and reason of dental implants use

- 2. Periodontal characteristics of implant and tooth comparison
- 3. Generic terminology in dental implants (three different systems catalogues will be taught)
- 4. Surface texture, soft tissue integration, Osseo integration
- 5. Surgical techniques in dental implants
- 6. Prosthetic choices in dental implants
- 7. Diagnostic radiology techniques and importance of available bone in implant treatment
- 8. Diagnostic casts and surgical guides
- 9. Diagnosis and treatment plan from the aspect of surgery in dental implants in easy cases
- 10. Diagnosis and treatment plan from the aspect of prosthodontics in dental implants in easy cases
- 11. Classification and treatment plan of fully and partially edentulous ridges
- 12.Implant supported overdenture treatment techniques
- 13.Implant supported fixed prosthesis treatment techniques
- 14.Implant preservation and follow up

<sup>\*</sup>performing the surgical and prosthodontic process of at least three systems on model and fabrication of a surgical stent

Unit Title: Practical implant 1-A Unit Code: 19

Number and type of unit: 1 practical unit Educational hours during the course: 34h

Aims: Learning treatment techniques of implant supported prosthesis (removable and fixed)

Unit Title: Practical implant 1-B

Unit Code: 20

Number and type of unit: 1 practical unit Educational hours during the course: 34h

Aims: Learning treatment techniques of implant supported prosthesis (removable and fixed)

Subtitles: At the end of the course A &B residents are expected to fulfill these requirements:

- 1. Treating 15 units of fixed implant supported prosthesis and 2 patients with implant supported removable prosthesis
- 2. Presence in diagnosis and treatment plan session of the patient and filling the document
- 3. Preparing study casts, stent and slides of the treatment
- 4. Presence in operation room in order to observe or perform the surgery, help and comment about changes in treatment plan
- 5. Follow up of tissue regeneration process till the patient is ready for prosthesis
- 6. Performing prosthodontic treatment and delivering it to the patient
- 7. Patient follow up after delivering the prosthesis

\*All residents are obligated to fill and deliver the completed patient document with related slides to department's postgraduate officer after mentor's approval

Unit Title: Practical implant 2-A

Unit Code: 21

Number and type of unit: 1 practical unit Educational hours during the course: 34h

Aims: Learning more complex techniques in fixed and removable implant supported prosthesis

Unit Title: Practical implant 2-B

Unit Code: 22

Number and type of unit: 1 practical unit Educational hours during the course: 34h

Aims: Learning treatment techniques of implant supported prosthesis (removable and fixed)

Subtitles: At the end of the course A &B residents are expected to fulfill these requirements:

- 1. Treating 15 units of fixed implant supported prosthesis and 3 patients with implant supported removable prosthesis and performing surgery of an easy case
- 2. Presence in diagnosis and treatment plan session of the patient and filling the document
- 3. Preparing study casts, stent and slides of the treatment
- 4. Presence in operation room in order to observe or perform the surgery, help and comment about changes in treatment plan
- 5. Follow up of tissue regeneration process till the patient is ready for prosthesis
- 6. Performing prosthodontic treatment and delivering it to the patient
- 7. Patient follow up after delivering the prosthesis

Unit Title: Implant literature review Unit Code: 23

Number and type of unit: 1theoretical unit Educational hours during the course: 17h

Aims: Criticizing reliable national and international articles in the field of implant supported prosthesis in order to acquire new knowledge of research methods and related basic science

<sup>\*</sup> All residents are obligated to fill and deliver the completed patient document with related slides to department's postgraduate officer after mentor's approval.

- 1. Familiarity with available materials and methods in articles to help clinical judgments
- 2. Familiarity with recent research topics related to implant supported prosthesis

<sup>\*</sup>Article selection is on the attending and articles published in journals that are determined by the secretariat of the educational council for dentistry and specialty courses of studies for board exams have priority.

