COURSE LİST FOR INCOMİNG ERASMUS+ STUDENTS

1. SEMESTER	
COURSE NAME	**ECTS**
Oral and Maxillofacial Surgery	**8**
Oral and Maxillofacial Radiology	**7**
Restorative Dentistry	**8**
Endodontics	**7**
2. SEMESTER	
COURSE NAME	**ECTS**
Prosthetic Dentistry	**8**
Periodontology	**8**
Pedodontics	**7**
Orthodontics	**7**

Oral and Maxillofacial Surgery

Objectives of the Course:

The aim of this course is to provide the students to understand the basic surgical concepts and principles and to teach the methods of tooth extraction.

Course Content:

Diagnosis: anamnesis and clinic examination and necessary tests, systemic diseases associated with dentistry, bleeding and hemostasis, wound and wound healing. Basic principles of surgery: asepsis for oral surgery, insicions and flap design, instruments of oral and maksillofasiyal surgery and its uses, simple mucosal surgery and biopsy, orofacial pain and pain control, dentoalveoler infections and commonly used antibiotics in oral surgery.

Learning Outcomes:

1. The student should be able to take anamnesis correctly.
2. The student should be able to comment on the medical conditions of the patients.
3. Students should be able to have the basic knowledge about bleeding control methods.
4. Students should be able to learn basic information about wound and wound healing.
5. The student should know the antisepsis rules of asepsis.
6. The student should know the basic principles of surgery.
7. Students should know the basic properties of instruments used in dentistry surgery.
8. The student should be able to know the painful conditions that may occur in the orofacial region, make differential diagnosis and provide pain control.
9. The student should know the characteristics of the infection and the basic principles of the fight against infection.

Weekly Course Plan:

1. Introduction to oral jaw diseases and surgery
2. Systemic approach and consultation for patients undergoing surgery
3. Inspection techniques
4. Patient history
5. Laboratory and radiological tests of patients undergoing surgery
6. Rules to be followed in oral surgery, asepsis, antisepsis
7. Basic instruments used in oral surgery
8. Tooth extraction techniques in upper and lower jaw
9. Tooth extraction, indications and contraindications
10. Complications of shooting teeth
11. Incision, stur and flap techniques
12. Complicated shooting
13. Surgical Shooting
14. Common drugs in OMFS
15. Wound healing and complications
16. Emergency interventions

Oral and Maxillofacial Radiology

Objectives of the Course:

To provide dental students an understanding of the principles and applications of the use of ionizing radiation for the diagnosis of oral-facial diseases. This includes an appreciation for the biologic hazards attendant to the use of ionizing radiation, as well as the use of a systematic radiographic approach to the identification of normal anatomy and pathologic conditions. Moreover, introduction to oral diagnosis, including history, intra and extra oral examination techniques provides the students elicit other conditions and confirm diagnosis.

Course Content:

To provide an understanding in diagnosis and maintain required treatment planning, Intraoral and Extraoral radiography technics, Introduction to Radiology and general terms and Radiation physics.

Learning Outcomes

1. Have information about oral diagnosis, definitions and anamnesis form.
2. To teach vital signs (fever, pulse, blood pressure and respiration rate), complaint area, resume, family history and pain characteristics.
3. To teach the clinical signs and symptoms of dental approach and systemic diseases to patients with systemic diseases and systemic diseases.
4. To be able to know and apply intraoral and extraoral examination methods applied in dentistry.
5. To teach radiation physics, radiation types and units, formation of X-rays and X-ray mechanics, radiation damages and radiation protection methods.
6. To teach the structure, usage areas, indications and techniques of intraoral and extraoral films used in dentistry.
7. Explain anatomical landmark, radiographic quality, structure and functions of bath solutions, image formation and evaluation.
8. To teach the artifacts to occur and to distinguish them.

