



UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Medicina di Precisione in area Medica, Chirurgica e Critica		
ACADEMIC YEAR	2020/2021		
MASTER'S DEGREE (MSC)	DENTISTRY		
INTEGRATED COURSE	PERIODONTOLOGY AND DENTAL PROSTHESIS - INTEGRATED COURSE		
CODE	14258		
MODULES	Yes		
NUMBER OF MODULES	2		
SCIENTIFIC SECTOR(S)	MED/28		
HEAD PROFESSOR(S)	PIZZO GIUSEPPE	Professore Ordinario	Univ. di PALERMO
OTHER PROFESSOR(S)	PIZZO GIUSEPPE	Professore Ordinario	Univ. di PALERMO
	MAUCERI RODOLFO	Ricercatore a tempo determinato	Univ. di PALERMO
CREDITS	8		
PROPAEDEUTICAL SUBJECTS	05209 - MICROBIOLOGY AND GENERAL PATHOLOGY - INTEGRATED COURSE		
MUTUALIZATION			
YEAR	4		
TERM (SEMESTER)	2° semester		
ATTENDANCE	Mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	<p>MAUCERI RODOLFO Tuesday 16:30 18:30</p> <p>PIZZO GIUSEPPE Wednesday 16:00 17:30 Ufficio del Prof. Pizzo, Plesso di Odontostomatologia, Edificio 14 (I piano), Via del Vespro 129, 90127 Palermo - Piattaforma Teams, Stanza "Ricevimento Prof. Giuseppe Pizzo"</p> <p>Friday 08:30 10:00 Ufficio del Prof. Pizzo, Plesso di Odontostomatologia, Edificio 14 (I piano), Via del Vespro 129, 90127 Palermo - Piattaforma Teams, Stanza "Ricevimento Prof. Giuseppe Pizzo"</p>		

PREREQUISITES	<p>1. Macro- and microscopic morphology of the periodontium.</p> <p>2. Structure and functions of the bacterial cell. Bacterial metabolism. Host-microorganism and inter-microbial interactions, microbial ecology of the oral cavity, bacterial biofilms. Main determinants of pathogenicity and virulence of microorganisms.</p> <p>3. The components of the immune system: cells and tissues, antigens and immunogenicity, lymphoid organs. The recognition of antigen by T and B cells. Antibodies: structure and functions. T cell-mediated immunity. The humoral immune response. Cytokines and its receptors. The complement system and innate immunity.</p> <p>4. Overview of inflammation: cells and mediators. Local and Systemic Inflammatory response. Acute inflammation. Cellular and plasmatic mediators. Adhesion molecules and cellular recruitment. Phagocytosis. Exudate and Transudate. Chronic Inflammation: causes and mechanisms. Chronic inflammatory cells and mediators. Tissue repair: cell regeneration and fibrosis. Granulation tissue.</p>
LEARNING OUTCOMES	<p>Knowledge and understanding: Knowledge of epidemiology, of etiology and pathogenesis, of clinical features, of diagnosis of gingival and periodontal diseases. Pre-clinical knowledge of treatment planning and implementation of non-surgical periodontal therapy. Theoretical and pre-clinical knowledge of oral rehabilitation with tooth-supported fixed partial dentures (FPD). Knowledge of technical language used in periodontology and prosthodontics relevant to the subjects within the modules Parodontologia I (Periodontology I) and Protesi Dentaria I (Prosthodontics I).</p> <p>Applying knowledge and understanding: Ability to understand the nature, advantages and limits of non-surgical periodontal therapy and oral rehabilitation with FPD, evaluating the influence of local and systemic factors on the therapeutic outcome.</p> <p>Making judgements: Ability to independently <ul style="list-style-type: none"> - diagnose gingival and periodontal plaque-induced diseases; - plan treatment for gingival and periodontal plaque-induced diseases; - plan the rehabilitation with FPD in partially edentulous patients. </p> <p>Communication skills: Ability to correctly describe clinical features of gingival and periodontal plaque-induced diseases. Ability to communicate diagnosis and oral hygiene instructions to patients. Ability to present patients with the advantages and limits of oral rehabilitation with FPD.</p> <p>Learning skills: Ability to stay up to date with scientific publications in the fields of Periodontology and Fixed prosthodontics. Ability to use the knowledge acquired to attend postgraduate courses in Periodontology and in Fixed Prosthodontics.</p>
ASSESSMENT METHODS	<p>TYPE OF ASSESSMENT Oral assessment. This assessment is used to evaluate the student's knowledge and understanding of the programme content, independent judgement, ability to apply acquired knowledge and specific technical terminology. The student will have to answer a minimum of four questions posed orally which will focus on the subjects covered in the programme, making reference to suggested texts.</p> <p>ASSESSMENT CRITERIA The assessment grades are given as numerical scores awarded out of a possible 30 points, and as follows: <ul style="list-style-type: none"> - 30 - 30 cum laude - ECTS grades: Excellent (A – A+) Result: Excellent knowledge of the taught subject matter. The student demonstrates good analytic-synthetic capabilities and is able to apply knowledge to resolve highly complex problems. <ul style="list-style-type: none"> - 27 – 29 – ECTS grades: Very good (B) Result: Very good knowledge of the taught subject matter and good use of language. The student demonstrates analytic-synthetic capabilities and is able to apply knowledge to resolve some complex problems. <ul style="list-style-type: none"> - 24 – 26 – ECTS grades: Good (C) Result: Good knowledge of the taught subject matter and good use of language. The student is able to apply knowledge to resolve problems of medium complexity. <ul style="list-style-type: none"> - 21 – 23 – ECTS grades: Satisfactory (D) Result: Reasonable knowledge of the taught subject matter, in some cases limited to the main topics. Acceptable use of technical language and capacity to apply acquired knowledge independently. <ul style="list-style-type: none"> - 18 – 20 – ECTS grades: Sufficient (E) Result: Minimal knowledge of the taught subject matter, often limited to the main topics. Modest use of technical language and some capacity to apply acquired</p>