Unit Title: Partial prosthesis literature review Unit Code:

24

Number and type of unit: 1theoretical unit Educational hours during the course: 17h

Aims: Criticizing reliable national and international articles in the field of partial prosthesis in order to acquire new knowledge of research methods and related basic science

- 1. Familiarity with available materials and methods in articles to help clinical judgments
- 2. Familiarity with recent research topics related to partial prosthesis

Unit Title: Fixed prosthesis literature review

Unit Code:

25

Number and type of unit: 1theoretical unit Educational hours during the course: 17h

Aims: Criticizing reliable national and international articles in the field of fixed prosthesis in order to acquire new knowledge of research methods and related science and dental material

- 1. Familiarity with available materials and methods in articles to help clinical judgements
- 2. Familiarity with recent research topics related to fixed prosthesis

Unit Title: Complete prosthesis literature review

Unit Code:

26

Number and type of unit: 1theoretical unit Educational hours during the course: 17h

Aims: Criticizing reliable national and international articles in the field of complete prosthesis in order to acquire new knowledge of research methods and related science

- 1. Familiarity with available materials and methods in articles to help clinical judgements
- 2. Familiarity with recent research topics related to complete prosthesis

Unit Title: Dental prosthesis literature review 1 Unit Code: 27

Number and type of unit: 3 theoretical units Educational hours during the course: 51h

Aims: Criticizing reliable national and international articles in the field of dental prosthesis in order to acquire new knowledge of research methods related to fixed and removable complete and partial prosthesis, implant, occlusion, maxillofacial prosthesis and dental material to prepare for board exam

- 1. Familiarity with available materials and methods in articles to help clinical judgements
- 2. Familiarity with recent research topics related to dental prosthesis

Unit title: Thesis (1) to (5)

Unit code: 28-32

Unit number: 10 practical-workshop units

Educational hours: 476 h

Thesis (1) - Aim: Selection of research subject with in the area of specialty. This course is held in two work shop units and must be taken to account in the educational program. The research subject will be chosen with the assistance of the relevant supervisor throughout the work shop sessions. Field research must be done out of work shop time and the outcome of it must be presented during the work shop sessions. The resident must have gathered his/her documents to present the proposal by the end of the semester. The proposal must be preregistered in the research council and the evidence suggesting that the resident has passed the course by the dead line must be handed to postgraduate director.

Thesis (2)- Aim: Registration of research subject.

This course is held in two work shop units and the resident must participate in sessions held in collaboration with statistical consultant and/or statistic experts or epidemiologists. The resident must complete his/her proposal by the end of the semester and must register it in the relevant site. Meetings must also be held with the supervising professor during these sessions.

Thesis (3)- Aim: Performing the research.

This course is held in two practical and must be taken to account in the educational program. The time and manner of performance of this unit is up to the supervisor and can be organized in continuous or interrupted sessions. The supervisor must inform the postgraduate director of the department about the progress so that other educational programs can be coordinated. If the research requires more time than one semester, the measures that must be taken during that semester should be confirmed by the supervisor.

Thesis (4)- Aim: writing the thesis and relevant article.

It is a two unit work shop course must be taken to account in the educational program. The resident should statistically analyze data, extract the results and write the thesis under the supervision of the supervisor and statistical consultant. The resident is obliged to write and submit at least one paper to a valid journal. If the research is to be done in more than one semester, the resident must analyze and extract the primary results.

Thesis (5)- Aim: Defense of thesis

This is a two unit work shop course that should be considered in the educational program. The resident must complete the thesis, present his findings and defend the thesis. 54

Notice: It is apparent that all researches may not follow this sequence and timing and may require more time. It is possible to extend the performance to reschedule the dead line only with the confirmation of the vice dean of research.

Unit Title: Theoretical fixed prosthesis1 Unit Code: 33

Number and type of unit: 1.5 theoretical units Educational hours during the course: 26h

Aims: Basic familiarity with fixed prosthesis and treatment method of teeth under RCT treatment and review to board exam references

- 1. Familiarity with principles of fixed prosthesis and diagnosis
- 2. Familiarity with treatment plan in fixed prosthesis
- 3. Familiarity with principles of occlusion
- 4. Periodontal considerations in fixed prosthesis
- 5. Familiarity with biomechanical principles of tooth preparation, introducing, burs and their application
- 6. Familiarity with full veneer preparation
- 7. Familiarity with partial veneer preparation
- 8. Familiarity with all ceramic crowns preparation
- 9. Restoration of RCT teeth
- 10.Implant supported fixed prosthesis
- 11. Tissue management and impression making

Unit Title: Theoretical fixed prosthesis2

Unit Code: 34

Number and type of unit: 1.5 theoretical units Educational hours during the course: 26h

Aims: Familiarity with principles of fixed prosthesis in the field of impression making, fabrication of metal core and temporary restorations and reviewing board exam references