Weekly Course Plan:

1. Introduction to oral diagnosis,
2. Anamnesis form
3. Vital signs
4. Dentistry and systemic diseases
5. Pain
6. Inspection methods
7. Introduction to Radiology
8. Radiation physics
9. Radiation types and units
10. Radiation damage and radiation protection
11. Image receptors
12. Dark room, bathroom solutions
13. Intraoral radiography techniques I
14. Radiographic quality
15. Anatomical landmark I
16. Artifacts

Restorative Dentistry

Objectives of the Course:

1. To teach the etiology, classification and histopathology of dental caries, basic concepts of tooth-colored restorative materials, composite resins, principles of ergonomics in dentistry, complex amalgam restorations and light curing units and polymerization methods, 2. To explain the basic principles of dental caries, complex amalgam restorations and ergonomi in dentistry, 3. To explain the etiological factors of dental caries, 4. To teach the differences among the compositions and physical properties of different composites.

Course Content:

-Dental caries, complex amalgam restorations, light curing units and polymerization methods, ergonomics in dentistry, tooth-colored restorative materials, dental composite resins - Preparation steps of posterior amalgam restorations on the phantom teeth of phantom head simulators, complex amalgam, modified amalgam and composite, anterior composite restorations on the extracted human carious teeth.

Learning Outcomes:

1. Defines the basic concepts of composite resins, light curing devices and polymerization methods, principles of ergonomics in dentistry, etiology, classification and histopathology of dental caries,
2. Explains the structure and content of composite resins.
3. Explains the advantages, disadvantages and limitations of different types of composite resins.
4. Explains the types of dentistry treatment and clinical layout.
5. Explains the attitudes which are decisive in the relationship between patient-physician and physician-assistant.
6. Describes and defines etiology of dental caries.
7. Describes the relationship between dental caries and etiological factors.
8. Describes histopathology of caries.
9. Explains the principles of diagnosing dental caries and methods used in this regard.

Weekly Course Plan:

1. Caries theories
2. Experimental caries
3. Etiological factors of caries
4. Pellicle and dental plaque
5. Microbiology of caries
6. Nutrition and caries
7. Saliva and caries
8. Histopathology of enamel caries
9. Histopathology of dentine caries
10. Caries classification
11. Fluoride and caries
12. Determination of caries risk
13. Complex amalgam restorations
14. Light devices and light polymerization methods
15. Restorative materials of tooth color
16. Composite resins

Endodontics

Objectives of the Course

To provide sufficient information about pulpal pathosis, diagnostic procedures and treatment planning, vital pulp therapy, endodontic isolation, indications and contraindications of endodontic treatment, root canal irrigation and disinfection, root canal medicaments, innovations in root canal filling techniques.

Course Content

The histology, biology, anatomy, physiology, pathology and treatment of the pulp.

Learning Outcomes:

1. To be able to take medical and dental anamnesis and explain its importance,
2. Identify the causes and methods used in the evaluation of patient complaints, medical and dental history and current disease,
3. Be able to define radiographic findings showing pulpal and periapical disease,
4. To be able to define pulpal pathologies and treatments,
5. To be able to define direct and indirect pulp capping, partial and total pulp amputation,
6. Evaluate the materials used in vital pulp therapies,
7. Be able to classify pulpal diseases, clinical and histological features,
8. Describe the indications and contraindications of root canal treatment,
9. Define the effects of clinical root canal disinfection on root canal micro flora,
10. To be able to perform clinical and radiological examination of the traumatized patient and to be able to determine the appropriate diagnosis and treatment approach by taking detailed anamnesis.

Weekly Course Plan:

1. Anamnesis in endodontics
2. Diagnosis and treatment planning in endodontics
3. Radiographic methods in endodontics
4. Pulp diseases and degenerations
5. Periapexy anatomy, histology, physiology and pathology
6. Vital pulp therapies in endodontics
7. Reaction of pulp and protection of pulp to dental restorations
8. Differential diagnosis in endodontic bone diseases and periradicular lesions
9. Recovery after canal treatment
10. Trauma-induced dental injuries and treatments
11. Root resorbations
12. Apexification and apexogenesis
13. Immunology in Endodontics
14. Microbiology in Endodontics
15. Epidemiology of apical periodontitis
16. Pain in Endodontics

Prosthetic Dentistry

Objectives of the Course

The student should be able to achieve fixed and removable prosthetic rehabilitations for partially edentulous patient.