	knowledge independently. - 1 – 17 – ECTS grades: Fail (F) Result: Unacceptable knowledge of the taught subject matter. Little or no use of technical language and capacity to apply acquired knowledge independently. Exam failed.
TEACHING METHODS	Lectures

MODULE PERIODONTOLOGY I

Prof. GIUSEPPE PIZZO

SUGGESTED BIBLIOGRAPHY

- 1) Lindhe J, Lang NP. Clinical Periodontology and Implant Dentistry, 6th edition. Wiley-Blackwell, 2015, ISBN: 978-0-470-67248-8 (edizione italiana: Lindhe J, Lang NP. Parodontologia clinica e implantologia orale. Sesta edizione. Edi.Ermes, 2016, ISBN: 9788870515282)
- 2) Newman MG, Takei HH, Klokkevold PR, Carranza FA. Newman and Carranza's Clinical Periodontology, 13th edition. Elsevier, 2018, ISBN: 9780323523004 (comprensivo di edizione elettronica e disponibile anche come ebook). Per questo testo, il docente provvederà ad evidenziare le parti da studiare ai fini del raggiungimento dei risultati di apprendimento attesi
- 3) Articoli scientifici e materiale bibliografico miscelaneo (selezionato e/o redatto dal docente e caricato sul portale studenti; il docente provvederà ad evidenziare le parti da studiare ai fini del raggiungimento dei risultati di apprendimento attesi)
- 4) Altri ausili didattici forniti dal docente: guida allo studio autonomo delle fonti bibliografiche

AMBIT	50448-Discipline odontoiatriche e radiologiche
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30

EDUCATIONAL OBJECTIVES OF THE MODULE

Acquisition of technical language, knowledge and competence on the following topics:

- Structure and function of the normal periodontium
- Classification and epidemiology of diseases affecting the periodontium
- Etiology, pathogenesis, histopathology and clinical features of gingival and periodontal diseases
- Periodontal examination, clinical diagnosis and clinical risk assessment
- Diagnosis and treatment of periodontal emergencies
- Non-surgical periodontal therapy