- 1. Familiarity with temporary restoration
- 2. Familiarity with cast and die
- 3. Familiarity with record registration and transferring cast to articulator
- 4. Familiarity with types of pontics and edentulous ridges
- 5. Familiarity with wax patterns and metal core designing
- 6. Familiarity with principles of alloys and casting
- 7. Familiarity with try-in, metal core polishing and crown cementation
- 8. Familiarity with importance of follow up and resolving problems after delivery
- 9. All ceramic restorations
- 10. Resin bonded fixed dental prosthesis
- 11. Fiber reinforced composite fixed prosthesis
- 12. Connections in fixed prosthesis
- 13.Polishing
- 14. Staining and glazing
- 15. Cements and cementing methods
- 16.Post-delivery care

Unit Title: Practical fixed prosthesis1 (preclinic)

Unit Code: 35

Number and type of unit: 5 practical units Educational hours during the course: 170h

Aims: Familiarity with theoretical and practical principles of different tooth preparation and conducting laboratory process of fixed prosthesis

- 1. Mounting the casts in semi-adjustable articulators
- 2. Customized occlusal table and flag
- 3. Determining the anterior guidance and occlusal plan adjustment
- 4. Partial coverage, inlay, onlay, laminate preparation
- 5. Familiarity with impression making and cast fabrication and die mobilization
- 6. Post preparation
- 7. Temporary restoration preparation
- 8. Working cast fabrication
- 9. Wax up and frame work designing
- 10. Cylindering and casting
- 11.Soldering
- 12. Porcelain investment (PFM)
- 13. Familiarity with new porcelains laboratory process
- 14.Log book presentation
- At the end of the course the residents are obligated 1 unit of crown, 1 unit post and 3 units bridge with their laboratory process

Unit Title: Practical fixed prosthesis2

Unit

Code: 36

Number and type of unit: 4 practical units Educational hours during the course: 136h

Aims: Conducting clinical process of fixed prosthesis treatment

### Subtitles:

1. Conducting 4 single crown cases

- 2. Conducting 1 three unit posterior bridge case
- 3. Preparing 4 unit of casting post
- 4. Conducting 1 case of six unit anterior bridge
- 5. Follow up of 2 fixed cases that has been treated in the last semester
- 6. Conducting 2 multidisciplinary cases (periodontics-prosthodontics)( prosthodontics-orthodontics)( prosthodontics-restorative)( prosthodontics-surgery)

<sup>\*</sup>In multidisciplinary cases the resident could either observe or conduct the treatment according to the department post graduate officer`s opinion.

Unit Title: Practical fixed prosthesis 3-A

Unit

Code: 37

Number and type of unit: 2 practical units Educational hours during the course: 68h

Aims: Conducting clinical process of complicated fixed prosthesis cases

Unit Title: Practical fixed prosthesis 3-B

Unit

Code: 38

Number and type of unit: 2 practical units Educational hours during the course: 68h

Aims: Conducting clinical process of complicated fixed prosthesis cases

Subtitles: At the end of the course A &B residents are expected to fulfill these requirements:

- 1. Conducting a full case of fixed prosthesis
- 2. Upper and lower anterior and posterior crown treatment (10 units)
- 3. Treating 1 case of fixed prosthesis with non-rigid connector
- 4. Treating 1 case of partial prosthesis abutment crown
- 5. Follow up of 2 complicated cases treated in the last semesters
- 6. Aesthetic treatment (laminate, inlay, onlay, full ceramic)(10 units)

<sup>\*</sup>In multidisciplinary cases the resident could either observe or conduct the treatment according to the department post graduate officer`s opinion.

Unit Title: Practical fixed prosthesis 4-A

Unit

Code: 39

Number and type of unit: 2.5 practical units Educational hours during the course: 85h

Aims: Conducting clinical process of advanced fixed prosthesis cases

Unit Title: Practical fixed prosthesis 4-B

Unit Code:

40

Number and type of unit: 2.5 practical units Educational hours during the course: 85h

Aims: Conducting clinical process of advanced fixed prosthesis cases

Subtitles: At the end of the course A &B residents are expected to fulfill these requirements:

- 1. Conducting 1 case of full mouth prosthesis
- 2. Treating with all ceramic restorations (laminate, inlay, onlay, full ceramic)(10 units)
- 3. Treating other advanced cases(4 units) such as:
  - -Root amputation, Forcation Management
  - -Forced eruption, Onlay Fixed Partial Denture
- 4. Follow up of 2 complicated cases treated in the last semesters