Course Content

1-To teach the basic principles of bridge prosthese to student, 2- To teach laboratory and clinical applications of metal-ceramic prostheses to student, 3- To teach laboratory and clinical applications of removable dentures to student, 4- To teach the basic principles of complete dentures to student 5- To teach the student how to prepare the mouth for complete dentures, 6- To teach the student the clinical application of complete dentures, 7- To teach the student to be able to perform the laboratory application stages of complete dentures.

Learning Outcomes:

1. The student should know the terminology, indications and functions for complete prosthesis
2. Students should know the clinical stages in making full dentures
3. The student should know the laboratory steps in making full dentures
4. The student should know the structure and units of the complete denture
5. Students should know the terminology and elements of crown and bridge prosthesis
6. Students should know the classification of crown and bridge prosthesis
7. Students should know the indications and contraindications for different crown-bridge prostheses
8. The student should know the basic laboratory steps for crown prostheses
9. Students should know the clinical stages necessary for the construction of crown prostheses

Weekly Course Plan:

1. Introduction of bridge types in fixed restorations, Main dimensions and model acquisition in full dentures
2. Indications of bridge prosthesis, Post-dam site and construction techniques
3. Evaluation of support teeth in fixed prostheses, basic concepts in relation to jaws
4. Bridge trunk design, body - mucosal relationship, determination of vertical jaw relation
5. Bridge trunk construction techniques, horizontal jaw relations detection
6. Connectors in fixed prostheses, evaluation of tooth prosthesis in complete dentures
7. Biomechanical concepts in bridge prosthesis, phonation in complete dentures
8. Casting techniques, Soldering techniques, Alignment of complete dentures to the patient`s mouth and occlusal alignment
9. Temporary acrylic bridges, Priming in complete dentures
10. The relationship between crown edges and boundaries with gingiva, principles of retention in complete dentures
11. Providing form and esthetics in crown bridge prostheses
12. Effects of dental cutting tools on enamel, dentin and pulp in tooth cutting, Resorption-prosthesis relation
13. Crown Bridge topics - Discussion, Biomechanics in complete dentures
14. Gingival segregation methods in fixed prostheses, Model analysis in partial dentures
15. Measurement techniques in fixed prosthesis, direct and indirect measurement methods, classification of retainers in partial dentures
16. Attachment and telescope crowns, Partial Indirect holders

Periodontology

Objectives of the Course:

To teach structural biology of the periodontium, changes due to aging in periodontium, classification of periodontal diseases, local and systemic factors affecting the etiology of the periodontal disaeses,

Course Content:

An introduction to periodontology, Histology and morphology of periodontium (gingiva, alveolar bone, periodontal ligament, cementum), Aging and the periodontium, Classification of diseases and conditions affecting the periodontium, Biofilms, Etiology of the periodontal diseases, Periodontal microbiology, Periodontal immunology

Learning Outcomes:

1. To know histology and morphology of periodontal tissues.
2. To know the periodontal disease classification.
3. To know the etiology of periodontal diseases.
4. To know periodontal microbiology.
5. To know host-microbial interaction.
6. To know the pathogenesis of periodontal diseases and their interaction with systemic diseases.
7. To know the clinical, radiographic and histopathological features of all periodontal diseases.
8. To know the etiology and treatment of mouth odor.
9. To know the formation process of periodontal pocket and alveolar bone destruction skates and related mechanisms.
10. To know the interaction of occlusion and periodontal disease.