SYLLABUS

Hrs	Frontal teaching
3	The Normal Periodontium: Structure and Function. Classification and Epidemiology of Diseases and Conditions Affecting the Periodontium
5	Etiology, Pathogenesis and Histopathology of Gingival and Periodontal Diseases. The Role of Dental Calculus and Other Local Predisposing Factors. Biofilm and Periodontal Microbiology. Smoking and Periodontal Disease. Diabetes and periodontal disease.
6	Gingival Pathology: Gingival Inflammation; Clinical Features of Gingivitis; Gingival Diseases of Specific Bacterial/Viral/Fungal Origin; Traumatic lesions; Necrotizing Gingivitis; Gingival Enlargement; Gingival Disease in Childhood; Desquamative Gingivitis
6	Periodontal Pathology: The Periodontal Pocket; Bone Loss and Patterns of Bone Destruction; Chronic Periodontitis; Necrotizing Ulcerative Periodontitis; Aggressive Periodontitis; Systemic diseases and conditions associated with loos of periodontal attachment and alveolar bone.
3	Examination of Patients With Periodontal Diseases. Clinical Diagnosis. Clinical Risk Assessment
3	Diagnosis and Treatment of Acute Gingival Disease and Periodontal Abscess (Periodontal Emergencies)
4	Non-surgical Periodontal Therapy (Cause-related Therapy): Rationale, Sequence of Procedures, Outcome. Supragingival Plaque Control for the Periodontal Patient: Oral Hygiene Aids; Chemical Plaque Control; Patient Education and Motivation. Scaling and Root Planing (Periodontal Debridement). Sonic and Ultrasonic Instrumentation: an introduction. Irrigation.

MODULE DENTAL PROSTHESIS I

Prof. RODOLFO MAUCERI

SUGGESTED BIBLIOGRAPHY

- 1) Shillenburg HT. Fondamenti di Protesi fissa. Quintessenza, 2014. ISBN:8874921985
- 2) Castellani D. La preparazione dei pilastri per corone in metal-camica. Ed. Martina, 1995. ISBN:9788875720254
- 3) Scotti R, Ferrari M. Perti in fibra: presupposti teorici e applicazioni cliniche. EDRA-Masson, 2002. ISBN: 978-8821426674
- 4) Gherlone E. L'impronta in protesi dentaria. EDRA-Masson, 2017. ISBN: 978882144271 "disponibile anche in versione eBook"
- 5) Terry D.A., Geller W. Odontoiatria estetica e ricostruttiva. Quintessence Publishing Italia, 2012. ISBN: 978-88-7492-168-3

AMBIT	50448-Discipline odontoiatriche e radiologiche
INDIVIDUAL STUDY (Hrs)	75
COURSE ACTIVITY (Hrs)	50

EDUCATIONAL OBJECTIVES OF THE MODULE

Acquisition of technical language, knowledge and competence on the following topics:

- diagnosis of the different types of partial edentulism;
- indications, treatment planning, design and fabrication of metal-ceramic and metal-free restorations (single crown restoration, replacement of missing teeth through fixed partial denture).

SYLLABUS

Hrs	Frontal teaching
1	Introduction to Prosthodontics; clinical examination and classification of types of edentulia
1	Classification of dentures
2	General considerations on the clinical and instrumental diagnosis and prosthetic treatment plan of partially edentulous patients
2	Prosthetic restoration of single tooth: inlay, onlay, overlay, full crown
1	Bonded fixed partial denture: indications and contraindications
2	Restoration of endodontically treated tooth. Tooth restoration by cast post and core or by fiber post.
1	Fixed partial denture components
2	Indications and contraindications for the fixed prosthetic rehabilitation
2	Physical examination and instrumental analysis: photography, radiographic exams, study models, diagnostic wax-up.
2	The preliminary impressions
2	Fabrication of the plaster study models
3	Pretreatments: periodontal therapy, periodontal surgery, strategic tooth extractions, conservative treatments
2	Biological aspects of fixed partial denture
2	Periodontal aspects of fixed partial denture
3	Criteria for selection of the operating methods. Abutment selection for fixed partial denture; Requisites of dental abutments; principles for tooth preparations: aesthetic, biologic and mechanic principles. concept of retention and stability; white aesthetic and pink aesthetic; emergence profile and crown contour.
3	Tooth preparation technique; finishing lines; Biologically Oriented Preparation Technique (BOPT)
3	The temporary bridge: direct and indirect temporary bridge; relining and temporary cementation.
2	The impression materials
2	The final impression
2	The gypsum cast
2	Modeling and fabrication of the framework: wax-up and fusion. The metal alloys.
2	The try-in of the framework. The colour: tooth colour selection and communication to the dental technician. Biscue try-in.
2	Delivery and cementation of the restoration. Traditional and adhesive cementation.
2	The CAD-CAM technology and the metal-free restorations, Notes on optical impression and digital work-flow.
2	Classification of ceramics and processing technologies. Aesthetic veneers. The choice of the material for fixed denture: classification, features and clinical indications.