<sup>\*</sup>The residents are obligated to treat at least 2 multidisciplinary cases during the course

Unit Title: Theoretical partial removable prosthesis 1 Unit Code:

41

Number and type of unit: 1.5 theoretical units Educational hours during the course: 26h

Aims: Familiarity with partial edentulous classifications and components of partial denture

- 1. Familiarity with the classification of partial edentulous arches
- 2. Partial denture components
- 3. Mechanical principles of partial prosthesis
- 4. Examinations and evaluations of diagnostic findings
- 5. Surveyor and designing
- 6. Familiarity with I-bar in partial prosthesis design
- 7. Implant supported partial prosthesis
- 8. Mouth preparation
- 9. Laboratory process of frame work fabrication

Unit Title: Theoretical partial removable prosthesis 2

Unit Code:

42

Number and type of unit: 1.5 theoretical units Educational hours during the course: 26h

Aims: Acquiring knowledge about principles, anatomy and physiology of edentulous period, treatment plan and mouth preparation

- 1. Fitting the framework
- 2. Impression taking methods in tooth and tissue born partial prosthesis
- 3. Occlusal relations registration
- 4. Partial prosthesis try-in
- 5. Partial prosthesis delivery
- 6. Post -delivery problems
- 7. Preservation and repair of partial prosthesis
- 8. Temporary prosthesis
- 9. Other forms of partial prosthesis
- 10. Attachments in partial prosthesis

Unit Title: Theoretical complete removable prosthesis 1 Unit Code:

43

Number and type of unit: 1.5 theoretical units Educational hours during the course: 26h

Aims: Acquiring knowledge about principles, anatomy and physiology of edentulous period, treatment plan and mouth preparation

- 1. Edentulous forms
- 2. Biomechanics of edentulous forms
- 3. Effect of aging in edentulous forms
- 4. Complete denture side effects
- 5. TMJ disorders
- 6. Nutritional considerations in prosthetic patients
- 7. Diagnosis and treatment plan
- 8. Pre-prosthetic surgeries
- 9. Immediate dentures
- 10.Overdenture
- 11. The art of making contact with edentulous patient during the treatment
- 12. Materials used in treatment of edentulous patients
- 13. Fabrication of substitute in rest areas of maxillary denture
- 14. Fabrication of substitute in rest areas of mandibular denture
- 15.Determining the arch form and status

Unit Title: Theoretical complete removable prosthesis 2 Unit Code:

44

Number and type of unit: 1.5 theoretical units Educational hours during the course: 26h

Aims: Familiarity with impression taking and articulator jaw relations, occlusion, teeth selection and arrangement

- 1. Biological and clinical aspects
- 2. Artificial teeth selection and arrangement, occlusion in edentulous patients
- 3. First try-in appointment
- 4. Speech considerations in complete dentures
- 5. Wax up and denture fabrication
- 6. Single denture
- 7. Complete denture retention
- 8. Maxillofacial prosthesis for edentulous patients
- 9. Fabrication of more durable complete dentures
- 10. Application implant supported prosthesis
- 11.Osseointegration science
- 12.Implant supported overdenture clinical process
- 13. Supported fixed prosthesis clinical process
- 14. Resolving problems and errors
- 15.Implant prosthesis in edentulous patients

Unit Title: Theoretical maxillofacial prosthesis 1 Unit Code: 45

Number and type of unit: 1.5 theoretical units Educational hours during the course: 26h

Aims: Familiarity with cancer causes and subsequent treatment, acquired defects of the lower jaw, hard and soft palate and their treatment

- 1. Mental management of patients with maxillofacial prosthesis
- 2. Radiotherapy
- 3. Resin-bonded maxillofacial prosthesis
- 4. Nasoalveolar molding in primary treatment steps of lip and palate cleft
- 5. Treating edentulous patients with maxillary resection
- 6. Treating edentulous patients with mandibular resection
- 7. Soft tissue lesions treatment
- 8. Clinical considerations in palatal lift prosthesis
- 9. Intra osseous implants` effect in maxillofacial prosthesis
- 10. Diagnostic considerations in prosthetic treatment of patients with mandible resection
- 11. Prosthetic treatment of patients with mandibular resection
- 12.Implant application in lower jaws undergone radiotherapy
- 13. Prosthetic treatment after complete or partial tongue resection
- 14. Treatment of patients with sleeping disorder due to upper airways disorder with extra oral appliance