Weekly Course Plan:

1. Introduction to Periodontology / Histology and morphology of the periodontium (gingiva)
2. Histology and morphology of the periodontium (Alveolar bone)
3. Classification of diseases and conditions affecting aging and periodontium
4. Attachments accumulated on teeth
5. The etiology of periodontal diseases
6. Periodontal microbiology
7. Periodontal immunology
8. Periodontal pathogenesis
9. Genetic factors and periodontal disease
10. Smoking and periodontal disease
11. Systemic disorders and the relationship of stress with periodontal condition
12. The effect of periodontal diseases on systemic condition
13. Bad breath
14. Gingival inflammation / Gingivitis / Gingival recession
15. Gum growth
16. Chronic periodontitis / Aggressive periodontitis

Pedodontics

Objectives of the Course:

Understanding development of primary and permanent teeth, preventive interventions, diagnosis and treatment planning in pediatric dentistry

Course Content:

Morphological and histological characteristics of primary teeth; eruption and root resorption; dental caries, preventive interventions, restorative materials used in children; examination and treatment methods.

Learning Outcomes:

1. Morphological and histological differences between deciduous and continuous teeth should be known.
2. Normal developmental processes and abnormal conditions in deciduous, mixed and continuous dentition should be learned.
3. Learning growth and behavior orientation techniques should be learned in children.
4. Knowledge about tooth decay and periodontal condition.
5. Deciduous and young permanent teeth cavity preparation techniques and restorative treatments should be learned.
6. Child endodontic treatments should be learned.
7. Principles of preventive dentistry should be learned.
8. Fissure sealant and flouride applications should be learned.

Weekly Course Plan:

1. General morphological characteristics of teeth, functions and differences with permanent teeth
2. Principles of cavity teeth
3. Embryonic development of teeth
4. Factors affecting dental survival and driving
5. Tread times and root resorbations
6. Histology of enamel, dentin and pulp
7. Classification of caries in the dentition by caries spread, localization and rate of progression
8. Early childhood caries
9. Caries activity in children, determination of caries risk and regulation of caries prevention programs
10. The scientific basis of caries prophylaxis and the importance of protective applications in dentistry
11. Caries antimicrobial mechanisms of fluorides
12. Application methods of systemic and topical fluorides
13. Fissure sealers
14. Minimally invasive dentistry
15. Glass ionomer cements
16. Excessive substance loss restoration

Orthodontics

Objectives of the Course:

To teach the basic principles of normal growth and development and its relationship with orthodontics; evaluate the normal occlusion and stomatognathic system; to teach the orthodontic anomalies and their etiology.

Course Content:

To have information about stomatognathic growth and development and orthodontic anomalies.

Learning Outcomes:

1. The definition and parts of orthodontics should be known.
2. What is growth and development, head and percent in what areas of growth and development is observed. The student should know the embryonic development and the late fetal development of the cranium before birth and also the malformations that may occur in the early and late development of the birth.
3. Student should be able to define malocclusion. Students should know the factors that play a role in the etiology of malocclusion. The student should be able to diagnose congenital anomalies that play an important role in the formation of the fusion. The student should be aware of the effects of genetic and environmental factors on the formation of malocclusion.
4. Diagnosis of normal occlusion and orthodontic dental anomalies in sagittal, vertical and transverse direction and anomalies should be known.
5. To be able to gain oral, oral and functional examination. Recognition of orthodontic diagnostic tools and issues to be considered during orthodontic photographic examination, learning of lateral, anteroposterior and panoramic x-ray, model and anamnesis. Gypsum models should be learned in terms of space constraints and the compatibility of the teeth in the upper and lower jaws.

Weekly Course Plan:

1. Identification of orthodontics, definition of normal, rules that human organism fits
2. Definition of growth and development, Factors affecting growth development
3. Factors playing a role in the etiology of malocclusion
4. Congenital anomalies
5. Cleft lip and palate
6. Orthodontic dental anomalies
7. Orthodontic skeletal anomalies
8. Orthodontic diagnosis and anamnesis
9. Functional analysis, Model diagnosis
10. Evaluation of wrist films and growth development
11. Periapical and occlusal films
12. Cephalometry and cephalometric analysis
13. Orthodontic force sources, force types and properties
14. Anchoring, anchorage zones, anchorage classification
15. TMJ anatomy, physiology, and function
16. TME dysfunctions