Unit Title: Theoretical maxillofacial prosthesis 2 Unit Code:

46

Number and type of unit: 1.5 theoretical units Educational hours during the course: 26h

Aims: Familiarity with soft palate lesions, cleft palate, facial lesions reconstruction, cranial implants and auxiliary appliances

- 1. Clinical aspects of facial prosthesis fabrication
- 2. Staining techniques of facial prosthesis
- 3. Eye prosthesis fabrication
- 4. Craniofacial implants
- 5. Maxillofacial prosthesis literature review

Unit Title: Practical removable prosthesis 1 (preclinic)

Unit Code: 47

Number and type of unit: 6 practical units Educational hours during the course: 204h

Aims: Practical familiarity with removable prosthesis fabrication process in preclinic and treating simple cases

### Subtitle:

- 1. Familiarity with various articulators, occlusal record and face bow registration
- 2. Conducting laboratory process of complete denture fabrication on phantom and acquiring skill in the whole laboratory workflow including: fabrication of special tray, boxing, record base, teeth arrangement in various jaw relations, flasking process and post fabrication balance
- 3. Conducting laboratory process of partial denture fabrication on phantom and acquiring skill in the whole laboratory workflow including: fabrication of special tray, boxing, surveying, designing, relief, bock out, duplicating, wax up, casting, polishing
- 4. Clinical treatment and laboratory process of 2 complete denture and 1 partial denture cases

\*The resident should present seminars according to laboratory process and related subjects

Unit Title: Practical removable prosthesis 2

Unit Code:

48

Number and type of unit: 4 practical units Educational hours during the course: 136h

Aims: full and partial edentulous patients treatment

# Subtitle:

1. Complete removable prosthesis treatment

2. Partial removable prosthesis treatment

Attention: All of the laboratory process of a complete removable prosthesis and a Partial removable prosthesis will be conducted by the resident. The resident must follow up 2 patients of previous residents.

Unit Title: maxillofacial preclinic Unit Code: 49

Number and type of unit: 4 practical units Educational hours during the course: 34h

Aims: acquiring skill in laboratory process of silicon extra oral maxillofacial prosthesis, impression taking, wax up, flasking and staining of silicon

# Subtitle:

Fabrication and staining of one extra oral maxillofacial prosthesis in preclinic

Unit Title: Practical removable /maxillofacial prosthesis 3-A

Unit Code: 50

Number and type of unit: 3 practical units Educational hours during the course: 102h

Aims: Treating patients with complete, partial and maxillofacial prosthesis and preparing for oral board exam

Unit Title: Practical removable /maxillofacial prosthesis 3-B

Unit Code: 51

Number and type of unit: 3 practical units Educational hours during the course: 102h

Aims: Treating patients with complete, partial and maxillofacial prosthesis and preparing for oral board exam

Subtitle: At the end of the course A &B residents are expected to fulfill these requirements:

- 1. 5 cases of removable complete denture
- 2. 3 cases of partial removable denture
- 3. 1 case of single denture
- 4. 1 case of immediate complete denture
- 5. 1 case of overdenture
- 6. 3 cases of reline, rebase, surgical splint or prosthesis repair
- 7. 3 cases of interim surgical obturators

Unit Title: Practical removable /maxillofacial prosthesis 4-A

Unit Code: 52

Number and type of unit: 3 practical units Educational hours during the course: 102h

Aims: treating complicated patients according to the ACP index, complete, partial and maxillofacial prosthesis and preparing for oral board exam

Unit Title: Practical removable /maxillofacial prosthesis 4-B

Unit Code: 53

Number and type of unit: 3 practical units Educational hours during the course: 102h

Aims: treating complicated patients according to the ACP index, complete, partial and maxillofacial prosthesis and preparing for oral board exam

Subtitle: At the end of the course A &B residents are expected to fulfill these requirements:

- 1. 4 cases of removable complete denture
- 2. 3 cases of partial removable denture
- 3. 1 case of single denture
- 4. 1 case of overdenture
- 5. 4 cases of reline, rebase, surgical splint or prosthesis repair
- 6. 3 cases of maxillofacial prosthesis

Unit Title: Aesthetic Dentistry

Unit

Code: 54

Number and type of unit: 1 theoretical units Educational hours during the course: 17h

Aims: Familiarity with concepts of aesthetic related to prosthodontic treatments

## Subtitle:

1. Smile design

- 2. Porcelain laminate veneer
- 3. Inlay, onlay, all ceramic complete crown
- 4. Principles of tooth color selection
- 5. Bonding
- 6. Function and aesthetic interference
- 7. Aesthetic management of the dentinogingival unit
- 8. Aesthetic surgery
- 9. Tooth whitening
- 10. Aesthetic in implants

Unit Title: case presentation1-A

Unit Code: 55

Number and type of unit: 1 theoretical-practical unit (0.5 theoretical units, 0.5

practical units)

Educational hours during the course: 26h

Aims: improving diagnostic skills and treatment plan for complicated patients according to ACP index, criticizing it based on evidence, improving inter and intra disciplinary social skills, preparing for exam

### Subtitle:

The resident is obligated to take part in every session and get familiar with case presentation criterias in board exam

Unit Title: case presentation1-B

Unit Code: 56

Number and type of unit: 1 theoretical-practical unit (0.5 theoretical units, 0.5

practical units)

Educational hours during the course: 26h

Aims: improving diagnostic skills and treatment plan for complicated patients according to ACP index, criticizing it based on evidence, improving inter and intra disciplinary social skills, preparing for exam

### Subtitle:

Unit Title: case presentation 2-A

Unit Code: 57

Number and type of unit: 1 theoretical-practical unit (0.5 theoretical units, 0.5

practical units)

Educational hours during the course: 26h

Aims: improving diagnostic skills and treatment plan for complicated patients according to ACP index, criticizing it based on evidence, improving inter and intra disciplinary social skills, preparing for exam

### Subtitle:

Unit Title: case presentation 2-B

Unit Code: 58

Number and type of unit: 1 theoretical-practical unit (0.5 theoretical units, 0.5

practical units)

Educational hours during the course: 26h

Aims: improving diagnostic skills and treatment plan for complicated patients according to ACP index, criticizing it based on evidence, improving inter and intra disciplinary social skills, preparing for exam

### Subtitle:

Unit Title: case presentation 3-A

Unit Code: 59

Number and type of unit: 1 theoretical-practical unit (0.5 theoretical units, 0.5 practical units)

Educational hours during the course: 26h

Aims: improving diagnostic skills and treatment plan for complicated patients according to ACP index, criticizing it based on evidence, improving inter and intra disciplinary social skills, preparing for exam

### Subtitle:

Unit Title: case presentation3-B

Unit Code: 60

Number and type of unit: 1 theoretical-practical unit (0.5 theoretical units, 0.5

practical units)

Educational hours during the course: 26h

Aims: improving diagnostic skills and treatment plan for complicated patients according to ACP index, criticizing it based on evidence, improving inter and intra disciplinary social skills, preparing for exam

### Subtitle:

Unit Title: Applicable dental material 1 Unit

Code: 61

Number and type of unit: 1 theoretical unit Educational hours during the course: 17h

Aims: Familiarity with mechanical, physical and biological characteristics of the material used in prosthodontics in order to solve clinical problems

- 1. Familiarity with mechanical, physical characteristics of the material
- 2. Familiarity with materials testing equipment
- 3. Familiarity with materials biocompatibility
- 4. Acquiring knowledge about plasters
- 5. Acquiring knowledge about waxes
- 6. Acquiring knowledge about amalgam
- 7. Acquiring knowledge about refractory dies investment
- 8. Acquiring knowledge about noble alloys
- 9. Acquiring knowledge about base metal alloys
- 10. Acquiring knowledge about casting process

Unit Title: Applicable dental material 2 Unit

Code: 62

Number and type of unit: 1 theoretical unit Educational hours during the course: 17h

Aims: Familiarity with mechanical, physical and biological characteristics of the material used in prosthodontics

## Subtitle:

- 1. Acquiring knowledge about PFM ceramics and porcelains
- 2. Acquiring knowledge about various polymers
- 3. Acquiring knowledge about denture base polymers and their application
- 4. Acquiring knowledge about composites
- 5. Acquiring knowledge about bonding method of resin based materials
- 6. Acquiring knowledge about soft liners and their application
- 7. Acquiring knowledge about impression materials
- 8. Acquiring knowledge about cements
- 9. Tissue engineering
- 10.Dental biomaterial

Educational method: Q&A